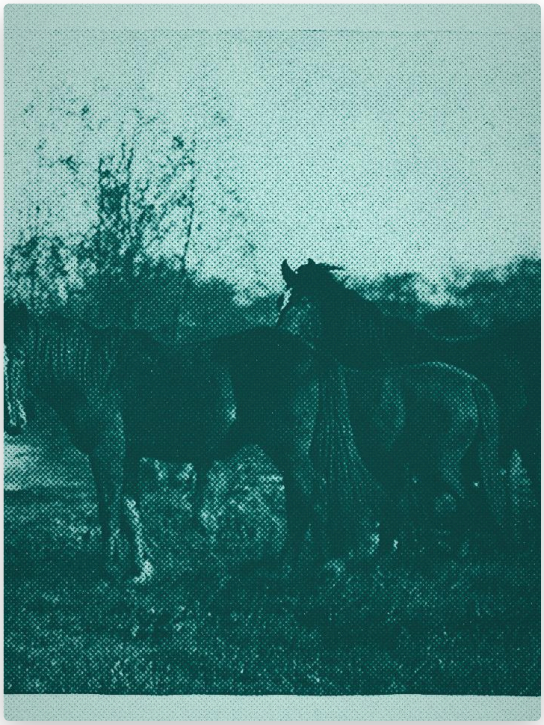
FORM S-1 · REGISTRATION STATEMENT

Upstart Holdings Inc

IPO priced 2020-12-16 · $20.00 a share · UPST



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As filed with the Securities and Exchange Commission on November 5, 2020.

REGISTRATION NO. 333-

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

Upstart Holdings, Inc.

(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

Delaware	**7389**	**46-4332431**
(STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)	(PRIMARY STANDARD INDUSTRIAL CLASSIFICATION CODE NUMBER)	(I.R.S. EMPLOYER IDENTIFICATION NUMBER)

Upstart Holdings, Inc.

2950 S. DELAWARE STREET, SUITE 300

SAN MATEO, CALIFORNIA 94403

(650) 204-1000

(ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE, OF REGISTRANT'S PRINCIPAL EXECUTIVE OFFICES)

DAVE GIROUARD

CHIEF EXECUTIVE OFFICER

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(NAME, ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE, OF AGENT FOR SERVICE)

Copies to:

JEFFREY D. SAPER ALLISON B. SPINNER SHANNON R. DELAHAYE **Wilson Sonsini Goodrich & Rosati, P.C.** 650 PAGE MILL ROAD PALO ALTO, CALIFORNIA 94304 (650) 493-9300	ALISON NICOLL CHRISTOPHER ING EMILY SAIRAFIAN **Upstart Holdings, Inc.** 2950 S. DELAWARE STREET, SUITE 300 SAN MATEO, CALIFORNIA 94403 (650) 204-1000	JOHN L. SAVVA SULLIVAN & CROMWELL LLP 1870 EMBARCADERO ROAD PALO ALTO, CALIFORNIA 94303 (650) 461-5600

Approximate date of commencement of proposed sale to the public:

As soon as practicable after this registration statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box. ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☐
Emerging growth company	☒		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

CALCULATION OF REGISTRATION FEE

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE(1)	AMOUNT OF REGISTRATION FEE(2)
Common stock, par value $0.0001 per share	$100,000,000	$10,910

(1) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(o) of the Securities Act of 1933, as amended. Includes the aggregate offering price of additional shares that the underwriters have the option to purchase, if any.

(2) Calculated pursuant to Rule 457(o) based on an estimate of the proposed maximum aggregate offering price.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant will file a further amendment which specifically states that this Registration Statement will thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement will become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion. Dated , 2020.

Shares

Upstart Holdings, Inc.

Common Stock

This is the initial public offering of shares of common stock of Upstart Holdings, Inc. We are offering shares of common stock. The selling stockholders identified in this prospectus are offering an additional shares of common stock. We will not receive any of the proceeds from the sale of shares by the selling stockholders.

Prior to this offering, there has been no public market for the common stock. It is currently estimated that the initial public offering price per share will be between $ and $. Upstart has applied to list the common stock on the Nasdaq Global Select Market under the symbol “UPST”.

We are an “emerging growth company” as that term is defined under the federal securities laws and, as such, we have elected to comply with certain reduced reporting requirements for this prospectus and may elect to do so in future filings.

See “Risk Factors” beginning on page 21 to read about factors you should consider before buying shares of our common stock.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

	Per Share	Total
Initial public offering price		$$
Underwriting discount(1)		$$
Proceeds, before expenses, to Upstart		$$
Proceeds, before expenses, to the selling stockholders		$$

(1) See “Underwriting” for a description of the compensation payable to the Underwriters.

To the extent that the underwriters sell more than shares of common stock, the underwriters have the option to purchase up to an additional shares from Upstart at the initial public offering price less the underwriting discount.

The underwriters expect to deliver the shares against payment in New York, New York on , 2020.

Goldman Sachs & Co. LLC	**BofA Securities**	**Citigroup**
Jefferies	**Barclays**	
JMP Securities	**Blaylock Van, LLC**	

Prospectus dated , 2020.

Upstart

AI Powered Lending

~15B cells of performance data 1 622,079 loans transacted on platform 2 ~75% reduction in loss rates 3 10x increase in conversion rates since inception 4 ~70% loans fully automated 5 3 of 4 last quarters GAAP profitable 6 Data presented as of September 30, 2020 unless otherwise specified.

(1) Represents the amount of data powering our AI models, which includes model input variables and training data such as payment events. Such data is integral to our models' continued improvement and accuracy. See the section titled "Business–Evolution of Upstart's AI Model" for more information.

(2) Number of Loans Transacted. We define the Number of Loans Transacted as the transaction volume, measured by number of loans facilitated on our platform, between a borrower and originating bank.

(3) In an internal study, Upstart replicated three bank models using their respective underwriting policies and evaluated their hypothetical loss rates and approval rates using Upstart's applicant base in late 2017. To compare the hypothetical loss rates between Upstart's model and each of the replicated bank models, Upstart held approval rates constant at the rate called for by each bank's respective underwriting policy. Such result represents the average rate of improvement exhibited by Upstart's platform against each of the three respective bank models.

(4) Based on the change in Conversion Rate from May 1, 2014 to September 30, 2020. We define Conversion Rate as the Number of Loans Transacted in a period divided by the number of rate inquiries received in the same period, which we record when a borrower requests a loan offer on our platform.

(5) Percentage of Loans Fully Automated. We define Percentage of Loans Fully Automated as the total number of loans in a given period originated end-to-end (from initial rate request to final funding) with no human involvement divided by the Number of Loans Transacted in the same period.

(6) We were GAAP profitable in the fourth quarter of 2019 and the first and third quarters of 2020.

You are more than your credit score FOUNDERS' LETTER I left Google in 2012 to found Upstart with Anna and Paul.

We were convinced that technology and data science could improve access to affordable credit, but we were a little fuzzy on the details. It seemed obvious that there was room for improvement: Why should a credit score invented 30 years ago, prior to the emergence of cloud computing and modern data science, decide who is approved for a loan and who isn't?

I was confident that the types of technologies and analytics we were developing at Google for very different reasons could be useful to this vast but incredibly inefficient industry. And done properly, such a system could reduce the cost of borrowing for millions.

Why credit?

You don't go into credit to be loved. With five thousand years of colorful history, there's no shortage of reasons to be concerned for borrowers and suspicious of lenders. The business of lending suffers from self-inflicted reputational damage brought on by uncountable stories of borrower exploitation. For all the right reasons, it's among the most heavily regulated industries.

We can dream about living in a world where credit isn't necessary—where each of us has the money we need to live the life we want. But like it or not, money is a core ingredient of our lives, and the need to borrow money is a reality for virtually all Americans.

Despite its checkered past, it's clear that credit is a cornerstone of the economy and access to affordable credit is an enabler of the American dream. Purchasing a home or car, starting a business, pursuing a college degree, relocating to a new city—these are the building blocks of life that are out of reach for those without access to affordable credit.

Simply put, credit unlocks opportunity and mobility—and thus the price of credit equals the price of the American dream.

This is why we founded Upstart.

Lending is broken

Considering how central lending is to the economy, it's stunning how ineffective current approaches to credit origination are. In June of 2020, commercial banks in the US issued almost $15 trillion in loans.1 Yet the models used to predict whether a loan will be repaid are much closer to a roll of the dice than to an omniscient lending deity.

By way of example, four in five Americans have never defaulted on a loan, yet less than half have a credit score that would qualify them for the low rates that banks offer.2 The implication is eye-opening: with a smarter credit model, lenders could approve almost twice as many borrowers, with fewer defaults.

Limitations of legacy credit systems affect most of us: First, they offer loans to many people who fail to pay them back, which is harmful to both consumers and lenders. Second, they decline to offer loans to people who would successfully pay them back if given the chance, also harmful to consumers and lenders. And finally, even those who repay their loans pay too much in interest, because they subsidize borrowers who default.

It's accepted as immutable that lending is a cyclical industry whose performance depends wholly on the macro-economic environment. A corollary of this belief holds that, aside from modest efficiency improvements, technology can't alter the fundamentals of lending. Lenders staffed by disciplined teams with solid analytics will do fine when times are good. But like gravity, it will all come crashing down at the next recession.

These beliefs lead to an intense and ultimately fruitless effort in boardrooms across the country to predict the timing of the next recession. When the first signs of a slowdown are evident, lenders are quick to raise the drawbridge and batten down the hatches. These impulsive reactions invariably mean that access to credit for consumers and businesses dries up just when it's needed most.

Artificial intelligence is the fix AI has the potential to add $13 trillion to the global economy by 2030 and is broadly considered one of the most important developments in the history of technology.3 Last year, Amazon's Jeff Bezos said "we're at the beginning of a golden age of AI. Recent advancements have already led to invention that previously lived in the realm of science fiction."

Credit is a compelling and obvious use case for AI. First, lending involves sophisticated decisioning for events that occur millions of times each day. Second, there is an almost unlimited supply of data that has the potential to improve the accuracy of credit decisions. Third, given the costs and risks associated with lending, as well as the scale of the industry, the potential economic wins from AI are dramatic.

1 Statista: Value of Loans of all Commercial Banks in the United States from March 2014 to August 2020, September 2018.

2 Based on an Upstart retrospective study completed in December 2019, which defined access to prime credit as individuals with credit reports with VantageScores of 720 or above.

3 McKinsey Global Institute, or McKinsey, Notes From the AI Frontier: Modeling the Impact of AI on the World Economy, September 2018.

How does AI change lending? It starts by vastly expanding the information used to inform a credit decision.

Then, it utilizes sophisticated machine learning algorithms that can tease out the relationships between hundreds or even thousands of variables. And finally, the system learns and improves on its own, optimizing in response to daily loan-level repayment and delinquency data. Our own AI system is trained on almost 15 billion cells of performance data and predicts the specific likelihood of default or prepayment for each month of a loan term.4 As the number of variables and volume of training data in Upstart's model have grown over time, we've been able to implement increasingly sophisticated machine learning algorithms, which in turn improve the accuracy of our model and efficiency of our funnel. As good as our AI platform is today, it only scratches the surface of the accuracy gains that are possible.

Applied across the entire credit origination funnel, AI can reduce friction, eliminate costs, and mitigate risks associated with lending. The result is a superior customer experience and improved economics that can be shared between borrowers and lenders.

The wins from AI lending are compelling. Studies we completed with several large US banks suggested that Upstart's model could approve up to three times the number of borrowers at the same loss rates as traditional models.5 Furthermore, improvements to our AI models have increased throughput of our borrower funnel by a factor of 10 since we began more than eight years ago, driving long-term reductions in acquisition cost and improvements to our unit economics. These improvements led to our first profitable quarter in Q4 2019 (and a net loss of $466,000 for the full-year 2019).

What about those ugly recessions? Lenders would do well to put away their crystal balls and instead focus on predicting which borrowers will pay them back in any environment. While the probability of default for a borrower may vary by as much as 2X6 depending on the state of the economy, our experience suggests that risk associated with two borrowers with similar credit scores can vary by at least 10X.7 Furthermore, with an AI-based system, banks can lend responsibly in any environment, with a system that responds quickly and intelligently to changes in employment levels and economic output. This isn't just theory: during the employment shock of the recent COVID-19 pandemic, when unemployment increased from about 4% to 14% in just a few weeks, Upstart partner banks experienced immaterial impact to the performance of their loans.8 4 Performance data is defined as a combination of payment events and model input variables.

5 In an internal study, Upstart replicated three bank models using their respective underwriting policies and evaluated their hypothetical loss rates and approval rates using Upstart's applicant base in late 2017. To compare the hypothetical approval rates between Upstart's model and each of the replicated bank models, Upstart held loss rates constant at the rate called for by each bank's respective underwriting policy. Such result represents the average rate of improvement exhibited by Upstart's platform against each of the three respective bank models.

6 Based on a comparison of loss rates on 60 day past due credit card accounts from 2004-2006 and 2009 using data obtained from Canals-Cerda and Kerr, Working Paper No. 15-08 Credit Risk Modeling in Segmented Portfolios: An Application to Credit Cards, Federal Reserve Bank of Philadelphia, February 2015.

7 Based on an internal Upstart study conducted in June 2020 comparing annualized loss rates of all Upstart-powered loans originated in 2018 by segments based on the borrower's FICO credit score and the risk tier assigned by Upstart at origination.

8 Bureau of Labor Statistics, U.S. Department of Labor, News Release: The Employment Situation – August 2020, September 2020.

We don't expect every future cycle to behave the same in terms of government stimulus and consumer dynamics, but we do expect the relative strengths of AI demonstrated during this cycle to persist.

Nevertheless, it will take time for banks and capital markets to develop confidence necessary to continue lending through cycles, as evidenced by the fact that the COVID-19 pandemic led to a significant but temporary reduction in bank lending and loan funding on our platform.

While we expect AI to disrupt virtually all forms of credit globally, Upstart is focused today on the US consumer market (and on personal loans in particular). There were more than $4.2 trillion in credit outstanding in December 2019 across mortgages, HELOCs, auto loans, credit cards, personal loans, and student loans— and virtually all could have been improved with AI.9 In June 2020, we announced the expansion of our AI platform into auto lending, and the first Upstart-powered auto loan was originated in September 2020. The auto lending market is both large – at least five times the size of the personal loan market – and inefficient, with millions of borrowers paying interest rates that don't reflect their true risk.10 This is an ideal next opportunity for Upstart.

Why now, why Upstart?

History is littered with companies who claimed to have built a "better mousetrap" in credit only to fail the test of time.11 So it's fair to ask what's changed and why now is the time for AI lending.

First, the building blocks for this transformation came into place only in the last decade or so. The science underpinning AI has gone from research labs to mainstream in just a few years. And cloud computing has unlocked the ability to apply the enormous power of computation required by AI to a single credit decision in just a few seconds.

Second, change is hard, and change at the core of credit is really hard. The data science, the regulatory hurdles, the financial risk—add these up and it's no secret why the pre-eminent lending institutions in the US (banks) have yet to take on the challenge of building an AI model.

At Upstart, we built the right team to take on this challenge and paired it with the right mission to inspire us.

Every single day, we focus maniacally on helping our bank partners approve more borrowers at lower rates while eliminating every bit of friction associated with the process. With our eight-year head start, we believe our AI lending platform is well-positioned to help power one of the largest transformations facing the financial services industry.

9 The Federal Reserve Board, Statistical Release: Consumer Credit, or Federal Reserve Consumer Credit, December 2019.

10 Based on an internal Upstart study conducted in July 2020. Market size data obtained from Matt Komos, TransUnion: Consumer Credit Origination, Balance and Delinquency Trends: Q1 2020, June 2020.

11 Hansell, Saul, Technology; U.S. Seizes Bank Business of Web Credit Card Issuer, The New York Times, February 2002.

A partner to banks

While many Fintech companies aspire to become the bank of the future, we're not one of them. Instead of competing with banks, we decided to partner with them, helping banks navigate and thrive through one of the most foundational technology transformations in history.

While a handful of our country's largest banks may aspire to build an AI-powered lending platform, thousands of others will look to form strong and reliable technology partnerships in order to secure their future. We aim to partner with them.

What motivates us

Eight years in, it's unusual for three founders to continue to lead a company day in and day out. But Paul, Anna and I are still here. We're different people, from different backgrounds and even different generations.

But we figured out how to work together to build a company that none of us could have built alone. We do have some things in common—we each come from a modest background, where affordable credit was central to our unique pursuit of the American dream.

We have a "true north" at Upstart—to bring more people into the world where the credit system works, to unlock opportunity and mobility for them so that money isn't a daily concern, and to write a story about lending of which we can all be proud.

Dave on behalf of Paul and Anna **TABLE OF CONTENTS**

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Through and including , 2020 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

Neither we, the selling stockholders nor any of the underwriters have authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses we have prepared. We, the selling stockholders and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of its date.

For investors outside the United States: Neither we, the selling stockholders nor any of the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of our common stock and the distribution of this prospectus outside the United States.

Prospectus Summary

PROSPECTUS SUMMARY *This summary highlights selected information that is presented in greater detail elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our common stock. You should read this entire prospectus carefully, including the sections titled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the related notes included elsewhere in this prospectus, before making an investment decision. Unless the context otherwise requires, the terms "Upstart," "the company," "we," "us" and "our" in this prospectus refer to Upstart Holdings, Inc. and its consolidated subsidiaries. Our fiscal year end is December 31, and our fiscal quarters end on March 31, June 30, September 30 and December 31.*

Upstart Holdings, Inc.

Overview

Our mission is to enable effortless credit based on true risk.

We are a leading, cloud-based artificial intelligence lending platform. Artificial intelligence, or AI, lending enables a superior loan product with improved economics that can be shared between consumers and lenders. Our platform aggregates consumer demand for high-quality loans and connects it to our network of Upstart AI-enabled bank partners. Consumers on our platform benefit from higher approval rates, lower interest rates, and a highly automated, efficient, all-digital experience. Our bank partners benefit from access to new customers, lower fraud and loss rates, and increased automation throughout the lending process. Since inception, our bank partners have originated over 620,000 personal loans that have generated more than 9 million repayment events. In the nine months ended September 30, 2020, approximately 70% of Upstart-powered loans were entirely automated.

Credit is a cornerstone of the U.S. economy, and access to affordable credit is central to unlocking upward mobility and opportunity. The FICO score was invented in 1989 and remains the standard for determining who is approved for credit and at what interest rate.[12] While FICO is rarely the only input in a lending decision, most banks use simple, rules-based systems that consider only a limited number of variables. Unfortunately, because legacy credit systems fail to properly identify and quantify risk, millions of creditworthy individuals are left out of the system, and millions more pay too much to borrow money.[13] The first generation of online lenders focused on bringing credit online. Analogous to earlier internet pioneers, these companies made shopping for and accessing credit simpler and easier for consumers and businesses. It was no longer necessary to stand in line at a bank branch, to sit across the desk from a loan officer and to wait weeks or months for a decision. These lenders enabled the emergence of personal loan products that were previously unprofitable for banks to offer. While they brought the credit process online, they inherited the decision frameworks that banks had used for decades and did not address the more rewarding and challenging opportunity of reinventing the credit decision.

We leverage the power of AI to more accurately quantify the true risk of a loan. Our AI models have been continuously upgraded, trained and refined for more than eight years. We have discrete AI

12 Rob Kaufman, myFico Blog: The History of the FICO Score, August 2018.

13 Patrice Ficklin and Paul Watkins, Consumer Financial Protection Bureau Blog: An Update on Credit Access and the Bureau's First No-Action Letter, August 2019.

models that target fee optimization, income fraud, acquisition targeting, loan stacking, prepayment prediction, identity fraud and time-delimited default prediction. Our models incorporate more than 1,600 variables and benefit from a rapidly growing training dataset that currently contains more than 9 million repayment events.[14] The network effects generated by our constantly improving AI models provide a significant competitive advantage—more training data leads to higher approval rates and lower interest rates at the same loss rate.

We have been able to demonstrate through several studies that AI lending works. First, in 2019 the Consumer Financial Protection Bureau, or CFPB, reported that a study by Upstart of its data using a methodology specified by the CFPB showed that our AI model approves 27% more borrowers than a high-quality traditional model, with a 16% lower average APR for approved loans.[15] Second, when compared to credit models from several large banks, our AI models approve approximately 2.7 times as many borrowers at the same loss rate.[16] Third, for pools of securitized loans, our realized loss rates were only approximately half of those predicted by Kroll, a prominent credit rating agency; over that same time period, realized losses for the same pool of loans were on average only 5% different than our internal forecasts.[17] And finally, we regularly monitor the accuracy of our AI models in comparison with simple credit

score-based models and have observed higher model accuracy across a variety of statistical measures relating to each model's predictive accuracy.[18] Our AI models are provided to bank partners within a consumer-facing cloud application that streamlines the end-to-end process of originating and servicing a loan. We have built a configurable, multi-tenant cloud application designed to integrate seamlessly into a bank's existing technology systems. Our highly configurable platform allows each bank to define its own credit policy and determine the significant parameters of its lending program. Our AI models use and analyze data from all of our bank partners. As a result, these models are trained by every Upstart-powered loan, and each bank partner benefits from participating in a shared AI lending platform.

Consumers can discover Upstart-powered loans in one of two ways: either via Upstart.com or through a white-labeled product on our bank partners' own websites.

Loans issued through our platform can be retained by our originating bank partners, distributed to our broad base of approximately 100 institutional investors and buyers that invest in Upstart-powered loans or funded by Upstart's balance sheet. In the third quarter of 2020, 22% of the loans funded through our platform were retained by the originating bank and 76% of loans were purchased by

14 References to variables in this prospectus refer to all raw variables and certain combined variables considered in our AI models.

15 Ficklin and Watkins; see the section titled "Industry, Market and Other Data."

16 In an internal study, Upstart replicated three bank models using their respective underwriting policies and evaluated their hypothetical loss rates and approval rates using Upstart's applicant base in late 2017. Such result represents the average rate of improvement exhibited by Upstart's platform against each of the three respective bank models.

17 In an internal study, Upstart compared the actual realized loss rates of Upstart loans securitized in five securitization transactions between June 2017 and September 2019 and the loss rate predictions for those loans obtained from KBRA Surveillance Reports published by Kroll Bond Rating Agency in December 2019. As compared to Kroll's loss predictions, actual realized losses were approximately 31% to 71% lower, with an average deviation across all five securitization transactions of -48%. As compared to our internal forecasts, actual realized losses ranged from approximately 35% higher (for the earliest securitization transaction) to approximately 17% lower (for the most recent securitization transaction), with an average absolute deviation across all of five securitization transactions of approximately 13%.

18 Upstart compares on a monthly basis its AI models to (i) a FICO-only model and (ii) a "FICO+" model, which considers loan amount, debt-to-income ratio, monthly income, number of inquiries and number of trade accounts in addition to FICO score, which we believe is representative of the model many of our sophisticated competitors would use. To conduct a comparison of the Upstart AI models to the models described in (i) and (ii), we run applicant information through the Upstart AI models, the FICO-only model, and FICO+ model, comparing performance by analyzing five commonly-used statistical metrics, each of which measures the deviation between predicted losses and actual losses for each model. These metrics include: the root mean square error of net present value of losses, normalized logistic loss, ratio of the gini coefficients of predicted to observed rankings, the area under the receiver operating characteristics curve, and the Kolmogorov-Smirnov statistic.

institutional investors through our loan funding programs. Our institutional investors and buyers that participate in our loan funding programs, which include Goldman Sachs, PIMCO and funds managed by Morgan Stanley Investment Management, invest in Upstart-powered loans through whole loan purchases, purchases of pass-through certificates and investments in asset-backed securitizations. We enter into nonexclusive agreements with our whole loan purchasers and each of the grantor trust entities in our asset-backed securitizations, or ABS, under which our ABS investors benefit from our loan servicing capabilities.[19] The remaining 2% of loans funded through our platform in the third quarter of 2020 were funded through our balance sheet.

Our revenue is primarily comprised of fees paid by banks. We charge banks referral fees for each loan referred through Upstart.com and originated by a bank partner, platform fees for each loan originated (regardless of its source) and loan servicing fees as consumers repay their loans. Our agreements with our bank partners are nonexclusive, generally have 12-month terms that automatically renew, subject to certain early termination provisions and minimum fee amounts, and do not include any minimum origination obligation or origination limits. As a usage-based platform, we target positive unit economics on each transaction, resulting in a cash efficient business model that features both high growth rates and profitability. As of September 30, 2020, we had 10 bank partners. In the nine months ended September 30, 2020, Cross River Bank originated 72% of the loans facilitated on our platform and fees received from Cross River Bank accounted for 65% of our total revenue.[20] Our current agreement with Cross River Bank began on January 1, 2019 and has an initial four year term, with a renewal term for an additional two years following the initial four year term.

We have achieved rapid growth while improving our margin profile in recent years. The number of loans facilitated on our platform increased by 88% from 114,125 in 2018 to 215,122 in 2019, and 30% from 136,468 in the nine months ended September 30, 2019 to 176,983 over the same period in 2020. Our revenue for the nine months ended September 30, 2019 and 2020 was $101.6 million and $146.7 million, respectively, representing an increase of 44%. For the nine months ended September 30, 2019 and 2020, our net income (loss) was $(6.5) million and $5.0 million, respectively.[21]

Industry Overview

Affordable Credit is Critical to Unlocking Upward Mobility and Opportunity

With $3.6 trillion of consumer credit originated between April 2019 and March 2020,[22] credit is a cornerstone of the U.S. economy. Access to affordable credit is central to unlocking upward mobility and opportunity. Reducing the price of borrowing for consumers has the potential to dramatically improve the quality of life for millions of people. Studies have demonstrated a strong statistical link among access to affordable credit, personal well-being and income growth.[23] The average American has approximately $29,800 in personal debt.[24] While access to affordable credit has allowed Americans to purchase and improve their homes, buy cars, pay for college tuition and cover emergency expenses, high interest

19 See the sections titled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Term loans and revolving loan facilities", "Business—Institutional Investors" and Note 7 to our consolidated financial statements for more information about our loan funding programs, including the role of our warehouse credit facilities and special purpose entities and our arrangements with institutional investors. See "Note 3. Securitizations and Variable Interest Entities" to our consolidated financial statements for additional information regarding transactions with our VIEs.

20 See the section titled "Business—Bank Partnerships" for more information about our arrangements with CRB and other bank partners.

21 Unless otherwise noted, "net loss" refers to "net loss attributable to Upstart Holdings, Inc. common stockholders."

22 Based on loan origination dollar amounts published by TransUnion; see the section titled "Industry, Market and Other Data.".

23 Kirsten Wysen, Open Source Solutions: Why Credit Scores and Payday Lending Matter for Health, October 2019.

24 Northwestern Mutual, 2019 Planning & Progress Study: The Debt Debacle, 2019.

rates can negatively impact a consumer's financial health. The U.S. Federal Reserve reports that on average, 10% of household disposable personal income is spent on debt repayment.[25] In addition, 16% of Americans spend 50% to 100% of their monthly income repaying debt.[26]

Affordable Credit Is Inaccessible for Millions because Existing Systems Fail to Accurately Quantify Risk

The FICO score was invented in 1989 and has not fundamentally changed since that time.[27] The FICO score is used by over 90% of lenders to determine who is approved for credit and at what interest rate.[28] While FICO is rarely used in isolation, many credit models are simple, rules-based systems. A leading expert found that bank credit models commonly incorporate eight to 15 variables, with the more sophisticated models using as many as 30.[29] Unsurprisingly, the world is more complicated than can be represented by these models, so they are limited in their ability to reliably estimate the probability of default.

Many borrowers suffer from the effects of inaccurate credit models. Many are approved for a loan that they ultimately will be unable to repay, negatively impacting both the consumer and the lender. Many others may be declined for a loan that they could have successfully repaid if given the opportunity—again doing harm to both consumer and lender. According to an Upstart retrospective study completed in December 2019, four out of five Americans who have taken out a loan have never defaulted, yet less than half of Americans have access to prime credit.[30] Even consumers with high credit scores tend to pay too much for loans because the rates they pay effectively subsidize the losses from borrowers who default.

25 The Federal Reserve Board, Household Debt Service and Financial Obligations Ratios, or Federal Reserve Household Debt, December 2019.

26 Northwestern Mutual; see the section titled "Industry, Market and Other Data."

27 Kaufman; see the section titled "Industry, Market and Other Data."

28 Kaufman; see the section titled "Industry, Market and Other Data."

29 Naeem Siddiqi, Intelligent Credit Scoring: Building and Implementing Better Credit Risk Scorecards–2nd Edition, 2017.

30 The study defined access to prime credit as individuals with credit reports with VantageScores of 720 or above.

Banks Will Continue to be at the Forefront of Consumer Lending

Banks have been at the forefront of consumer lending in the U.S. for more than a century. They benefit from long-term structural advantages, including a low cost of funding, a unique regulatory framework, and high levels of consumer trust. Through large and reliable deposit bases, banks are able to maintain a very low cost of funds—approximately 1% on average.[31] These cost savings are passed through to borrowers in the form of lower interest rates, a significant competitive advantage over non-depository lending institutions. Banks also benefit from a regulatory framework that allows them to create nation-wide lending programs that are largely uniform. Given these advantages, we believe that a partnership-based bank enablement approach will be more successful than a disruption strategy.

Banks Must Undergo a Digital Transformation to Remain Competitive

The largest four U.S. banks spend an estimated $38 billion on technology and innovation annually.[32] These four banks may attempt to build AI lending models over time, once general market acceptance has been achieved. However, outside the largest four banks, there are approximately 5,200 FDIC insured institutions[33] that are at risk of falling behind. Despite holding over $8 trillion in deposits,[34] we believe these banks, particularly small to medium-sized banks, have outdated technology and lack the technical resources of larger banks to fund the digitization process.

At the same time, consumers are increasingly seeking digital, personalized and automated experiences.[35] A 2017 Bain survey found that approximately 50% of the U.S. population would be comfortable buying financial products from technology companies.[36] We believe that as consumers, both young and old, move their financial lives online, small and medium-sized banks will be increasingly ill-equipped to serve them.

We believe that these trends have been accelerated by the COVID-19 pandemic, as the lack of access to physical bank branches has increased the banking industry's focus on digital capabilities. The performance of our platform through this crisis has also given existing and prospective bank partners an important new data point to underpin their growing confidence in our solution.

Increasing Recognition from Regulators

Many regulators including the Federal Deposit Insurance Corporation, or FDIC, the Office of the Comptroller of the Currency, or OCC, the Federal Reserve and the CFPB increasingly recognize the opportunity to modernize techniques used in lending.[37] In December 2019, these agencies issued an inter-agency report in support of the use of alternative data in lending decisions.[38] Additionally, in November 2019, the CFPB director noted that despite external uncertainty regarding how AI will fit into

31 Federal Home Loan Bank of San Francisco, Cost of Funds Index, December 2019.

32 Adrian D. Garcia, Bankrate: JPM, Big Banks Spend Billions on Tech but Innovation Lags, July 2018.

33 Federal Deposit Insurance Corporation, or FDIC, Statistics on Depository Institutions, December 2019.

34 The dollar amount of deposits held by banks, other than the largest four banks, was aggregated by Upstart using data provided by the FDIC; see the section titled "Industry, Market and Other Data."

35 Bain & Company, Inc., or Bain, Evolving the Customer Experience in Banking, 2017. PricewaterhouseCoopers LLP, or PwC, Experience Is Everything: Here's How To Get It Right, 2018. RedPoint Global and the Harris Poll, or RedPoint Global, Addressing the Gaps in Customer Experience: A Benchmark Study Exploring the Ever Evolving Customer Experience and How Marketers and Consumers Are Adapting, March 2019.

36 Bain; see the section titled "Industry, Market and Other Data."

37 Board of Governors of the Federal Reserve System, Consumer Financial Protection Bureau, Federal Deposit Insurance Corporation, National Credit Union Administration and Office of the Comptroller of the Currency, Interagency Statement on the Use of Alternative Data in Credit Underwriting, or FDIC Interagency Statement, December 2019.

38 FDIC Interagency Statement; see the section titled "Industry, Market and Other Data."

regulatory frameworks, the CFPB is focused on ensuring a path to regulatory clarity because it recognizes the value AI lending products can offer consumers.[39] In fact, in 2017, in response to a request by Upstart, the CFPB issued Upstart the first no-action letter, which provides that the CFPB has no present intention to recommend enforcement action with regard to the application of the Equal Credit Opportunity Act against Upstart for its use of alternative variables and AI and machine learning in credit decision-making.[40] Such no-action letter expires on December 1, 2020. We are currently discussing with the CFPB whether we can continue to operate under its no-action letter policies, which were revised in 2018 and replaced the prior policy under which our no-action letter was issued. However, there is no guarantee that these discussions will be successful.

The AI Opportunity

AI has the potential to add $13 trillion to the current global economic output by 2030, a 16% increase over today's output.[41] According to the McKinsey Global Institute, AI will be slowly adopted in its early stages, followed by steep acceleration as the technology matures and companies learn how to best deploy it.[42] We believe the lending industry will follow this path.

Lending is a compelling application for AI. First, it involves sophisticated decisioning for events that occur millions of times each day. Second, there is an almost unlimited supply of data that has the potential to be predictive and improve the accuracy of credit decisions. Third, given the costs and risks associated with lending, the economic wins from AI are dramatic for both banks and consumers. This means that the significant investment required to overcome the technical and regulatory hurdles is well worth the effort.

With our eight-year head start, our AI lending platform is well-positioned to power a significant portion of the U.S. credit market. To date, we have focused on the unsecured personal loan market, one of the fastest-growing segment of consumer credit.[43] From April 2019 to March 2020, there were $118 billion[44] in U.S. unsecured personal loan originations, representing 8% growth over the prior year. In the same period, we facilitated the origination of $3.5 billion in unsecured personal loans, or less than 5% of the total market.[45] We not only have a large opportunity to capture market share in unsecured personal loans, but by applying our AI models and technology to adjacent opportunities, we believe we are well-positioned to address the U.S. auto loan, credit card and mortgage markets. From April 2019 to March 2020, there were $625 billion in U.S. auto loan originations, $363 billion in U.S. credit card originations and $2.5 trillion in U.S. mortgage originations.[46] In June 2020, we began offering auto loans on our platform, and in September 2020, the first auto loan was originated through the Upstart platform. Over time, we believe we are also capable of capturing market share in student loans, point-of-sales loans and Home Equity Lines of Credit, or HELOCs.

39 Kathleen L. Kraninger, Consumer Financial Protection Bureau: Director Kraninger's Remarks at TCH-BPI Conference, November 2019.

40 Consumer Financial Protection Bureau, No-Action Letter to Upstart Network, Inc. dated September 14, 2017, and as modified on September 11, 2020, or the CFPB No-Action Letter.

41 McKinsey; see the section titled "Industry, Market and Other Data."

[42] McKinsey; see the section titled "Industry, Market and Other Data."

[43] Eldar Beiseitov, Federal Reserve Bank of St. Louis: Unsecured Personal Loans Get a Boost From Fintech Lenders, July 2019.

[44] Based on loan origination dollar amounts published by TransUnion; see the section titled "Industry, Market and Other Data."

[45] Based on loan origination dollar amounts published by TransUnion; see the section titled "Industry, Market and Other Data."

[46] Based on loan origination dollar amounts published by TransUnion; see the section titled "Industry, Market and Other Data."

Our AI Lending Platform

Our AI models are central to our value proposition and unique position in the industry. Our models incorporate more than 1,600 variables, which are analogous to the columns in a spreadsheet. They have been trained by more than 9 million repayment events, analogous to rows of data in a spreadsheet. Interpreting these almost 15 billion cells of data are increasingly sophisticated machine learning algorithms that enable a more predictive model.

These elements of our model are co-dependent; the use of hundreds or thousands of variables is impractical without sophisticated machine learning algorithms to tease out the interactions between them. And sophisticated machine learning depends on large volumes of training data. Over time, we have been able to deploy and blend more sophisticated modeling techniques, leading to a more accurate system. This co-dependency presents a challenge to others who may aim to short-circuit the development of a competitive model. While incumbent lenders may have vast quantities of historical repayment data, their training data lacks the hundreds of columns, or variables, that power our model. For more details regarding the variables, training data, and algorithms in our models, please see "Business—Evolution of Upstart's AI Model."

Despite their sophistication, our AI models are delivered to banks in the form of a simple cloud application that shields borrowers from the underlying complexity. Additionally, our platform allows banks to tailor lending applications based on their policies and business needs. Our bank partners can configure many aspects of their lending programs, including factors such as loan duration, loan amount, minimum credit score, maximum debt-to-income ratio and return target by risk grade. Within the construct of each bank's self-defined lending program, our platform enables the origination of conforming and compliant loans at a low per-loan cost.

Our platform benefits from powerful flywheel effects that drive continuous improvements as our business scales. Our platform benefits first from increasingly sophisticated models, variable expansion and rapid growth of training data. Upgrades to our platform allow us to offer higher approval rates and lower interest rates to consumers, which increases the number of borrowers on our platform. Upgrades to our platform also lead to better borrower selection, which lowers losses and lowers interest rates to borrowers. The flywheel effect created by self-reinforcing AI increases the economic opportunity that can be shared by borrowers and lenders over time.

Upstart's AI Flywheel

Our Ecosystem

Our platform connects consumers, banks and institutional investors through a shared AI lending platform. Because AI is a new and disruptive technology, and banking is a traditionally conservative industry, we have brought our technology to market in a way that allows us to grow rapidly and improve on our AI models, while allowing banks to take a prudent and responsible approach to assessing and adopting our platform.

On the consumer side, we aggregate demand on Upstart.com, where consumers are presented with bank-branded offers from our bank partners. In this way, we benefit banks who have adopted our AI lending technology. Bank partners can also offer Upstart-powered loans through a white-labeled interface on their own website or mobile application. Consumers on our platform are generally offered unsecured personal loans ranging from $1,000 to $50,000 in size, at APRs typically ranging from approximately 6.5% to 35.99%, with terms typically ranging from three to five years, with a monthly repayment schedule and no prepayment penalty.

On the funding side, our bank partners can retain loans that align with their business and risk objectives, while the remainder can be sold to our network of institutional investors, which have far broader and more diverse capacity to absorb and distribute risk. This flexible approach allows banks to adopt AI lending at their own pace, while we continue to grow and improve our platform.

Upstart's Ecosystem

Value Proposition to Consumers

- *Higher approval rates and lower interest rates*—The CFPB reported that a study by Upstart of its data using a methodology specified by the CFPB, showed that our AI model approves 27% more borrowers than high-quality traditional lending models with a 16% lower average APR for approved loans.[47] Our analyses suggest that our loan offers have improved significantly over time relative to those of competitors.[48]

[47] Ficklin and Watkins; see the section titled "Industry, Market and Other Data."

[48] Since 2017, Upstart has used a third-party service to perform quarterly comparative studies of the interest rates offered for Upstart-powered loans versus the interest rates offered by six other companies offering personal loans online.

- *Superior digital experience*—Whether consumers apply for a loan through Upstart.com or directly through a bank partner's website, the application experience is streamlined into a single application process and the loan offers provided are firm. In the third quarter of 2020, approximately 70% of Upstart-powered loans were instantly approved with no document upload or phone call required, an increase from 0% in late 2016. Such automation improvements were due in large part to improvements to our AI models and the application of such models to different aspects of the loan process, including data verification and fraud detection.

Value Proposition to Bank Partners

- *Competitive digital lending experience*—We provide regional banks and credit unions with a cost effective way to compete with the technology budgets of their much larger competitors. The Net Promoter Scores, or NPS, for our bank partners' lending programs are approximately 79, well above published benchmarks for the largest banks.[49]

- *Expanded customer base*—We refer customers that apply for loans through Upstart.com to our bank partners, helping them grow both loan volumes and number of customers. The most common age of Upstart-referred borrowers in the third quarter of 2020 was 28 years old, a compelling demographic that is often challenging for banks to access.

- *Lower loss rates*—An internal study comparing our model to that of several large U.S. banks found that our model could enable these banks to lower loss rates by almost 75% while keeping approval rates constant.[50]

- *New product offering*—Personal loans are one of the fastest-growing segment of credit in the U.S.[51] Our platform helps banks provide a product their customers want, rather than letting customers seek loans from competitors.

- *Institutional investor acceptance*—Analyses by credit rating agencies, loan and bond buying institutions, and credit underwriters help banks gain confidence that Upstart-powered loans are subject to significant and constant scrutiny from experts, the results of which are often publicly available.

Our Competitive Strengths

Constantly Improving AI Models

We have been building and refining our AI models for more than eight years, and they have led directly to our growth and profitability. Our models currently incorporate more than 1,600 variables and are trained by more than 9 million repayment events. Beyond the advantages accrued by our constantly growing volume of training data, our data science team continues to update our modeling

[49] Upstart used a third-party service to administer surveys to loan applicants immediately following an applicant's acceptance of a loan on Upstart's platform. The disclosed figure represents the weighted average of the Net Promoter Scores of each of our bank partners in the third quarter of 2020. While the Net Promoter Score methodology used by Upstart's third-party service was designed to be consistent with the methodology used in the referenced benchmark study, any differences in the timing or method in which the surveys were administered could negatively impact the comparability of such Net Promoter Scores. For further information, see the section titled "Industry, Market and Other Data."

[50] In an internal study, Upstart replicated three bank models using their respective underwriting policies and evaluated their hypothetical loss rates and approval rates using Upstart's applicant base in late 2017. To compare the hypothetical loss rates between Upstart's model and each of the replicated bank models, Upstart held approval rates constant at the rate called for by each bank's respective underwriting policy. Such result represents the average rate of improvement exhibited by Upstart's platform against each of the three respective bank models.

[51] Beiseitov; see the section titled "Industry, Market and Other Data."

techniques regularly. Model and technology improvements have increased our conversion rate from the initial rate inquiry to funded loan by a factor of ten since inception. We have a pipeline of potential model improvements that we expect will further increase our conversion rates in the future.

Flexible Two-Sided Ecosystem

We benefit from aggregating consumer demand on Upstart.com, referring consumers directly to our network of AI-enabled bank partners. Our consumer presence allows us to increase awareness of and interest in Upstart-powered loans, directly contributing to our own growth, as well as the growth and success of our bank partners' lending programs.

With an expanding list of bank partners, we can solve the borrowing needs of an increasingly diverse array of consumers. As more banks leverage the Upstart platform, consumers benefit from better offers of credit, while experiencing a consistently high-quality experience.

Capital Efficient Fee-Based Business

In the third quarter of 2020, we generated 96% of revenue from fees from banks and loan servicing. We have also achieved a high degree of automation, with approximately 70% of Upstart-powered loans approved instantly and fully automated in the third quarter of 2020, driving operating leverage and improving unit economics.

Regulatory Compliance

We have worked with regulators since our inception to ensure we operate in compliance with applicable laws and regulations. AI lending expands access to affordable credit by constantly finding new ways to identify qualified borrowers, yet AI models must avoid unlawful disparate impact or statistical bias that would be harmful to protected groups. We have demonstrated to the CFPB that our platform does not introduce unlawful bias to the credit decision, and we have developed sophisticated reporting procedures to ensure future versions of the model remain fair.[52] In September 2017, we received the CFPB's first no-action letter.[53] The CFPB issues no-action letters to reduce potential regulatory uncertainty for innovative products that may offer significant consumer benefit.[54] At this time, we do not know of any other lending platforms that have received similar no-action letters for fair lending from the CFPB.

Our Growth Strategy

Model Improvements

Our growth has historically been driven by AI model improvements and technology upgrades, and we expect this trend to continue for the foreseeable future. Model upgrades typically result in higher approval rates, better loan offers, higher degrees of automation and other improvements that increase our total number of funded loans. As our model accuracy increases, we are able to re-target and approve consumers who previously visited our site but were not eligible for a loan. A more efficient funnel also has the effect of enabling new marketing and acquisition channels that may not have been economical in the past, providing a second-order growth driver.

[52] Ficklin and Watkins; see the section titled "Industry, Market and Other Data."

[53] CFPB No-Action Letter; see the section titled "Industry, Market and Other Data."

[54] Consumer Financial Protection Bureau, Policy on No-Action Letters, September 2019.

More Efficient Funding

Growth is also driven by a reduced cost of funding for Upstart-powered loans. This can happen because more banks adopt our platform, or existing partners increase their budget for Upstart-powered loans. Cost of funding can also be reduced as bank partners gain more confidence in our models and lower some of the constraints they choose to place on their lending program. The cost of funding through institutional investors can also improve regularly, as credit rating agencies and loan and residual buyers gain confidence in the credit performance of Upstart-powered loans.

Our internal data suggests that each 100 basis point reduction in interest rate offered to the consumer increases conversion by 15%.[55] Therefore, reduced cost of funding can be a direct driver of growth.

Bank Distribution

Today, the vast majority of borrowers are referred to our bank partners via Upstart.com. But these banks are also beginning to offer Upstart-powered loans through their own websites, supported by their own marketing programs. We expect the bank-driven distribution of Upstart-powered loans to grow over time, as more bank partners roll out white-labeled versions of Upstart to serve their new and existing customers directly.

New Products

Personal loans are one of the fastest-growing segment of consumer credit in the U.S., but they are far from the largest.[56] As we apply our AI models and technology to other credit verticals, we will be able to serve the needs of more consumers and to play a broader technology enablement role for our bank partners. There is significant opportunity to expand from personal loans to auto loans, credit cards, mortgages, student loans, point-of-sale loans and HELOCs. In June 2020, we began offering auto loans on our platform, and in September 2020, the first auto loan was originated through the Upstart platform.

Risk Factors Summary

Our business is subject to numerous risks and uncertainties, including those highlighted in the section titled "Risk Factors" immediately following this prospectus summary. These risks include, but are not limited to, the following:

- We are a rapidly growing company with a relatively limited operating history, which may result in increased risks, uncertainties, expenses and difficulties, and makes it difficult to evaluate our future prospects.
- Our revenue growth rate and financial performance in recent periods may not be indicative of future performance and such growth may slow over time.
- The COVID-19 pandemic has harmed and could continue to harm our business, financial condition and results of operations.
- If we fail to effectively manage our growth, our business, financial condition and results of operations could be adversely affected.
- We have incurred net losses in the past, and we may not be able to maintain or increase our profitability in the future.

[55] In a series of internal studies conducted in April 2016, September 2016 and January 2018, Upstart compared changes in conversion rates between test groups of Upstart loan applicants when loan offer APRs were increased or decreased for certain groups. The average change in conversion rates across the three studies is presented.

[56] Beiseitov; see the section titled "Industry, Market and Other Data."

- Our quarterly results are likely to fluctuate and as a result may adversely affect the trading price of our common stock.
- If we are unable to continue to improve our AI models or if our AI models contain errors or are otherwise ineffective, our growth prospects, business, financial condition and results of operations would be adversely affected.
- If our existing bank partners were to cease or limit operations with us or if we are unable to attract and onboard new bank partners, our business, financial condition and results of operations could be adversely affected.

- Cross River Bank and one other bank partner account for a substantial portion of the total number of loans facilitated by our platform and our revenue.
- The sales and onboarding process of new bank partners could take longer than expected, leading to fluctuations or variability in expected revenues and results of operations.
- Our business may be adversely affected by economic conditions and other factors that we cannot control.
- Our AI models have not yet been extensively tested during down-cycle economic conditions. If our AI models do not accurately reflect a borrower's credit risk in such economic conditions, the performance of Upstart-powered loans may be worse than anticipated.
- If we are unable to maintain a diverse and robust loan funding program, our growth prospects, business, financial condition and results of operations could be adversely affected.
- Our business is subject to a wide range of laws and regulations, many of which are evolving, and failure or perceived failure to comply with such laws and regulations could harm our business, financial condition and results of operations.
- We rely on strategic relationships with loan aggregators to attract applicants to our platform, and if we cannot maintain effective relationships with loan aggregators or successfully replace their services, our business could be adversely affected.
- Substantially all of our revenue is derived from a single loan product, and we are thus particularly susceptible to fluctuations in the unsecured personal loan market. We also do not currently offer a broad suite of products that bank partners may find desirable.

Channels for Disclosure of Information

Investors, the media and others should note that, following the completion of this offering, we intend to announce material information to the public through filings with the Securities and Exchange Commission, or the SEC, our corporate blog at Upstart.com/blog, the investor relations page on our website, press releases, our Twitter account (@Upstart), our Facebook page, our LinkedIn page, public conference calls or webcasts.

The information disclosed by the foregoing channels could be deemed to be material information. As such, we encourage investors, the media, and others to follow the channels listed above and to review the information disclosed through such channels.

Any updates to the list of disclosure channels through which we will announce information will be posted on the investor relations page on our website.

Corporate Information

Upstart Network, Inc. was incorporated in Delaware in 2012. Pursuant to a restructuring, Upstart Holdings, Inc. was incorporated in December 2013 and became the holding company of Upstart Network, Inc. Our principal executive offices are located at 2950 S. Delaware Street, Suite 300, San Mateo, California 94403, and our telephone number is (650) 204-1000. Our website address is www.Upstart.com. Information contained on, or that can be accessed through, our website does not constitute part of this prospectus and inclusions of our website address in this prospectus are inactive textual references only. You should not consider information contained on our website to be part of this prospectus or in deciding whether to purchase shares of our common stock.

Upstart, our logo, and our other registered or common law trademarks, service marks, or trade names appearing in this prospectus are the property of Upstart Holdings, Inc. or one of its subsidiaries. Other trademarks and trade names referred to in this prospectus are the property of their respective owners.

JOBS Act

We qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. An emerging growth company may take advantage of relief from certain reporting requirements and other burdens that are otherwise applicable generally to public companies. These provisions include:

- reduced obligations with respect to financial data, including presenting only two years of audited financial statements and only two years of selected financial data;
- an exception from compliance with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act;
- reduced disclosure about our executive compensation arrangements in our periodic reports, proxy statements, and registration statements; and
- exemptions from the requirements of holding non-binding advisory votes on executive compensation or golden parachute arrangements.

We may take advantage of these provisions for up to five years or such earlier time that we no longer qualify as an emerging growth company. We would cease to be an emerging growth company if we have more than $1.07 billion in annual revenues, have more than $700 million in market value of our capital stock held by non-affiliates or issue more than $1.0 billion of non-convertible debt over a three-year period. We may choose to take advantage of some but not all of these reduced reporting burdens.

In addition, under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have elected to avail ourselves of this exemption from new or revised accounting standards, and, therefore, we will not be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies or that have opted out of using

such extended transition period, which may make comparison of our financial statements with those of other public companies more difficult. We may take advantage of these reporting exemptions until we no longer qualify as an emerging growth company, or, with respect to adoption of certain new or revised accounting standards, until we irrevocably elect to opt out of using the extended transition period.

The Offering

Common stock offered by us	shares
Common stock offered by the selling stockholders	shares
Common stock to be outstanding after this offering	shares
Option to purchase additional shares of common stock from us	We have granted the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase up to additional shares from us.
Use of proceeds	We estimate that the net proceeds to us from the sale of shares of our common stock in this offering will be approximately $ (or approximately $ if the underwriters' option to purchase additional shares of our common stock is exercised in full), based upon the assumed initial public offering price of $ per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We will not receive any of the proceeds from the sale of common stock by the selling stockholders in this offering.

The principal purposes of this offering are to increase our capitalization and financial flexibility, create a public market for our common stock, and enable access to the public equity markets for us and our stockholders. We intend to use the net proceeds from this offering for general corporate purposes, including working capital, operating expenses, and capital expenditures. Additionally, we may use a portion of the net proceeds to acquire or invest in businesses, products, services, or technologies. However, we do not have agreements or commitments for any material acquisitions or investments at this time. See the section titled "Use of Proceeds" for additional information.

Concentration of ownership	Upon completion of this offering, our executive officers, directors, and holders of 5% or more of our common stock will beneficially own, in the aggregate, approximately % of the outstanding shares of our common stock.
Risk factors	See "Risk Factors" and the other information included in this prospectus for a discussion of factors you should carefully consider before deciding to invest in our common stock.
Proposed Nasdaq Global Select Market trading symbol	"UPST"

The number of shares of our common stock that will be outstanding after this offering is based on shares of our common stock outstanding as of September 30, 2020, and reflects:

- 47,349,577 shares of preferred stock that will automatically convert into shares of common stock immediately prior to the completion of this offering pursuant to the terms of our amended and restated certificate of incorporation, or the Capital Stock Conversion; and
- 600,208 shares of our Series B preferred stock issuable upon the automatic net exercise of a warrant outstanding as of September 30, 2020, with an exercise price of $0.01 per share, upon the closing of this offering, which would result in the issuance of shares of our common stock in connection with the Capital Stock Conversion.

The shares of our common stock outstanding as of September 30, 2020 exclude the following:

- 19,356,042 shares of our common stock issuable upon the exercise of options to purchase shares of our common stock outstanding as of September 30, 2020, with a weighted-average exercise price of $3.11 per share (other than shares to be issued upon exercise of options to purchase common stock by certain selling stockholders in connection with the sale of such shares by such selling stockholders in this offering);
- 319,669 shares of our common stock issuable upon the exercise of warrants outstanding as of September 30, 2020, with a weighted-average exercise price of $1.77 per share;
- shares of our common stock issuable upon the exercise of options to purchase shares of our common stock issued after September 30, 2020, with a weighted-average exercise price of $ per share; and
- shares of our common stock reserved for future issuance under our equity compensation plans, consisting of:
  - 5,520,000 shares of our common stock to be reserved for future issuance under our 2020 Equity Incentive Plan, or our 2020 Plan, which will become effective prior to the completion of this offering;
  - shares of our common stock reserved for future issuance under our 2012 Stock Plan, or our 2012 Plan, provided that we will cease granting awards under our 2012 Plan upon the effectiveness of the 2020 Plan; and
  - 1,380,000 shares of our common stock reserved for future issuance under our 2020 Employee Stock Purchase Plan, or our ESPP, which will become effective prior to the completion of this offering.

Our 2020 Plan and our ESPP will each provide for annual automatic increases in the number of shares reserved thereunder and our 2020 Plan will also provide for increases to the number of shares that may be granted thereunder based on awards under our 2012 Plan that expire, are forfeited, or otherwise repurchased by us, as more fully described in the section titled "Executive Compensation—Employee Benefit and Stock Plans."

Except as otherwise indicated, all information in this prospectus assumes:

- the Capital Stock Conversion will occur immediately prior to the completion of this offering;
- the filing and effectiveness of our amended and restated certificate of incorporation in Delaware and the effectiveness of our amended and restated bylaws, will each occur immediately prior to the completion of this offering;
- no exercise or cancellation of outstanding stock options subsequent to September 30, 2020 (other than shares to be issued upon exercise of options to purchase common stock by certain selling stockholders in connection with the sale of such shares by such selling stockholders in this offering); and
- no exercise by the underwriters of their option to purchase an additional shares of our common stock from us.

Summary Consolidated Financial and Other Data

The following tables summarize our consolidated historical financial and other data. We have derived the summary consolidated statements of operations data for the years ended December 31, 2017, 2018 and 2019 from our audited consolidated financial statements included elsewhere in this prospectus. The summary consolidated statements of operations data for the nine months ended September 30, 2019 and 2020 and the consolidated balance sheet data as of September 30, 2020 have been derived from our unaudited interim consolidated financial statements included elsewhere in this prospectus. The summary consolidated financial data in this section are not intended to replace our consolidated financial statements and related notes, and our historical results are not necessarily indicative of the results that may be expected in the future. The following summary consolidated financial and other data should be read in conjunction with the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included elsewhere in this prospectus. The last day of our fiscal year is December 31. Our fiscal quarters end on March 31, June 30, September 30, and December 31.

Consolidated Statements of Operations Data

	Year Ended December 31,			Nine Months Ended September 30,	
(In thousands, except share and per share amounts)	**2017**	**2018**	**2019**	**2019**	**2020**
Revenue:					
Revenue from fees, net	$51,161	$88,482	$159,847	$98,699	$144,179
Interest income and fair value adjustments, net	6,128	10,831	4,342	2,918	2,527
Total revenue	57,289	99,313	164,189	101,617	146,706
Operating expenses:					
Sales and marketing[(1)]	33,838	63,633	93,175	61,236	65,113
Customer operations[(1)]	10,232	15,416	24,947	16,593	24,792
Engineering and product development[(1)]	5,324	8,415	18,777	11,480	24,651
General, administrative, and other[(1)]	15,431	19,820	31,865	20,399	30,778
Total operating expenses	64,825	107,284	168,764	109,708	145,334
(Loss) income from operations	(7,536)	(7,971)	(4,575)	(8,091)	1,372
Other income	330	487	1,036	832	5,497
Expense on warrants and convertible notes, net	(1,649)	(3,734)	(1,407)	(2,626)	(2,317)
Net (loss) income before income taxes	(8,855)	(11,218)	(4,946)	(9,885)	4,552
Provision for income taxes	6	—	74	—	—
Net (loss) income before attribution to noncontrolling interests	(8,861)	(11,218)	(5,020)	(9,885)	4,552
Net (loss) income attributable to noncontrolling interests	(1,144)	1,101	(4,554)	(3,368)	(404)

	Year Ended December 31,			Nine Months Ended September 30,	
(In thousands, except share and per share amounts)	**2017**	**2018**	**2019**	**2019**	**2020**
Net (loss) income attributable to Upstart Holdings, Inc. common stockholders	$(7,717)	$(12,319)	$(466)	$(6,517)	$4,956
Net loss per common share attributable to Upstart Holdings, Inc. common stockholders, basic and diluted[(2)]	$(0.56)	$(0.87)	$(0.03)	$(0.46)	$—

Weighted-average number of shares outstanding used in computing net loss per share attributable to Upstart Holdings, Inc. common stockholders, basic and diluted[2]	13,873,810	14,128,183	14,335,611	14,313,262	14,663,623
Pro forma net loss per share attributable to Upstart Holdings, Inc. common stockholders, basic and diluted[2]					$$
Weighted-average number of shares used to compute pro forma net loss per share attributable to Upstart Holdings, Inc. common stockholders, basic and diluted[2]					

(1) Includes stock-based compensation expense as follows:

	Year Ended December 31,			Nine Months Ended September 30,	
(In thousands)	**2017**	**2018**	**2019**	**2019**	**2020**
Sales and marketing	$32	$183	$278	$157	$1,136
Customer operations	124	178	433	252	625
Engineering and product development	574	753	1,803	932	3,181
General, administrative, and other	560	931	1,292	863	2,160
Total stock-based compensation	$1,290	$2,045	$3,806	$2,204	$7,102

(2) See Note 16 to our consolidated financial statements for an explanation of the calculations of our basic and diluted net loss per share attributable to Upstart Holdings, Inc. common stockholders, pro forma net loss per share attributable to Upstart Holdings, Inc. common stockholders and the weighted-average number of shares used in the computation of the per share amounts.

Consolidated Balance Sheet Data

	As of September 30, 2020		
(In thousands)	**Actual**	**Pro Forma[1]**	**Pro Forma asAdjusted [2] [3]**
Cash	$53,234		$$
Loans (at fair value)	122,708		
Total assets	309,804		
Borrowings	100,588		
Total liabilities	194,591		
Convertible preferred stock	162,546		
Accumulated deficit	(70,249)		
Total stockholders' deficit	(47,333)		
Total liabilities, convertible preferred stock and stockholders' deficit	$309,804		

(1) The pro forma column in the balance sheet data table above reflects (a) the Capital Stock Conversion, as if such conversions had occurred on September 30, 2020, (b) the automatic net exercise of a warrant to purchase up to shares of our convertible preferred stock and (c) the filing and effectiveness of our amended and restated certificate of incorporation in Delaware that will become effective immediately prior to the completion of this offering.

(2) The pro forma as adjusted column in the balance sheet data table above gives effect to (a) the pro forma adjustments set forth above and (b) the sale and issuance by us of shares of our common stock in this offering, based upon the assumed initial public offering price of $ per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us and (c) the issuance of shares of common stock upon the exercise of options held by certain selling stockholders in connection with the sale of such shares by such selling stockholders in this offering.

(3) Each $1.00 increase or decrease in the assumed initial public offering price of $ per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, would increase or decrease the amount of our pro forma as adjusted cash, working capital, total assets, and total stockholders' equity by $, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, after deducting estimated underwriting discounts and commissions payable by. An increase or decrease of 1.0 million shares in the number of shares offered by us would increase or decrease, as applicable, the amount of our pro forma as adjusted cash, working capital, total assets, and total stockholders' equity by $ assuming the assumed initial public offering price remains the same, and after deducting estimated underwriting discounts and commissions payable by us.

Key Operating Metrics

We review a number of operating and financial metrics, including the following key metrics to evaluate our business, measure our performance, identify trends affecting our business, formulate business plans, and make strategic decisions.

	Year Ended December 31,			Nine Months Ended September 30,	
	2017	**2018**	**2019**	**2019**	**2020**
Number of Loans Transacted	70,457	114,125	215,122	136,468	176,983

Conversion Rate	8.1%	9.1%	13.1%	12.2%	14.0%
Percentage of Loans Fully Automated	34%	53%	66%	64%	69%

See the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Operating Metrics" for a description of Number of Loans Transacted, Conversion Rate and Percentage of Loans Fully Automated.

Non-GAAP Financial Measures

	Year Ended December 31,			Nine Months Ended September 30,	
(In thousands)	**2017**	**2018**	**2019**	**2019**	**2020**
Contribution Profit	$9,265	$13,098	$48,940	$25,560	$63,697
Adjusted EBITDA	$(4,679)	$(6,226)	$5,595	$(1,363)	$16,006

See the section titled "Selected Consolidated Financial and Other Data—Non-GAAP Financial Measures" for a description of Contribution Profit and Adjusted EBITDA and the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Reconciliation of Non-GAAP Financial Measures" for a reconciliation of such non-GAAP financial measures to certain directly comparable financial measures calculated in accordance with GAAP.

Risk Factors

RISK FACTORS *Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information in this prospectus, including the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes, before making a decision to invest in our common stock. Our business, financial condition, results of operations, or prospects could also be harmed by risks and uncertainties not currently known to us or that we currently do not believe are material. If any of the risks actually occur, our business, financial condition, results of operations, and prospects could be adversely affected. In that event, the market price of our common stock could decline, and you could lose part or all of your investment.*

Risks Related to Our Business and Industry

We are a rapidly growing company with a relatively limited operating history, which may result in increased risks, uncertainties, expenses and difficulties, and makes it difficult to evaluate our future prospects.

We were founded in 2012 and have experienced rapid growth in recent years. Our limited operating history may make it difficult to make accurate predictions about our future performance. Assessing our business and future prospects may also be difficult because of the risks and difficulties we face. These risks and difficulties include our ability to:

- improve the effectiveness and predictiveness of our AI models;
- maintain and increase the volume of loans facilitated by our AI lending platform;
- enter into new and maintain existing bank partnerships;
- successfully maintain a diversified loan funding strategy, including bank partnerships and whole loan sales and securitization transactions that enhance loan liquidity for the bank partners that use our loan funding capabilities;
- successfully fund a sufficient quantity of our borrower loan demand with low cost bank funding to help keep interest rates offered to borrowers competitive;
- maintain competitive interest rates offered to borrowers on our platform, while enabling our bank partners to achieve an adequate return over their cost of funds, whether through their own balance sheets or through our loan funding programs;
- successfully build our brand and protect our reputation from negative publicity;
- increase the effectiveness of our marketing strategies, including our direct consumer marketing initiatives;
- continue to expand the number of potential borrowers;
- successfully adjust our proprietary AI models, products and services in a timely manner in response to changing macroeconomic conditions and fluctuations in the credit market;
- comply with and successfully adapt to complex and evolving regulatory environments.
- protect against increasingly sophisticated fraudulent borrowing and online theft;

- successfully compete with companies that are currently in, or may in the future enter, the business of providing online lending services to financial institutions or consumer financial services to borrowers;
- enter into new markets and introduce new products and services;
- effectively secure and maintain the confidentiality of the information received, accessed, stored, provided and used across our systems;
- successfully obtain and maintain funding and liquidity to support continued growth and general corporate purposes;
- attract, integrate and retain qualified employees; and
- effectively manage and expand the capabilities of our operations teams, outsourcing relationships and other business operations.

If we are not able to timely and effectively address these risks and difficulties as well as those described elsewhere in this "Risk Factors" section, our business and results of operations may be harmed.

Our revenue growth rate and financial performance in recent periods may not be indicative of future performance and such growth may slow over time.

We have grown rapidly over the last several years, and our recent revenue growth rate and financial performance may not be indicative of our future performance. In 2017, 2018 and 2019, our revenue was $57.3 million, $99.3 million and $164.2 million, respectively, representing a 73% growth rate from 2017 to 2018 and a 65% growth rate from 2018 to 2019. For the nine months ended September 30, 2019 and 2020, our revenue was $101.6 million and $146.7 million, respectively, representing a period-over-period growth rate of 44%. You should not rely on our revenue for any previous quarterly or annual period as any indication of our revenue or revenue growth in future periods. As we grow our business, our revenue growth rates may slow, or our revenue may decline, in future periods for a number of reasons, which may include slowing demand for our platform offerings and services, increasing competition, a decrease in the growth of our overall credit market, increasing regulatory costs and challenges and our failure to capitalize on growth opportunities. Further, we believe our growth over the last several years has been driven in large part by our AI models and our continued improvements to our AI models. Future incremental improvements to our AI models may not lead to the same level of growth as in past periods. In addition, we believe our growth over the last several years has been driven in part by our ability to rapidly streamline and automate the loan application and origination process on our platform. The Percentage of Loans Fully Automated on our platform was 34% in 2017 and increased to 66% in 2019.[57] We expect the Percentage of Loans Fully Automated to level off and remain relatively constant in the long term, and to the extent we expand our loan offerings beyond unsecured personal loans, we expect that such percentage may decrease in the short term. As a result of these factors, our revenue growth rates may slow, and our financial performance may be adversely affected.

The COVID-19 pandemic has harmed and could continue to harm our business, financial condition and results of operations.

The COVID-19 pandemic has caused extreme societal, economic, and financial market volatility, resulting in business shutdowns, an unprecedented reduction in economic activity and significant dislocation to businesses, the capital markets, and the broader economy. In particular, the impact of the COVID-19 pandemic on the finances of borrowers on our platform has been profound, as many have been, and will likely continue to be, impacted by unemployment, reduced earnings and/or elevated economic disruption and insecurity.

[57] See the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" for more information on how we define Percentage of Loans Fully Automated.

The magnitude and duration of the resulting decline in business activity cannot currently be estimated with any degree of certainty and has had several effects on our business and results of operations, including, among other things:

- decreased origination volumes on our platform;
- the potential for increased losses for new and existing originations using our AI models resulting from a rapid rise in U.S. unemployment;
- a temporary reduction in the availability of loan funding from institutional investors and the capital markets; and
- restricted sales operations and marketing efforts, and a reduction in the effectiveness of such efforts in some cases.

The COVID-19 pandemic may lead to a continued economic downturn, which is expected to decrease technology spending generally and could adversely affect demand for our platforms and services, in addition to prolonging the foregoing challenges in our business.

In response to the impact of the COVID-19 pandemic, we have undertaken a number of initiatives to support borrowers on our platform who have suffered income loss or other hardships as a result of the pandemic. We worked with our bank partners to offer revised hardship and temporary relief plans to support borrowers impacted by the COVID-19 pandemic and adjust credit and underwriting processes and standards. While these changes to our hardship and temporary relief plans were designed to help borrowers impacted by the COVID-19 pandemic, the changes were implemented quickly and may not have had all the intended effects or desired impact. We continue to actively monitor the situation, assess possible implications to our business and take appropriate actions in an effort to mitigate the adverse consequences of the COVID-19 pandemic. However, there can be no assurances that the initiatives we take will be sufficient or successful.

We have also taken precautionary measures intended to reduce the risk of the virus spreading to our employees, partner banks, vendors, and the communities in which we operate, including temporarily closing our offices and virtualizing, postponing, or canceling partner bank, employee, or industry events, which may negatively impact our business. Furthermore, as a result of the COVID-19 pandemic, we have required all employees who are able to do so to work remotely through the end of the first quarter of 2021. It is possible that widespread remote work arrangements may have a negative impact on our operations, the execution of our business plans, the productivity and availability of key personnel and other employees necessary to conduct our business, and on third-party service providers who perform critical services for us, or otherwise cause operational failures due to changes in our normal business practices necessitated by the outbreak and related governmental actions. If a natural disaster, power outage, connectivity issue, or other event occurred that impacted our employees' ability to work remotely, it may be difficult or, in certain cases, impossible, for us to continue our business for a substantial period of time. The increase in remote working may also result in increased consumer privacy, data security, and fraud risks, and our understanding of applicable legal and regulatory requirements, as well as the latest guidance from regulatory authorities in connection with the COVID-19 pandemic, may be subject to legal or regulatory challenge, particularly as regulatory guidance evolves in response to future developments.

Further, in response to the market conditions caused by the COVID-19 pandemic, we made certain operational changes, including increases to the fees we charge our bank partners and reductions in our sales and marketing activities and certain operational expenses. We continue to evaluate market and other conditions and may make additional changes to our fees or marketing activities, or implement additional operational changes, in the future.

The extent to which the COVID-19 pandemic continues to impact our business and results of operations will also depend on future developments that are highly uncertain and cannot be predicted, including new information which may emerge concerning the severity of the disease, the duration and spread of the outbreak, the scope of travel restrictions imposed in geographic areas in which we operate, mandatory or voluntary business closures, the impact on businesses and financial and capital markets, and the extent and effectiveness of actions taken throughout the world to contain the virus or treat its impact. An extended period of economic disruption as a result of the COVID-19 pandemic could have a material negative impact on our business, results of operations, and financial condition, though the full extent and duration is uncertain. To the extent the COVID-19 pandemic continues to adversely affect our business and financial results, it is likely to also have the effect of heightening many of the other risks described in this "Risk Factors" section.

If we fail to effectively manage our growth, our business, financial condition and results of operations could be adversely affected.

Over the last several years, we have experienced rapid growth in our business and the Number of Loans Transacted on our AI lending platform, and we expect to continue to experience growth in the future. The Number of Loans Transacted on our platform increased from 70,457 in 2017 to 215,122 in 2019, representing a compound annual growth rate of 75%. The Number of Loans Transacted on our platform increased from 136,468 to 176,983 in the nine months ended September 30, 2019 and 2020, respectively, representing a growth rate of 30%.[58] This rapid growth has placed, and may continue to place, significant demands on our management, processes and operational, technological and financial resources. Our ability to manage our growth effectively and to integrate new employees and technologies into our existing business will require us to continue to retain, attract, train, motivate and manage employees and expand our operational, technological and financial infrastructure. From time to time, we rely on temporary independent contractor programs to scale our operations team. Failure to effectively implement and manage such programs could result in misclassification or other employment related claims or inquiries by governmental agencies. Continued growth could strain our ability to develop and improve our operational, technological, financial and management controls, enhance our reporting systems and procedures, recruit, train and retain highly skilled personnel and maintain user satisfaction. Any of the foregoing factors could negatively affect our business, financial condition and results of operations.

We have incurred net losses in the past, and we may not be able to maintain or increase our profitability in the future.

For the years ended December 31, 2017, 2018 and 2019, we have experienced net losses of $7.7 million, $12.3 million and $0.5 million, respectively. For the nine months ended September 30, 2019 and 2020, we have experienced net losses of $6.5 million and net income of $5.0 million, respectively. We intend to continue to expend significant funds to continue to develop and improve our proprietary AI models, improve our marketing efforts to increase the number of borrowers on our platform, enhance the features and overall user experience of our platform, expand the types of loan offerings on our platform and otherwise continue to grow our business, and we may not be able to increase our revenue enough to offset these significant expenditures. We may incur significant losses in the future for a number of reasons, including the other risks described in this section, and unforeseen expenses, difficulties, complications and delays, macroeconomic conditions and other unknown events. Any failure to increase our revenue sufficiently to keep pace with our investments and other expenses could prevent us from maintaining or improving profitability on a consistent basis. If we are unable to successfully address these risks and challenges as we encounter them, our business, financial condition and results of operations could be adversely affected.

[58] See the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" for more information on how we define Number of Loans Transacted.

Our quarterly results are likely to fluctuate and as a result may adversely affect the trading price of our common stock.

Our quarterly results of operations, including the levels of our revenue, net income and other key metrics, are likely to vary significantly in the future, and period-to-period comparisons of our results of operations may not be meaningful. Accordingly, the results for any one quarter are not necessarily an accurate indication of future performance. Our quarterly financial results may fluctuate due to a variety of factors, many of which are outside of our control. Factors that may cause fluctuations in our quarterly financial results include:

- our ability to improve the effectiveness and predictiveness of our AI models;
- our ability to attract new bank partners and investors of our loan funding programs;
- our ability to maintain relationships with existing bank partners and investors of our loan funding programs;

- our ability to maintain or increase loan volumes, and improve loan mix and the channels through which the loans, bank partners and loan funding are sourced;
- our ability to maintain effective relationships with loan aggregators from which prospective borrowers access our website;
- general economic conditions, including economic slowdowns, recessions and tightening of credit markets, including due to the economic impact of the COVID-19 pandemic;
- improvements to our AI models that negatively impact transaction volume, such as lower approval rates;
- the timing and success of new products and services;
- the effectiveness of our direct marketing and other marketing channels;
- the amount and timing of operating expenses related to maintaining and expanding our business, operations and infrastructure, including acquiring new and maintaining existing bank partners and investors and attracting borrowers to our platform;
- our cost of borrowing money and access to loan funding sources;
- the number and extent of loans facilitated on our platform that are subject to loan modifications and/or temporary assistance due to disasters or emergencies;
- the number and extent of prepayments of loans facilitated on our platform;
- changes in the fair value of assets and liabilities on our balance sheet;
- network outages or actual or perceived security breaches;
- our involvement in litigation or regulatory enforcement efforts (or the threat thereof) or those that impact our industry generally;
- the length of the onboarding process related to acquisitions of new bank partners;
- changes in laws and regulations that impact our business; and
- changes in the competitive dynamics of our industry, including consolidation among competitors or the development of competitive products by larger well-funded incumbents.

In addition, we experience significant seasonality in the demand for Upstart-powered loans, which is generally lower in the first quarter. This seasonal slowdown is primarily attributable to high loan demand around the holidays in the fourth quarter and the general increase in borrowers' available cash flows in the first quarter, including cash received from tax refunds, which temporarily reduces borrowing needs. While our growth has obscured this seasonality in our overall financial results, we expect our results of operations to continue to be affected by such seasonality in the future. Such seasonality and other fluctuations in our quarterly results may also adversely affect and, increase the volatility of, the trading price of our common stock.

If we are unable to continue to improve our AI models or if our AI models contain errors or are otherwise ineffective, our growth prospects, business, financial condition and results of operations would be adversely affected.

Our ability to attract potential borrowers to our platform and increase the number of Upstart-powered loans will depend in large part on our ability to effectively evaluate a borrower's creditworthiness and likelihood of default and, based on that evaluation, offer competitively priced loans and higher approval rates. Further, our overall operating efficiency and margins will depend in large part on our ability to maintain a high degree of automation in our loan application process and achieve incremental improvements in the degree of automation. If our AI models fail to adequately predict the creditworthiness of borrowers due to the design of our models or programming or other errors, and our AI models do not detect and account for such errors, or any of the other components of our credit decision process fails, we may experience higher than forecasted loan losses. Any of the foregoing could result in sub-optimally priced loans, incorrect approvals or denials of loans, or higher than expected loan losses, which in turn could adversely affect our ability to attract new borrowers and bank partners to our platform, increase the number of Upstart-powered loans or maintain or increase the average size of loans facilitated on our platform.

Our AI models also target and optimize other aspects of the lending process, such as borrower acquisition, fraud detection, default timing, loan stacking, prepayment timing and fee optimization, and our continued improvements to such models have allowed us to facilitate loans inexpensively and virtually instantly, with a high degree of consumer satisfaction and with an insignificant impact on loan performance. However, such applications of our AI models may prove to be less predictive than we expect, or than they have been in the past, for a variety of reasons, including inaccurate assumptions or other errors made in constructing such models, incorrect interpretations of the results of such models and failure to timely update model assumptions and parameters. Additionally, such models may not be able to effectively account for matters that are inherently difficult to predict and beyond our control, such as

macroeconomic conditions, credit market volatility and interest rate fluctuations, which often involve complex interactions between a number of dependent and independent variables and factors. Material errors or inaccuracies in such AI models could lead us to make inaccurate or sub-optimal operational or strategic decisions, which could adversely affect our business, financial condition and results of operations.

Additionally, errors or inaccuracies in our AI models could result in any person exposed to the credit risk of Upstart-powered loans, whether it be us, our bank partners or investors in our loan funding programs, experiencing higher than expected losses or lower than desired returns, which could impair our ability to retain existing or attract new bank partners and investors to participate in our loan funding programs, reduce the number, or limit the types, of loans bank partners and investors are willing to fund, and limit our ability to increase commitments under our warehouse and other debt facilities. Any of these circumstances could reduce the number of Upstart-powered loans and harm our ability to maintain a diverse and robust loan funding program and could adversely affect our business, financial condition and results of operations.

Continuing to improve the accuracy of our AI models is central to our business strategy. However, such improvements could negatively impact transaction volume, such as by lowering approval rates. For example, an upgrade to our AI models in the fourth quarter of 2018 related to prepayment predictions led to a temporary decrease in the total number of loans approved. While we believe that continuing to improve the accuracy of our AI models is key to our long-term success, those improvements could, from time to time, lead us to reevaluate the risks associated with certain borrowers, which could in turn cause us to lower approval rates or increase interest rates for any borrowers identified as a higher risk, either of which could negatively impact our growth and results of operations in the short term.

If our existing bank partners were to cease or limit operations with us or if we are unable to attract and onboard new bank partners, our business, financial condition and results of operations could be adversely affected.

In the nine months ended September 30, 2020, approximately 98% of our revenue was generated from platform, referral and servicing fees that we receive from our bank partners. Our bank partners include Cross River Bank, Customers Bank, FinWise Bank, First Federal Bank of Kansas City, First National Bank of Omaha, KEMBA Financial Credit Union, TCF Bank, Apple Bank for Savings and Ridgewood Savings Bank. If any of our bank partners were to suspend, limit or cease their operations or otherwise terminate their relationships with us, the number of loans facilitated through our platform could decrease and our revenue and revenue growth rates could be adversely affected. Our sales and onboarding process with new bank partners can be long and unpredictable. If we are unable to timely onboard our bank partners, or if our bank partners are not willing to work with us to complete a timely onboarding process, our results of operations could be adversely affected.

We have entered into separate agreements with each of our bank partners. Our agreements with our bank partners are nonexclusive, generally have 12-month terms that automatically renew, subject to certain early termination provisions and minimum fee amounts, and do not include any minimum origination obligations or origination limits. Our bank partners could decide to stop working with us, ask to modify their agreement terms in a cost prohibitive manner when their agreement is up for renewal or enter into exclusive or more favorable relationships with our competitors. In addition, their regulators may require that they terminate or otherwise limit their business with us, or impose regulatory pressure limiting their ability to do business with us. If the bank partners listed above or any of our other bank partners were to stop working with us, suspend, limit or cease their operations or otherwise terminate their relationship with us, the number of loans facilitated through our platform could decrease and our revenue and revenue growth rates could be adversely affected. We could in the future have disagreements or disputes with any of our bank partners, which could negatively impact or threaten our relationship with them. In our agreements with bank partners, we make certain representations and warranties and covenants concerning our compliance with specific policies of a bank partner, our compliance with certain procedures and guidelines related to laws and regulations applicable to our bank partners, as well as the services to be provided by us. If those representations and warranties were not accurate when made or if we fail to perform a covenant, we may be liable for any resulting damages, including potentially any losses associated with impacted loans, and our reputation and ability to continue to attract new bank partners would be adversely affected. Additionally, our bank partners may engage in mergers, acquisitions or consolidations with each other, our competitors or with third parties, any of which could be disruptive to our existing and prospective relationships with our bank partners.

In addition, our bank partners have generally increasingly retained loans for their own customer base and balance sheet. In the third quarter of 2020, approximately 22% of Upstart-powered loans were retained by the originating bank, while about 76% of Upstart-powered loans were purchased by institutional investors through our loan funding programs. The percentage of Upstart-powered loans retained by the originating banks has fluctuated from quarter-to-quarter, but generally increased over the last few years. In general, banks can fund loans at lower rates due to the lower cost of funds available to them from their deposit base than is otherwise available in the broader institutional investment markets. Accordingly, loans retained by the originating bank generally carry lower interest rates for borrowers, which leads to better conversion rates and faster growth for our platform. Separately, as our number of bank partners grows, such banks will increasingly source new prospective borrowers from their own existing customer base and provide an incremental channel to attract borrowers. If we are unable to attract new bank partners or if we are unable to maintain or expand the number of loans held on their balance sheets, our financial performance would suffer.

Cross River Bank and one other bank partner account for a substantial portion of the total number of loans facilitated by our platform and our revenue.

Cross River Bank, or CRB, a New Jersey-chartered community bank, originates a substantial majority of the loans on our platform. In the year ended December 31, 2019 and the nine months ended September 30, 2020, CRB originated approximately 89% and 72%, respectively, of the loans facilitated on our platform. CRB also accounts for a large portion of our revenues. In the year ended December 31, 2019 and the nine months ended September 30, 2020, fees received from CRB accounted for 81% and 65%, respectively, of our total revenue. CRB funds a certain portion of these originated loans by retaining them on its own balance sheet, and sells the remainder of the loans to us, which we in turn sell to institutional investors and to our warehouse trust special purpose entities. Our most recent commercial arrangement with CRB began on January 1, 2019 and has a term of four years with an automatic renewal provision for an additional two years following the initial four year term. Either party may choose to not renew by providing the other party 120 days' notice prior to the end of the initial term or any renewal term. In addition, even during the term of our arrangement, CRB could choose to reduce the volume of Upstart-powered loans that it chooses to fund and retain on its balance sheet or to originate at all. We or CRB may terminate our arrangement immediately

upon a material breach and failure to cure such breach within a cure period, if any representations or warranties are found to be false and such error is not cured within a cure period, bankruptcy or insolvency of either party, receipt of an order or judgement by a governmental entity, a material adverse effect, or a change of control whereby such party involved in such change of control provides 90 days' notice to the other and payment of a termination fee of $450,000. If we are unable to continue to increase the number of other bank partners on our platform or if CRB or one of our other bank partners were to suspend, limit or cease their operations or otherwise terminate their relationship with us, our business, financial condition and results of operations would be adversely affected.

In the nine months ended September 30, 2020, one of our other bank partners originated approximately 19% of the loans facilitated on our platform. In the nine months ended September 30, 2020, the fees received from this bank partner accounted for 15% of our total revenue.

The sales and onboarding process of new bank partners could take longer than expected, leading to fluctuations or variability in expected revenues and results of operations.

Our sales and onboarding process with new bank partners can be long and typically takes between six to 15 months. As a result, revenues and results of operations may vary significantly from period to period. Prospective bank partners are often cautious in making decisions to implement our platform and related services because of the risk management alignment and regulatory uncertainties related to their use of our AI models, including their oversight, model governance and fair lending compliance obligations associated with using such models. In addition, prospective banks undertake an extensive diligence review of our platform, compliance and servicing activities before choosing to partner with us. Further, the implementation of our AI lending model often involves shifts by the bank partner to a new software and/or hardware platform or changes in their operational procedures, which may involve significant time and expense to implement. Delays in onboarding new bank partners can also arise while prospective bank partners complete their internal procedures to approve expenditures and test and accept our applications. Consequently, we face difficulty predicting the quarter in which new bank partners will begin using our platform and the volume of fees we will receive, which can lead to fluctuations in our revenues and results of operations.

Our business may be adversely affected by economic conditions and other factors that we cannot control.

Uncertainty and negative trends in general economic conditions, including significant tightening of credit markets, historically have created a difficult operating environment for our industry. Many factors, including factors that are beyond our control, may impact our results of operations or financial condition and our overall success by affecting a borrower's willingness to incur loan obligations or willingness or capacity to make payments on their loans. These factors include interest rates, unemployment levels, conditions in the housing market, immigration policies, gas prices, energy costs, government shutdowns, trade wars and delays in tax refunds, as well as events such as natural disasters, acts of war, terrorism, catastrophes and pandemics.

For example, in response to the COVID-19 pandemic, bank partners tightened their credit requirements or paused originations, and investors in our loan funding programs temporarily suspended making investments in Upstart-powered loans, which resulted in a decrease in the Number of Loans Transacted by 71% and a decrease in our revenue of 47%, each, in the second quarter of 2020 compared to the same period of the prior year. Furthermore, nearly all personal loans presently facilitated through our platform are issued with fixed interest rates. If interest rates rise, potential borrowers could seek to defer loans as they wait for interest rates to stabilize. As a result of these circumstances, bank partners, investors and borrowers may be discouraged from engaging with our platform and as a result, reduce the volume of Upstart-powered loans.

Many new consumers on the Upstart platform have limited or no credit history. Accordingly, such borrowers have historically been, and may in the future become, disproportionately affected by adverse macroeconomic conditions, such as the disruption and uncertainty caused by the COVID-19 pandemic. In addition, major medical expenses, divorce, death or other issues that affect borrowers could affect a borrower's willingness or ability to make payments on their loans. If borrowers default on loans facilitated on our platform, the cost to service these loans may also increase without a corresponding increase in our servicing fees or other related fees and the value of the loans held on our balance sheet could decline. Higher default rates by these borrowers may lead to lower demand by our bank partners and institutional investors to fund loans facilitated by our platform, which would adversely affect our business, financial condition and results of operations.

During periods of economic slowdown or recession, our current and potential investors in our loan funding programs may reduce the number of loans or interests in loans they purchase or demand terms that are less favorable to us, to compensate for any increased risks. A reduction in the volume of the loans and loan financing products we sell would negatively impact our ability to maintain or increase the number of loans facilitated by our platform. Any sustained decline in demand for loans or loan financing products, or any increase in delinquencies, defaults or foreclosures that result from economic downturns, may harm our ability to maintain a robust loan funding program, which would adversely affect our business, financial condition and results of operations.

For example, the COVID-19 pandemic and other related adverse economic events led to a significant increase in unemployment, comparable, and at times surpassing, the unemployment rates during the peak of the financial crisis in 2008. There can be no assurance that levels of unemployment or underemployment will improve in the near term. The increase in the unemployment rate could increase the delinquency rate of borrowers of Upstart-powered loans or increase the rate of borrowers declaring bankruptcy, any of which could adversely affect the attractiveness of Upstart-powered loans to the investors in our loan funding programs. If we are unable to improve our AI platform to account for events like the COVID-19 pandemic and the resulting rise in unemployment, or if our AI platform is unable to more successfully predict the creditworthiness of potential borrowers compared to other lenders, then our business, financial condition and results of operations could be adversely affected.

Furthermore, the COVID-19 pandemic has caused some borrowers on our platform to request a temporary extension or modification of the payment schedules of their loans under the temporary relief or loan modification programs, or hardship programs, offered by our bank partners and investors in our loan funding programs. If a large number of borrowers seek to participate in such hardship programs, the investment returns of our bank partners and investors in our loan funding programs could decline. Further, if the rate of borrowers that participate in such hardship programs is greater than those experienced by our competitors, then our bank partners and the investors in our loan funding programs may become less interested in purchasing or investing in Upstart-powered loans, which could negatively impact our diversified loan funding strategy or significantly increase the cost of obtaining loan funding. Any of the foregoing could adversely affect our business, financial condition and results of operations.

If there is an economic downturn that affects our current and prospective borrowers or our bank partners and institutional investors, or if we are unable to address and mitigate the risks associated with any of the foregoing, our business, financial condition and results of operations could be adversely affected.

Our AI models have not yet been extensively tested during down-cycle economic conditions. If our AI models do not accurately reflect a borrower's credit risk in such economic conditions, the performance of Upstart-powered loans may be worse than anticipated.

The performance of loans facilitated by our platform is significantly dependent on the effectiveness of our proprietary AI models used to evaluate a borrower's credit profile and likelihood of default. While our AI models have been refined and updated to account for the COVID-19 pandemic, the bulk of the data gathered and the development of our AI models have largely occurred during a period of sustained economic growth, and our AI models have not been extensively tested during a down-cycle economy or recession and have not been tested at all during a down-cycle economy or recession without significant levels of government assistance. There is no assurance that our AI models can continue to accurately predict loan performance under adverse economic conditions. If our AI models are unable to accurately reflect the credit risk of loans under such economic conditions, our bank partners, investors in our loan funding programs and we may experience greater than expected losses on such loans, which would harm our reputation and erode the trust we have built with our bank partners and investors in our loan funding programs. In addition, the fair value of the loans on our balance sheet may decline. Any of these factors could adversely affect our business, financial condition and results of operations.

If we are unable to maintain a diverse and robust loan funding program, our growth prospects, business, financial condition and results of operations could be adversely affected.

Our business depends on sourcing and maintaining a diverse and robust loan funding program to fund Upstart-powered loans that our bank partners are unable or unwilling to retain on their balance sheets. In the third quarter of 2020, approximately 22% of Upstart-powered loans were retained by the originating bank while approximately 76% of Upstart-powered loans were purchased by investors through our loan funding program, which includes whole loan sales to institutional investors, asset-backed securitization transactions, and utilization of committed and uncommitted warehouse credit facilities. While our loan funding program is diverse, only a limited portion of such funding sources are committed or guaranteed. We cannot be sure that these funding sources will continue to be available on reasonable terms or at all beyond the current maturity dates of our existing securitizations and debt financing arrangements.

Further, events of default or breaches of financial, performance or other covenants, or worse than expected performance of certain pools of loans underpinning our asset-backed securitizations or other debt facilities, could reduce or terminate our access to funding from institutional investors. Loan performance is dependent on a number of factors, including the predictiveness of our AI models and social and economic conditions. The availability and capacity of certain loan funding sources also depends on many factors that are outside of our control, such as credit market volatility and regulatory reforms. For example, at the start of the COVID-19 pandemic, the availability of most of our loan funding sources was significantly reduced. In the event of another sudden or unexpected shortage or restriction on the availability of loan funding sources, we may not be able to maintain the necessary levels of funding to retain current loan volume without incurring substantially higher funding costs, which could adversely affect our business, financial condition and results of operations.

Our business is subject to a wide range of laws and regulations, many of which are evolving, and failure or perceived failure to comply with such laws and regulations could harm our business, financial condition and results of operations.

The legal and regulatory environment surrounding our AI lending platform is relatively new, susceptible to change and may require clarification or interpretive guidance with respect to existing laws and regulations. The body of laws and regulations applicable to our business are complex and subject to varying interpretations, in many cases due to the lack of specificity regarding the application of AI and related technologies to the already highly regulated consumer lending industry. As a result, the application of such laws and regulations in practice may change or develop over time through judicial decisions or as new guidance or interpretations are provided by regulatory and governing bodies, such as federal, state and local administrative agencies.

Since we launched our AI lending platform, we have been proactively working with the federal government and regulatory bodies to ensure that our AI lending platform and other services are in compliance with applicable laws and regulations. For example, in 2017, after significant collaboration with the CFPB, the CFPB issued Upstart the first no-action letter regarding the use of alternative variables and AI and machine learning in credit decision-making. This no action letter expires on December 1, 2020 and we can provide no assurance that the CFPB will continue to permit us to operate under its current no-action letter policies beyond that date, or will not change its position regarding supervisory or enforcement action against us in the future. We plan to continue working and collaborating closely with regulators to provide visibility into AI and related emerging technologies and the potential benefits such technologies can have on the consumer lending industry, while also addressing the related risks. New laws and regulations and changes to existing laws and regulations continue to be adopted, implemented and interpreted in response to our industry and the emergence of AI and related technologies. As we expand our business into new markets, introduce new loan products on our platform and continue to improve and evolve our AI models, regulatory bodies or courts may claim that we are subject to additional requirements. Such regulatory bodies could reject our applications for licenses or deny renewals, delay or impede our ability to operate, charge us fees or levy fines or penalties, or otherwise disrupt our ability to operate our AI lending platform, any of which could adversely affect our business, financial condition and results of operations.

Recent financial, political and other events may increase the level of regulatory scrutiny on financial technology companies. Regulatory bodies may enact new laws or promulgate new regulations or view matters or interpret laws and regulations differently than they have in the past, or commence investigations or inquiries into our business practices. For example, in February 2020, we received a letter from five members of the U.S. Senate asking questions in connection with claims of discriminatory lending made by an advocacy group. We responded to this inquiry, and in July 2020, three of the Senators issued their findings from this inquiry, writing a letter to the Director of the CFPB recommending the CFPB further review Upstart's use of educational variables in its model and requesting that the CFPB stop issuing no-action letters related to the Equal Credit Opportunity Act, or ECOA. We have been subject to other governmental inquiries on this topic including an inquiry in June 2020 from the North Carolina Department of Justice. See the section titled "—We have been in the past and may in the future be subject to federal and state regulatory inquiries regarding our business" for more

information. Any such investigations or inquiries, whether or not accurate or warranted, or whether concerning us or one of our competitors, could negatively affect our brand and reputation and the overall market acceptance of and trust in our AI lending platform. Any of the foregoing could harm our business, financial condition and results of operations.

We rely on strategic relationships with loan aggregators to attract applicants to our platform, and if we cannot maintain effective relationships with loan aggregators or successfully replace their services, our business could be adversely affected.

A significant number of consumers that apply for a loan on Upstart.com learn about and access Upstart.com through the website of a loan aggregator, typically with a hyperlink from such loan aggregator's website to a landing page on our website. For example, in 2019 and the nine months ended September 30, 2020, 38% and 52%, respectively, of loan originations were derived from traffic from Credit Karma. Our most recent agreement with Credit Karma dated May 11, 2020 provides that either party may terminate our arrangement immediately upon a material breach of any provision of the agreement or at any time, with or without cause, by providing no less than 30 days' notice. Even during the term of our agreement, our agreement does not require Credit Karma to display offers from lenders on Upstart.com nor prohibit them from working with our competitors or from offering competing services. Further, there is no assurance that Credit Karma will continue its contract with us on commercially reasonable terms or at all. For example, Intuit Inc. recently announced that it has agreed to acquire Credit Karma. If such acquisition is completed, Intuit may not continue our agreement on commercially reasonable terms or at all, which would adversely affect our business.

While we are planning to move towards more direct acquisition channels, we anticipate that we will continue to depend in significant part on relationships with loan aggregators to maintain and grow our business. Our current agreements with these loan aggregators do not require them to display offers from lenders on Upstart.com nor prohibit them from working with our competitors or from offering competing services. Further, there is no assurance that a loan aggregator will renew its contract with us on commercially reasonable terms or at all. Our competitors may be effective in providing incentives to loan aggregators to favor their products or services or in reducing the volume of loans facilitated through our platform. Loan aggregators may not perform as expected under our agreements with them, and we may have disagreements or disputes with them, which could adversely affect our brand and reputation. If we cannot successfully enter into and maintain effective strategic relationships with loan aggregators, our business could be adversely affected.

In addition, the limited information such loan aggregators collect from applicants does not always allow us to offer rates to applicants that we would otherwise be able to through direct applicant traffic to Upstart.com. Typically, the rates offered to borrowers who come to Upstart.com directly are lower and more competitive than those rates offered through aggregators. In the event we do not successfully optimize direct traffic, our ability to attract borrowers would be adversely affected.

Such loan aggregators also face litigation and regulatory scrutiny for their part in the consumer lending ecosystem, and as a result, their business models may require fundamental change or may not be sustainable in the future. For example, loan aggregators are increasingly required to be licensed as loan brokers or lead generators in many states, subjecting them to increased regulatory supervision and more stringent business requirements. While we require loan aggregators to make certain disclosures in connection with our bank partners' offers and restrict how loan aggregators may display such loan offers, loan aggregators may nevertheless alter or even remove these required disclosures without notifying us, which may result in liability to us. Further, we do not have control over any content on loan aggregator websites, and it is possible that our brand and reputation may be adversely affected by being associated with such content. An unsatisfied borrower could also seek to bring claims against us based on the content presented on a loan aggregator's website. Such claims could be costly and time consuming to defend and could distract management's attention from the operation of the business.

Substantially all of our revenue is derived from a single loan product, and we are thus particularly susceptible to fluctuations in the unsecured personal loan market. We also do not currently offer a broad suite of products that bank partners may find desirable.

While we recently expanded the type of loan products offered on our platform to include auto loans, the vast majority of loan originations facilitated through our platform are unsecured personal loans. The market for unsecured personal loans has grown rapidly in recent years, and it is unclear to what extent such market will continue to grow, if at all. A wide variety of factors could impact the market for unsecured personal loans, including macroeconomic conditions, competition, regulatory developments and other developments in the credit market. For example, FICO has recently changed its methodology in calculating credit scores in a manner that potentially penalizes borrowers who take out personal loans to pay off or consolidate credit card debt. This change could negatively affect the overall demand for personal loans. Our success will depend in part on the continued growth of the unsecured personal loan market, and if such market does not further grow or grows more slowly than we expect, our business, financial condition and results of operations could be adversely affected.

In addition, bank partners may in the future seek partnerships with competitors that are able to offer them a broader array of credit products. Over time, in order to preserve and expand our relationships with our existing bank partners, and enter into new bank partnerships, it may become increasingly important for us to be able to offer a wider variety of products than we currently provide. We are also susceptible to competitors that may intentionally underprice their loan products, even if such pricing practices lead to losses. Such practices by competitors would negatively affect the overall demand for personal loans facilitated on our platform.

Further, because such personal loans are unsecured, there is a risk that borrowers will not prioritize repayment of such loans, particularly in any economic downcycle. For example, the economic downcycle resulting from the COVID-19 pandemic may cause borrowers to incur additional debt. To the extent borrowers have or incur other indebtedness that is secured, such as a mortgage, a home equity line of credit or an auto loan, borrowers may choose to repay obligations under such secured indebtedness before repaying their Upstart-powered loans. In addition, borrowers may not view Upstart-powered loans, which were originated through an online lending platform, as having the same significance as other credit obligations arising under more traditional circumstances, such as loans from banks or other commercial financial institutions. Any of the forgoing could lead to higher default rates and decreased demand by our bank partners and institutional investors to fund loans facilitated by our platform, which would adversely affect our business, financial condition and results of operations.

We are also more susceptible to the risks of changing and increased regulations and other legal and regulatory actions targeted towards the unsecured personal loan market. It is possible that regulators may view unsecured personal loans as high risk for a variety of reasons, including that borrowers will not prioritize repayment of such loans due to the unsecured nature of such loans or because existing laws and regulations may not sufficiently address the benefits and corresponding risks related to financial technology as applied to consumer lending. If we are unable to manage the risks associated with the unsecured personal loan market, our business, financial condition and results of operations could be adversely affected.

We are continuing to develop new loan products and services offerings, and if we are unable to manage the related risks, our growth prospects, business, financial condition and results of operations could be adversely affected.

We recently began offering auto loans and a credit decision application programming interface to allow our bank partners to utilize our AI underwriting models to support their loan origination process for personal, auto, and student loans. We are continuing to invest in developing new loan products and service offerings, such as credit cards, mortgages, student loans, point-of-sale loans and HELOCs. New initiatives are inherently risky, as each involves unproven business strategies, new regulatory requirements and new financial products and services with which we, and in some cases our bank partners, have limited or no prior development or operating experience.

We cannot be sure that we will be able to develop, commercially market and achieve market acceptance of any new products and services. In addition, our investment of resources to develop new products and services may either be insufficient or result in expenses that are excessive in light of revenue actually derived from these new products and services. If the profile of loan applicants using any new products and services is different from that of those currently served by our existing loan products, our AI models may not be able to accurately evaluate the credit risk of such borrowers, and our bank partners and investors in our loan funding programs may in turn experience higher levels of delinquencies or defaults. Failure to accurately predict demand or growth with respect to our new products and services could have an adverse impact on our reputation and business, and there is always risk that new products and services will be unprofitable, will increase our costs, decrease operating margins or take longer than anticipated to achieve target margins. In addition, any new products or services may raise new and potentially complex regulatory compliance obligations, which would increase our costs and may cause us to change our business in unexpected ways. Further, our development efforts with respect to these initiatives could distract management from current operations and will divert capital and other resources from our existing business.

We may also have difficulty with securing adequate funding for any such new loan products and services, and if we are unable to do so, our ability to develop and grow these new offerings and services will be impaired. If we are unable to effectively manage the foregoing risks, our growth prospects, business, financial condition and results of operations could be adversely affected.

Our reputation and brand are important to our success, and if we are unable to continue developing our reputation and brand, our ability to retain existing and attract new bank partners, our ability to attract borrowers to our platform and our ability to maintain and improve our relationship with regulators of our industry could be adversely affected.

We believe maintaining a strong brand and trustworthy reputation is critical to our success and our ability to attract borrowers to our platform, attract new bank partners and maintain good relations with regulators. Factors that affect our brand and reputation include: perceptions of artificial intelligence, our industry and our company, including the quality and reliability of our AI lending platform; the accuracy of our AI models; perceptions regarding the application of artificial intelligence to consumer lending specifically; our loan funding programs; changes to the Upstart platform; our ability to effectively manage and resolve borrower complaints; collection practices; privacy and security practices; litigation; regulatory activity; and the overall user experience of our platform. Negative publicity or negative public perception of these factors, even if inaccurate, could adversely affect our brand and reputation.

For example, consumer advocacy groups, politicians and certain government and media reports have, in the past, advocated governmental action to prohibit or severely restrict consumer loan arrangements where banks contract with a third-party platform such as ours to provide origination assistance services to bank customers. These arrangements have sometimes been criticized as “renting-a-bank charter.” Such criticism has frequently been levied in the context of payday loan marketers, though other entities operating programs through which loans similar to Upstart-powered loans are originated have also faced criticism. The perceived improper use of a bank charter by these entities has been challenged by both governmental authorities and private litigants, in part because of the high rates and fees charged to consumers in certain payday and small-dollar lending programs.

Bank regulators have even required banks to exit third-party programs that the regulators determined involved unsafe and unsound practices. The payday or “small-dollar” loans that have been subject to more frequent criticism and challenge are fundamentally different from Upstart-powered loans in many ways, including that Upstart-powered loans typically have lower interest rates and longer terms, and Upstart-powered loans do not renew. In particular, interest rates of Upstart-powered loans have always been and are currently less than 36%, as compared to the triple-digit interest rates of many payday or small dollar loans that have been subject to such criticism. If we are nevertheless associated with such payday or small-dollar consumer loans, or if we are associated with increased criticism of non-payday loan programs involving relationships between bank originators and non-bank lending platforms and program managers, demand for Upstart-powered loans could significantly decrease, which could cause our bank partners to reduce their origination volumes or terminate their arrangements with us, impede our ability to attract new bank partners or delay the onboarding of bank partners, impede our ability to attract institutional investors to participate in our loan funding programs or reduce the number of potential borrowers who use our platform. Any of the foregoing could adversely affect our results of operations and financial condition.

Any negative publicity or public perception of Upstart-powered loans or other similar consumer loans or the consumer lending service we provide may also result in us being subject to more restrictive laws and regulations and potential investigations and enforcement actions. In addition, regulators may decide they are no longer supportive of our AI lending platform if there is enough negative perception surrounding such practices. We may also become subject to lawsuits, including class action lawsuits, or other challenges such as government enforcement or arbitration, against our bank partners or us for loans originated by our bank partners on our platform, loans we service or have serviced. If there are changes in the laws or in the interpretation or enforcement of existing laws affecting consumer loans similar to those offered on our platform, or our marketing and servicing of such loans, or if we become subject to such lawsuits, our business, financial condition and results of operations would be adversely affected.

Artificial intelligence and related technologies are subject to public debate and heightened regulatory scrutiny. Any negative publicity or negative public perception of artificial intelligence could negatively impact demand for our AI lending platform, hinder our ability to attract new bank partners or slow the rate at which banks adopt our AI lending platform. From time to time, certain advocacy groups have made claims that unlawful or unethical discriminatory effects may result from the use of AI technology by various companies, including ours. Such claims, whether or not accurate, and whether or not concerning us or our AI lending platform, may harm our ability to attract prospective borrowers to our platform, retain existing and attract new bank partners and achieve regulatory acceptance of our business. For example, in February 2020, we received a letter from five members of the U.S. Senate asking questions in connection with claims of discriminatory lending made by an advocacy group. We responded to this inquiry, and in July 2020, three of the Senators issued their findings from this inquiry, writing a letter to the Director of the CFPB recommending the CFPB further review Upstart's use of educational variables in its model and requesting that the CFPB stop issuing no-action letters related to ECOA. We have been subject to other governmental inquiries on this topic including an inquiry in June 2020 from the North Carolina Department of Justice. See the section titled "—We have been in the past and may in the future be subject to federal and state regulatory inquiries regarding our business" for more information. Negative public perception, actions by advocacy groups or legislative and regulatory interest groups could lead to lobbying for and enactment of more restrictive laws and regulations that impact the use of AI technology in general, AI technology as applied to lending operations generally or as used in our applications more specifically. Any of the foregoing could negatively impact our business, financial condition and results of operations.

Harm to our reputation can also arise from many other sources, including employee or former employee misconduct, misconduct by outsourced service providers or other counterparties, failure by us or our bank partners to meet minimum standards of service and quality, and inadequate protection of borrower information and compliance failures and claims. If we are unable to protect our reputation, our business, financial condition and results of operations would be adversely affected.

If we do not compete effectively in our target markets, our business, results of operations and financial condition could be harmed.

The consumer lending market is highly competitive and increasingly dynamic as emerging technologies continue to enter into the marketplace. With the introduction of new technologies and the influx of new entrants, competition may persist and intensify in the future, which could have an adverse effect on our operations or business.

Our inability to compete effectively could result in reduced loan volumes, reduced average size of loans facilitated on our platform, reduced fees, increased marketing and borrower acquisition costs or the failure of the Upstart platform to achieve or maintain more widespread market acceptance, any of which could have an adverse effect on our business and results of operations.

Consumer lending is a vast and competitive market, and we compete to varying degrees with all other sources of unsecured consumer credit. This can include banks, non-bank lenders including retail-based lenders and other financial technology lending platforms. Because personal loans often serve as a replacement for credit cards, we also compete with the convenience and ubiquity that credit cards represent. Many of our competitors operate with different business models, such as lending-as-a-service or point-of-sale lending, have different cost structures or regulatory obligations, or participate selectively in different market segments. They may ultimately prove more successful or more adaptable to new regulatory, economic, technological and other developments, including utilizing new data sources or credit models. We may also face competition from banks or companies that have not previously competed in the consumer lending market, including companies with access to vast amounts of consumer-related information that could be used in the development of their own credit risk models. Our current or potential competitors may be better at developing new products due to their large and experienced data science and engineering teams, who are able to respond more quickly to new technologies. Many of our current or potential competitors have significantly more resources, such as financial, technical and marketing resources, than we do and may be able to devote greater resources to the development, promotion, sale and support of their platforms and distribution channels. We face competition in areas such as compliance capabilities, commercial financing terms and costs of capital, interest rates and fees (and other financing terms) available to consumers from our bank partners, approval rates, model efficiency, speed and simplicity of loan origination, ease-of-use, marketing expertise, service levels, products and services, technological capabilities and integration, borrower experience, brand and reputation, and terms available to our loan funding investor base. Our competitors may also have longer operating histories, lower commercial financing costs or costs of capital, more extensive borrower bases, more diversified products and borrower bases, operational efficiencies, more versatile or extensive technology platforms, greater brand recognition and brand loyalty, broader borrower and partner relationships, more extensive and/or more diversified loan funding investor bases than we have, and more extensive product and service offerings than we have. Furthermore, our existing and potential competitors may decide to modify their pricing and business models to compete more directly with us. Our ability to compete will also be affected by our ability to provide our bank partners with a commensurate or more extensive suite of loan products than those offered by our competitors. In addition, current or potential competitors, including financial technology lending platforms and existing or potential bank partners, may also acquire or form strategic alliances with one another, which could result in our competitors being able to offer more competitive loan terms due to their access to lower-cost capital. Such acquisitions or strategic alliances among our competitors or potential competitors could also make our competitors more adaptable to a rapidly evolving regulatory environment. To stay competitive, we may need to increase our regulatory compliance expenditures or our ability to compete may be adversely affected.

Our industry is driven by constant innovation. We utilize artificial intelligence and machine learning, which is characterized by extensive research efforts and rapid technological progress. If we fail to anticipate or respond adequately to technological developments, our ability to operate profitably could suffer. There can be no assurance that research, data accumulation and development by other companies will not result in AI models that are superior to our AI models or result in products superior to those we develop or that any technologies, products or services we develop will be preferred to any existing or newly-developed technologies, products or services. If we are unable to compete with such companies or fail to meet the need for innovation in our industry, the use of the Upstart platform could stagnate or substantially decline, or our loan products could fail to maintain or achieve more widespread market acceptance, which could harm our business, results of operations and financial condition.

Our proprietary AI models rely in part on the use of loan applicant and borrower data and other third-party data, and if we lose the ability to use such data, or if such data contain inaccuracies, our business could be adversely affected.

We rely on our proprietary AI models, which are statistical models built using a variety of data-sets. Our AI models rely on a wide variety of data sources, including data collected from applicants and borrowers, credit bureau data and our credit experience gained through monitoring the payment performance of borrowers over time. Under our agreements with our bank partners, we receive licenses to use data collected from loan applicants and borrowers. If we are unable to access and use data collected from applicants and borrowers, data received from credit bureaus, repayment data collected as part of our loan servicing activities, or other third-party data used in our AI models, or our access to such data is limited, our ability to accurately evaluate potential borrowers, detect fraud and verify applicant data would be compromised. Any of the foregoing could negatively impact the accuracy of our pricing decisions, the degree of automation in our loan application process and the volume of loans facilitated on our platform.

Third-party data sources on which we rely include the consumer reporting agencies regulated by the CFPB and other alternative data sources. Such data is electronically obtained from third parties and used in our AI models to price applicants and in our fraud model to verify the accuracy of applicant-reported information. Data from national credit bureaus and other consumer reporting agencies and other information that we receive from third parties about an applicant or borrower, may be inaccurate or may not accurately reflect the applicant or borrower's creditworthiness for a variety of reasons, including inaccurate reporting by creditors to the credit bureaus, errors, staleness or incompleteness. For example, loan applicants' credit scores may not reflect such applicants' actual creditworthiness because the credit scores may be based on outdated, incomplete or inaccurate consumer reporting data, including, as a consequence of us utilizing credit reports for a specific period of time after issuance before such reports are deemed to be outdated. Similarly, the data taken from an applicant's credit report may also be based on outdated, incomplete or inaccurate consumer reporting data. Although we use numerous third-party data sources and multiple credit factors within our proprietary models, which helps mitigate this risk, it does not eliminate the risk of an inaccurate individual report.

Further, although we attempt to verify the income, employment and education information provided by certain selected applicants, we cannot guarantee the accuracy of applicant information. Our fraud model relies in part on data we receive from a number of third-party verification vendors, data collected from applicants, and our experience gained through monitoring the performance of borrowers over time. Information provided by borrowers may be incomplete, inaccurate or intentionally false. Applicants may also misrepresent their intentions for the use of loan proceeds. We do not verify or confirm any statements by applicants as to how loan proceeds are to be used after loan funding. If an applicant supplied false, misleading or inaccurate information and our fraud detection processes do not flag the application, repayments on the corresponding loan may be lower, in some cases significantly lower, than expected, leading to losses for the bank partner or investor.

In addition, if third party data used to train and improve our AI models is inaccurate, or access to such third-party data is limited or becomes unavailable to us, our ability to continue to improve our AI models would be adversely affected. Any of the foregoing could result in sub-optimally and inefficiently priced loans, incorrect approvals or denials of loans, or higher than expected loan losses, which in turn could adversely affect our ability to attract new borrowers and partners to our platform or increase the number of Upstart-powered loans and adversely affect our business, financial condition and results of operations.

If we are unable to manage the risks associated with fraudulent activity, our brand and reputation, business, financial condition and results of operations could be adversely affected.

Fraud is prevalent in the financial services industry and is likely to increase as perpetrators become more sophisticated. We are subject to the risk of fraudulent activity associated with borrowers and third parties handling borrower information and in limited situations cover certain fraud losses of our bank partners and investors in our loan funding programs. Fraud rates could also increase in a downcycle economy. We use several identity and fraud detection tools, including tools provided by third-party vendors and our proprietary AI models, to predict and otherwise validate or authenticate applicant-reported data and data derived from third-party sources. If such efforts are insufficient to accurately detect and prevent fraud, the level of fraud-related losses of Upstart-powered loans could increase, which would decrease confidence in our AI lending platform. In addition, our bank partners, investors in our loan funding programs or we may not be able to recover amounts disbursed on loans made in connection with inaccurate statements, omissions of fact or fraud, which could erode the trust in our brand and negatively impact our ability to attract new bank partners and investors in our loan funding programs.

High profile fraudulent activity also could negatively impact our brand and reputation. In addition, significant increases in fraudulent activity could lead to regulatory intervention, which could increase our costs and also negatively impact our brand and reputation. Further, if there is any increase in fraudulent activity that increases the need for human intervention in screening loan application data, the level of automation on our platform could decline and negatively affect our unit economics. If we are unable to manage these risks, our business, financial condition and results of operations could be adversely affected.

We depend on our key personnel and other highly skilled personnel, and if we fail to attract, retain and motivate our personnel, our business, financial condition and results of operations could be adversely affected.

Our success significantly depends on the continued service of our senior management team, including Dave Girouard, our Co-Founder and Chief Executive Officer, and Paul Gu, our Co-Founder and SVP of Product and Data Science, and other highly skilled personnel. Our success also depends on our ability to identify, hire, develop, motivate and retain highly qualified personnel for all areas of our organization.

Competition for highly skilled personnel, including engineering and data analytics personnel, is extremely intense, particularly in the San Francisco Bay Area where one of our headquarters is located. We have experienced, and expect to continue to face, difficulty identifying and hiring qualified personnel in many areas, especially as we pursue our growth strategy. Further, as a result of the COVID-19 pandemic, a large and increasing number of companies have adopted permanent work-from-home policies, which further increases the challenges associated with hiring and retaining qualified personnel. We may not be able to hire or retain such personnel at compensation or flexibility levels consistent with our existing compensation and salary structure and policies. Many of the companies with which we compete for experienced employees have greater resources than we have and may be able to offer more attractive

terms of employment. In particular, candidates making employment decisions, specifically in high-technology industries, often consider the value of any equity they may receive in connection with their employment. Any significant volatility in the price of our stock after this offering may adversely affect our ability to attract or retain highly skilled technical, financial and marketing personnel.

In addition, we invest significant time and expense in training our employees, which increases their value to competitors who may seek to recruit them. If we fail to retain our employees, we could incur significant expenses in hiring and training their replacements. While we are in the process of training their replacements, the quality of our services and our ability to serve our bank partners, investors and borrowers whose loans we service may suffer, resulting in an adverse effect on our business.

Security breaches of borrowers' confidential information that we store may harm our reputation, adversely affect our results of operations and expose us to liability.

We are increasingly dependent on information technology systems and infrastructure to operate our business. In the ordinary course of our business, we collect, process, transmit and store large amounts of sensitive information, including personal information, credit information and other sensitive data of borrowers and potential borrowers. It is critical that we do so in a manner designed to maintain the confidentiality, integrity and availability of such sensitive information. We also have arrangements in place with certain of our third-party vendors that require us to share consumer information. We have outsourced elements of our operations (including elements of our information technology infrastructure) to third parties, and as a result, we manage a number of third-party vendors who may have access to our computer networks and sensitive or confidential information. In addition, many of those third parties may in turn subcontract or outsource some of their responsibilities to other third parties. As a result, our information technology systems, including the functions of third parties that are involved or have access to those systems, is large and complex, with many points of entry and access. While all information technology operations are inherently vulnerable to inadvertent or intentional security breaches, incidents, attacks and exposures, the size, complexity, accessibility and distributed nature of our information technology systems, and the large amounts of sensitive information stored on those systems, make such systems potentially vulnerable to unintentional or malicious, internal and external attacks. Any vulnerabilities can be exploited from inadvertent or intentional actions of our employees, third-party vendors, bank partners, loan investors, or by malicious third parties. Attacks of this nature are increasing in their frequency, levels of persistence, sophistication and intensity, and are being conducted by sophisticated and organized groups and individuals with a wide range of motives (including, but not limited to, industrial espionage) and expertise, including organized criminal groups, "hacktivists," nation states and others. In addition to the extraction of sensitive information, such attacks could include the deployment of harmful malware, ransomware, denial-of-service attacks, social engineering and other means to affect service reliability and threaten the confidentiality, integrity and availability of information and systems. In addition, the prevalent use of mobile devices increases the risk of data security incidents. Further, our shift to a remote working environment due to the COVID-19 pandemic could increase the risk of a security breach. Significant disruptions of our, our bank partners and third-party vendors' and/or other business partners' information technology systems or other similar data security incidents could adversely affect our business operations and result in the loss, misappropriation, or unauthorized access, use or disclosure of, or the prevention of access to, sensitive information, which could result in financial, legal, regulatory, business and reputational harm to us.

Because techniques used to obtain unauthorized access or to sabotage systems change frequently and generally are not recognized until they are launched against a target, we and our vendors may be unable to anticipate these techniques or to implement adequate preventative measures. In addition, many governments have enacted laws requiring companies to notify individuals of data security breaches involving their personal data. These mandatory disclosures regarding a security breach are costly to implement and often lead to widespread negative publicity following a breach, which may cause borrowers and potential borrowers to lose confidence in the effectiveness of our data security measures on our platform. Any security breach, whether actual or perceived, would harm our reputation and ability to attract new borrowers to our platform.

We also face indirect technology, cybersecurity and operational risks relating to the borrowers, bank partners, investors, vendors and other third parties with whom we do business or upon whom we rely to facilitate or enable our business activities, including vendors, payment processors, and other parties who have access to confidential information due to our agreements with them. In addition, any security compromise in our industry, whether actual or perceived, or information technology system disruptions, whether from attacks on our technology environment or from computer malware, natural disasters, terrorism, war and telecommunication and electrical failures, could interrupt our business or operations, harm our reputation, erode borrower confidence, negatively affect our ability to attract new borrowers, or subject us to third-party lawsuits, regulatory fines or other action or liability, which could adversely affect our business and results of operations.

Like other financial services firms, we have been and continue to be the subject of actual or attempted unauthorized access, mishandling or misuse of information, computer viruses or malware, and cyber-attacks that could obtain confidential information, destroy data, disrupt or degrade service, sabotage systems or cause other damage, distributed denial of service attacks, data breaches and other infiltration, exfiltration or other similar events.

While we regularly monitor data flow inside and outside the company, attackers have become very sophisticated in the way they conceal access to systems, and we may not be aware that we have been attacked. Any event that leads to unauthorized access, use or disclosure of personal information or other sensitive information that we or our vendors maintain, including our own proprietary business information and sensitive information such as personal information regarding borrowers, loan applicants or employees, could disrupt our business, harm our reputation, compel us to comply with applicable federal and/or state breach notification laws and foreign law equivalents, subject us to time consuming, distracting and expensive litigation, regulatory investigation and oversight, mandatory corrective action, require us to verify the correctness of database contents, or otherwise subject us to liability under laws, regulations and contractual obligations, including those that protect the privacy and security of personal information. This could result in increased costs to us and result in significant legal and financial exposure and/or reputational harm. In addition, any failure or perceived failure by us or our vendors to comply with our privacy, confidentiality or data security-related legal or other obligations to our bank partners or other third parties, actual or perceived security breaches, or any security incidents or other events that result in the unauthorized access, release or transfer of sensitive information, which could include personally identifiable information, may result in governmental investigations, enforcement actions, regulatory fines, litigation, or public statements against us by advocacy groups or others, and could cause our bank partners and other third parties to lose trust in us or we could be subject to claims by our bank partners and other third parties that we have breached our privacy- or confidentiality-related obligations, which could harm our

business and prospects. Moreover, data security incidents and other inappropriate access can be difficult to detect, and any delay in identifying them may lead to increased harm of the type described above. There can be no assurance that our security measures intended to protect our information technology systems and infrastructure will successfully prevent service interruptions or security incidents. For example, in April 2020, we were made aware of a software error which allowed access to certain consumers' accounts through the Upstart website without providing such consumers' passwords. As a result, certain of such consumers' personal information, such as their name, address and job information (but not full social security information), could be accessed by a third party. We promptly deployed an update to our software to address such vulnerability and are conducting an internal investigation. Thus far, we are not aware of any information being compromised as a result of this error. We cannot provide any assurance that similar vulnerabilities will not arise in the future as we continue to expand the features and functionalities of our platform and introduce new loan products on our platform, and we expect to continue investing substantially to protect against security vulnerabilities and incidents.

We maintain errors, omissions, and cyber liability insurance policies covering certain security and privacy damages. However, we cannot be certain that our coverage will continue to be available on economically reasonable terms or will be available in sufficient amounts to cover one or more large claims, or that an insurer will not deny coverage as to any future claim, or that any insurer will be adequately covered by reinsurance or other risk mitigants or that any insurer will offer to renew policies at an affordable rate or offer such coverage at all in the future. The successful assertion of one or more large claims against us that exceed available insurance coverage, or the occurrence of changes in our insurance policies, including premium increases or the imposition of large deductible or co-insurance requirements, could have an adverse effect on our business, financial condition and results of operations.

If we are unable to manage the risks related to our loan servicing and collections obligations, our business, financial condition and results of operations could be adversely affected.

The vast majority of Upstart-powered loans are not secured by any collateral, guaranteed or insured by any third party or backed by any governmental authority. As a result, we are limited in our ability to collect on such loans on behalf of our bank partners and investors of our loan funding programs if a borrower is unwilling or unable to repay them. Substantially all our collection duties and obligations for loans we service that are more than 30 days past due are subcontracted to several collection agencies. If such collection agencies do not perform as expected under our agreements with them or if these collection agents act unprofessionally and otherwise harm the user experience for borrowers of Upstart-powered loans, our brand and reputation could be harmed and our ability to attract potential borrowers to our platform could be negatively impacted. For example, during periods of increased delinquencies caused by economic downturns or otherwise, it is important that the collection agents are proactive and consistent in contacting a borrower to bring a delinquent balance current and ultimately avoid the related loan becoming charged off, which in turn makes it extremely important that the collection agents are properly staffed and trained to take prompt and appropriate action. If the collection agents are unable to maintain a high quality of service, or fulfill their servicing obligations at all due to resource constraints resulting from the increased delinquencies, it could result in increased delinquencies and charge-offs on the loans, which could decrease fees payable to us, cause our bank partners to decrease the volume of Upstart-powered loans kept on their balance sheets, erode trust in our platform or increase the costs of our loan funding programs.

While auto loans issued through our new auto lending platform will be secured by collateral, auto loans are inherently risky, as they are often secured by assets that may be difficult to locate and can depreciate rapidly. We generally begin the repossession process for auto loans that become 90 days past due. As our volume of auto loans increases, we plan to engage a third-party auto repossession vendor to handle all repossession activity. Following a repossession, if a borrower fails to redeem their vehicle or reinstate their loan agreement, the repossessed vehicle is sold at an auction and the proceeds are applied to the unpaid balance of the loan and related expenses. If the proceeds do not cover the unpaid balance of the loan and any related expenses, the deficiency would be charged-off. Further, if a vehicle cannot be located, repossession and sale of the vehicle would not be possible, which could also lead to delinquencies and charge-offs. A significant number of delinquencies and charge-offs could decrease fees payable to us, cause our bank partners to decrease the volume of Upstart-powered auto loans kept on their balance sheets, erode trust in our platform and increase the costs of our loan funding programs.

Additionally, if such repossession vendors do not perform consistent with agreements entered into with us, or if vendors act unprofessionally or otherwise harm the user experience for borrowers of Upstart-powered loans, our brand and reputation could be harmed and our ability to attract potential borrowers to our platform could be negatively impacted. We may also become subject to regulatory scrutiny and potential litigation based on the conduct of our repossession vendors.

In addition, loan servicing is a highly manual process and an intensely regulated activity. The laws and regulations governing these activities are subject to change. For example, during the COVID-19 pandemic certain states prohibited or restricted collection activities. If we are unable to comply with such laws and regulations, we could lose one or more of our licenses or authorizations, become subject to greater scrutiny by regulatory agencies or become subject to sanctions or litigation, which may have an adverse effect on our ability to perform our servicing obligations or make our platform available to borrowers in particular states. Any of the foregoing could adversely affect our business, financial condition and results of operations.

We primarily rely on three collection agencies to perform substantially all of our duties as the servicer for delinquent and defaulted loans. One or more collection agents could take actions that result in our arrangements becoming cost prohibitive or enter into exclusive or more favorable relationships with our competitors. If any of our collection agencies were to suspend or cease operations, or our relationship with one or more of them were to otherwise terminate, such as in the case of resource constraints caused by an economic downturn, we may need to implement substantially similar arrangements with other collection agencies on terms that may not be commercially attractive. Transitioning this aspect of loan servicing to a new collection agency may result in disruptions to our ability to service the loans made on our platform and loan performance may be impacted as a result. If we are unsuccessful in maintaining our relationships with our current collection agencies, our business, financial condition or results of operations may be adversely affected.

In addition, we charge our loan holders a fixed percentage servicing fee based on the outstanding balance of loans serviced. If we fail to efficiently service such loans and the costs incurred exceed the servicing fee charged, our results of operations would be adversely affected.

In connection with our loan funding programs, we make representations and warranties concerning the loans sold, and if such representations and warranties are not accurate when made, we could be required to repurchase the loans.

In our loan funding programs, including asset-backed securitizations and whole loan sales, we make numerous representations and warranties concerning the characteristics of the Upstart-powered loans sold and transferred in connection with such transactions, including representations and warranties that the loans meet the eligibility requirements of those facilities and of investors in our loan funding programs. If those representations and warranties were not accurate when made, we may be required to repurchase the underlying loans. Failure to repurchase so-called ineligible loans when required could constitute an event of default or termination event under the agreements governing our various loan funding programs. Through September 30, 2020, the number of repurchased Upstart-powered loans as a result of inaccurate representations and warranties represents less than 0.30% of all Upstart-powered loans. While only a small number of Upstart-powered loans have been historically repurchased by the Company, there can be no assurance that we would have adequate cash or other qualifying assets available to make such repurchases if and when required. Such repurchases could be limited in scope, relating to small pools of loans, or significant in scope, across multiple pools of loans. If we were required to make such repurchases and if we do not have adequate liquidity to fund such repurchases, our business, financial condition and results of operations could be adversely affected.

Borrowers may prepay a loan at any time without penalty, which could reduce our servicing fees and deter our bank partners and investors from investing in loans facilitated by our platform.

A borrower may decide to prepay all or a portion of the remaining principal amount on a loan at any time without penalty. If the entire or a significant portion of the remaining unpaid principal amount of a loan is prepaid, we would not receive a servicing fee, or we would receive a significantly lower servicing fee associated with such prepaid loan. Prepayments may occur for a variety of reasons, including if interest rates decrease after a loan is made. If a significant volume of prepayments occurs, the amount of our servicing fees would decline, which could harm our business and results of operations. Our AI models are designed to predict prepayment rates. However, if a significant volume of prepayments occur that our AI models do not accurately predict, returns targeted by our bank partners and investors in our loan funding programs would be adversely affected and our ability to attract new bank partners and investors in our loan funding programs would be negatively affected.

Our marketing efforts and brand promotion activities may not be effective.

Promoting awareness of our AI lending platform is important to our ability to grow our business, attract new bank partners, increase the number of potential borrowers on our platform and attract investors to participate in our loan funding programs. We believe that the importance of brand recognition will increase as competition in the consumer lending industry expands. However, because our bank partners are increasingly adopting our white-labeled version of our AI lending platform through their own websites, potential borrowers may not be aware they are experiencing our AI lending platform, which may hinder recognition of our brand. Successful promotion of our brand will depend largely on the effectiveness of marketing efforts and the overall user experience of our bank partners and potential borrowers on the Upstart platform, which factors are outside our control. The marketing channels that we employ may also become more crowded and saturated by other lending platforms, which may decrease the effectiveness of our marketing campaigns and increase borrower acquisition costs. Also, the methodologies, policies and regulations applicable to marketing channels may change. For example, internet search engines could revise their methodologies, which could adversely affect borrower volume from organic ranking and paid search. Search engines may also implement policies that restrict the ability of companies such as us to advertise their services and products, which could prevent us from appearing in a favorable location or any location in the organic rankings or paid search results when certain search terms are used by the consumer.

Our brand promotion activities may not yield increased revenues. If we fail to successfully build trust in our AI lending platform and the performance and predictability of Upstart-powered loans, we may lose existing bank partners and investors in our loan funding programs to our competitors or be unable to attract new bank partners and investors in our loan funding programs, which in turn would harm our business, results of operations and financial condition. Even if our marketing efforts result in increased revenue, we may be unable to recover our marketing costs through increases in loan volume, which could result in a higher borrower acquisition cost per account. Any incremental increases in loan servicing costs, such as increases due to greater marketing expenditures, could have an adverse effect on our business, financial condition and results of operations.

Any significant disruption in our AI lending platform could prevent us from processing loan applicants and servicing loans, reduce the effectiveness of our AI models and result in a loss of bank partners or borrowers.

In the event of a system outage or other event resulting in data loss or corruption, our ability to process loan applications, service loans or otherwise facilitate loans on our platform would be adversely affected. We also rely on facilities, components, and services supplied by third parties, including data center facilities and cloud storage services. We host our AI lending platform using Amazon Web Services, or AWS, a provider of cloud infrastructure services. In the event that our AWS service agreements are terminated, or there is a lapse of service, interruption of internet service provider connectivity or damage to AWS data centers, we could experience interruptions in access to our platform as well as delays and additional expense in the event we must secure alternative cloud infrastructure services. Any interference or disruption of our technology and underlying infrastructure or our use of third-party services could adversely affect our relationships with our bank partners and investors in our funding programs, and the overall user experience of our platform. Also, as our business grows, we may be required to expand and improve the capacity, capability and reliability of our infrastructure. If we are not able to effectively address capacity constraints, upgrade our systems as needed and continually develop our technology and infrastructure to reliably support our business, our business, financial condition and results of operations could be adversely affected.

Additionally, in the event of damage or interruption, our insurance policies may not adequately compensate us for any losses incurred. Our disaster recovery plan has not been tested under actual disaster conditions, and we may not have sufficient capacity to recover all data and services in the event of an outage or other event resulting in data loss or corruption. These factors could prevent us from processing or posting payments on the loans, damage our brand and reputation, divert our employees' attention, subject us to liability and cause borrowers to abandon our business, any of which could adversely affect our business, results of operations and financial condition.

Our platform and internal systems rely on software that is highly technical, and if our software contains undetected errors, our business could be adversely affected.

Our platform and internal systems rely on software that is highly technical and complex. In addition, our platform and internal systems depend on the ability of such software to store, retrieve, process and manage high volumes of data. The software in which we rely has contained, and may now or in the future contain, undetected errors or bugs. Some errors may only be discovered after the code has been released for external or internal use. Errors or other design defects within the software on which we rely may result in failure to accurately predict a loan applicant's creditworthiness, failure to comply with applicable laws and regulations, approval of sub-optimally priced loans, incorrectly displayed interest rates to applicants or borrowers, or incorrectly charged interest to borrowers or fees to bank partners or institutional investors, failure to detect fraudulent activity on our platform, a negative experience for consumers or bank partners, delayed introductions of new features or enhancements, or failure to protect borrower data or our intellectual property. Any errors, bugs or defects discovered in the software on which we rely could result in harm to our reputation, loss of consumers or bank partners, increased regulatory scrutiny, fines or penalties, loss of revenue or liability for damages, any of which could adversely affect our business, financial condition and results of operations.

We rely on third-party vendors and if such third parties do not perform adequately or terminate their relationships with us, our costs may increase and our business, financial condition and results of operations could be adversely affected.

Our success depends in part on our relationships with third-party vendors. In some cases, third-party vendors are one of a limited number of sources. For example, we rely on national consumer reporting agencies, such as TransUnion, for a large portion of the data used in our AI models. In addition, we rely on third-party verification technologies and services that are critical to our ability to maintain a high level of automation on our platform. In addition, because we are not a bank, we cannot belong to or directly access the ACH payment network. As a result, we rely on one or more banks with access to the ACH payment network to process collections on Upstart-powered loans. Most of our vendor agreements are terminable by either party without penalty and with little notice. If any of our third-party vendors terminates its relationship with us or refuses to renew its agreement with us on commercially reasonable terms, we would need to find an alternate provider, and may not be able to secure similar terms or replace such providers in an acceptable timeframe. We also rely on other software and services supplied by vendors, such as communications, analytics and internal software, and our business may be adversely affected to the extent such software and services do not meet our expectations, contain errors or vulnerabilities, are compromised or experience outages. Any of these risks could increase our costs and adversely affect our business, financial condition and results of operations. Further, any negative publicity related to any of our third-party partners, including any publicity related to quality standards or safety concerns, could adversely affect our reputation and brand, and could potentially lead to increased regulatory or litigation exposure.

We incorporate technology from third parties into our platform. We cannot be certain that our licensors are not infringing the intellectual property rights of others or that the suppliers and licensors have sufficient rights to the technology in all jurisdictions in which we may operate. Some of our license agreements may be terminated by our licensors for convenience. If we are unable to obtain or maintain rights to any of this technology because of intellectual property infringement claims brought by third parties against our suppliers and licensors or against us, or if we are unable to continue to obtain the technology or enter into new agreements on commercially reasonable terms, our ability to develop our platform containing that technology could be severely limited and our business could be harmed. Additionally, if we are unable to obtain necessary technology from third parties, we may be forced to acquire or develop alternate technology, which may require significant time and effort and may be of lower quality or performance standards. This would limit and delay our ability to provide new or competitive loan products or service offerings and increase our costs. If alternate technology cannot be obtained or developed, we may not be able to offer certain functionality as part of our platform and service offerings, which could adversely affect our business, financial condition and results of operations.

Failure by our third-party vendors or our failure to comply with legal or regulatory requirements or other contractual requirements could have an adverse effect on our business.

We have significant vendors that provide us with a number of services to support our platform. If any third-party vendors fail to comply with applicable laws and regulations or comply with their contractual requirements, including failure to maintain adequate systems addressing privacy and data protection and security, we could be subject to regulatory enforcement actions and suffer economic and reputational harm that could harm our business. Further, we may incur significant costs to resolve any such disruptions in service or failure to provide contracted services, which could adversely affect our business.

The CFPB and each of the prudential bank regulators that supervise our bank partners have issued guidance stating that institutions under their supervision may be held responsible for the actions of the companies with which they contract. As a service provider to those supervised entities, we must ensure we have implemented an adequate vendor management program. We or our bank partners could be adversely impacted to the extent our vendors fail to comply with the legal requirements applicable to the particular products or services being offered. Our use of third-party vendors is subject to increasing regulatory attention.

The CFPB and other regulators have also issued regulatory guidance that has focused on the need for financial institutions to perform increased due diligence and ongoing monitoring of third-party vendor relationships, thus increasing the scope of management involvement in connection with using third-party vendors. Moreover, if regulators conclude that we or our bank partners have not met the heightened standards for oversight of our third-party vendors, we or our bank partners could be subject to enforcement actions, civil monetary penalties, supervisory orders to cease and desist or other remedial actions, which could have an adverse effect on our business, financial condition and results of operations.

Unfavorable outcomes in legal proceedings may harm our business and results of operations.

We are, and may in the future become, subject to litigation, claims, examinations, investigations, legal and administrative cases and proceedings, whether civil or criminal, or lawsuits by governmental agencies or private parties, which may affect our results of operations. These claims, lawsuits, and proceedings could involve labor and employment, discrimination and harassment, commercial disputes, intellectual property rights (including patent, trademark, copyright, trade secret, and other proprietary rights), class actions, general contract, tort, defamation, data privacy rights, antitrust, common law fraud, government regulation, or compliance, alleged federal and state securities and "blue sky" law violations or other investor claims, and other matters. Due to the consumer-oriented nature of our business and the application of certain laws and regulations, participants in our industry are regularly named as

defendants in litigation alleging violations of federal and state laws and regulations and consumer law torts, including fraud. Many of these legal proceedings involve alleged violations of consumer protection laws. In addition, we have in the past and may in the future be subject to litigation, claims, examinations, investigations, legal and administrative cases and proceedings related to the offer and sale of Upstart-powered loans.

In particular, lending programs that involve originations by a bank in reliance on origination-related services being provided by non-bank lending platforms and/or program managers are subject to potential litigation and government enforcement claims based on "rent-a-charter" or "true lender" theories, particularly where such programs involve the subsequent sale of such loans or interests therein to the platform. See—"If loans facilitated through our platform for one or more bank partners were subject to successful challenge that the bank partner was not the "true lender," such loans may be unenforceable, subject to rescission or otherwise impaired, we or other program participants may be subject to penalties, and/or our commercial relationships may suffer, each which would adversely affect our business and results of operations," below. In addition, loans originated by banks (which are exempt from certain state requirements under federal banking laws), followed by the sale, assignment, or other transfer to non-banks of such loans are subject to potential litigation and government enforcement claims based on the theory that transfers of loans from banks to non-banks do not transfer the ability to enforce contractual terms such as interest rates and fees from which only banks benefit under federal preemption principles. See—"If loans originated by our bank partners were found to violate the laws of one or more states, whether at origination or after sale by the originating bank partner, loans facilitated through our platform may be unenforceable or otherwise impaired, we or other program participants may be subject to, among other things, fines and penalties, and/or our commercial relationships may suffer, each of which would adversely affect our business and results of operations," below. In addition, the recent inquiries related to our model's use of education variables in assessing credit risk could prompt potential litigation and government enforcement claims based on perceived violations of ECOA. See—"We have been in the past and may in the future be subject to federal and state regulatory inquiries regarding our business" below. If we were subject to such litigation or enforcement, then any unfavorable results of pending or future legal proceedings may result in contractual damages, usury related claims, fines, penalties, injunctions, the unenforceability, rescission or other impairment of loans originated on our platform or other censure that could have an adverse effect on our business, results of operations and financial condition. Even if we adequately address the issues raised by an investigation or proceeding or successfully defend a third-party lawsuit or counterclaim, we may have to devote significant financial and management resources to address these issues, which could harm our business, financial condition and results of operations.

Corporate and asset-backed debt ratings could adversely affect our ability to fund loans through our loan funding programs at attractive rates, which could negatively affect our results of operations, financial condition and liquidity.

Our unsecured senior corporate debt currently has no rating, and we have never issued unsecured debt securities in the capital markets. Asset-backed securities sponsored or co-sponsored by us are currently rated by a limited number of debt rating agencies. Structured finance ratings reflect these rating agencies' opinions of our receivables credit performance and ability of the receivables cash flows to pay interest on a timely basis and repay the principal of such asset-backed securitizations, as well as our ability to service the receivables and comply with other obligations under such programs, such as the obligation to repurchase loans subject to breaches of loan-level representations and warranties. Such ratings also reflect the rating agencies' opinions of other service providers in such transactions, such as trustees, back-up servicers, charged-off loan purchasers and others.

Any future downgrade or non-publication of ratings may increase the interest rates that are required to attract investment in such asset-backed securities, adversely impacting our ability to provide loan liquidity to our bank partners and whole loan purchasers. As a result, our lack of parent debt rating and any possible downgrades to the ratings of our asset-backed securities could negatively impact our business, financial condition and results of operations.

If loans originated by our bank partners were found to violate the laws of one or more states, whether at origination or after sale by the originating bank partner, loans facilitated through our platform may be unenforceable or otherwise impaired, we or other program participants may be subject to, among other things, fines and penalties, and/or our commercial relationships may suffer, each of which would adversely affect our business and results of operations.

When establishing the interest rates and structures (and the amounts and structures of certain fees constituting interest under federal banking law, such as origination fees, late fees and non-sufficient funds fees) that are charged to borrowers on loans originated on our platform, our bank partners rely on certain authority under federal law to export the interest rate requirements of the state where each bank partner is located to borrowers in all other states. Further, certain of our bank partners and institutional investors rely on the ability of subsequent holders to continue charging such rate and fee structures and enforce other contractual terms agreed to by our bank partners which are permissible under federal banking laws following the acquisition of the loans. The current annual percentage rates of the loans facilitated through our platform typically range from approximately 6.5% to 35.99%. In some states, the interest rates of certain Upstart-powered loans exceed the maximum interest rate permitted for consumer loans made by non-bank lenders to borrowers residing in, or that have nexus to, such states. In addition, the rate structures for Upstart-powered loans may not be permissible in all states for non-bank lenders and/or the amount or structures of certain fees charged in connection with Upstart-powered loans may not be permissible in all states for non-bank lenders.

Usury, fee, and disclosure related claims involving Upstart-powered loans may be raised in multiple ways. Program participants may face litigation, government enforcement or other challenge, for example, based on claims that bank lenders did not establish loan terms that were permissible in the state they were located or did not correctly identify the home or host state in which they were located for purposes of interest exportation authority under federal law. Alternatively, we or our investors may face litigation, government enforcement or other challenge, for example, based on claims that rates and fees were lawful at origination and through any period during which the originating bank partner retained the loan and interests therein, but that subsequent purchasers were unable to enforce the loan pursuant to its contracted-for terms, or that certain disclosures were not provided at origination because while such disclosures are not required of banks they may be required of non-bank lenders.

In Madden v. Midland Funding, LLC, 786 F.3d 246 (2d Cir. 2015), cert. denied, 136 S.Ct. 2505 (June 27, 2016), for example, the United States Court of Appeals for the Second Circuit held that the non-bank purchaser of defaulted credit card debt could not rely on preemption standards under the National Bank Act applicable to the originator of such debt in defense of usury claims. Madden addressed circumstances under which a defaulted extension of credit

under a consumer credit card account was assigned, following default, to a non-bank debt buyer that then attempted to collect the loan and to continue charging interest at the contracted-for rate. The debtor filed a suit claiming, among other claims, that the rate charged by the non-bank collection entity exceeded the usury rates allowable for such entities under New York usury law. Reversing a lower court decision, the Second Circuit held that preemption standards under the National Bank Act applicable to the bank that issued the credit card were not available to the non-bank debt buyer as a defense to usury claims. Following denial of a petition for rehearing by the Second Circuit, the defendant sought review by the United States Supreme Court. Following the United States Supreme Court's request that the Solicitor General file a brief setting forth the government's position on whether the Supreme Court should hear the case in 2016, the Solicitor General filed its brief recommending that the petition for a writ of certiorari be denied for certain vehicle suitability reasons, although the Solicitor General's brief concluded that the Second Circuit's decision was substantively incorrect as a matter of law. The Supreme Court denied certiorari on June 27, 2016, such that the Second Circuit's decision remains binding on federal courts in the Second Circuit (which include all federal courts in New York, Connecticut, and Vermont). Upon remand to the District Court for consideration of additional issues, including whether a choice of law provision in the debtor's credit card agreement was enforceable to displace New York usury law and class certification, the parties settled the matter in 2019.

The scope and validity of the Second Circuit's Madden decision remain subject to challenge and clarification. For example, the Colorado Administrator of the Colorado Uniform Consumer Credit Code, or the UCCC, reached a settlement with respect to complaints against two online lending platforms whose operations share certain commonalities with ours, including with respect to the role of bank partners and sale of loans to investors. The complaints included, among other claims, allegations, grounded in the Second Circuit's Madden decision, that the rates and fees for certain loans could not be enforced lawfully by non-bank purchasers of bank-originated loans. Under the settlement, these banks and nonbank partners committed to, among other things, limit the annual percentage rates, or APR, on loans to Colorado consumers to 36% and take other actions to ensure that the banks were in fact the true lenders. The nonbanks also agreed to obtain and maintain a Colorado lending license. In Colorado, this settlement should provide a helpful model for what constitutes an acceptable bank partnership model. However, the settlement may also invite other states to initiate their own actions, and set their own regulatory standards through enforcement.

In addition, in June 2019 private plaintiffs filed class action complaints against multiple traditional credit card securitization programs, including, Petersen, et al. v. Chase Card Funding, LLC, et al., (No. 1:19-cv-00741-LJV-JJM (W.D.N.Y. June 6, 2019)) and Cohen, et al. v. Capital One Funding, LLC et al., (No. 19-03479 (E.D.N.Y. June 12, 2019)). In *Petersen*, the plaintiffs sought class action status against certain defendants affiliated with a national bank that have acted as special purpose entities in securitization transactions sponsored by the bank. The complaint alleges that the defendants' acquisition, collection and enforcement of the bank's credit card receivables violated New York's civil usury law and that, as in Madden, the defendants, as non-bank entities, are not entitled to the benefit of federal preemption of state usury law. The complaint sought a judgment declaring the receivables unenforceable, monetary damages and other legal and equitable remedies, such as disgorgement of all sums paid in excess of the usury limit. *Cohen* was a materially similar claim against a separate national bank. On January 22, 2020, the magistrate judge in Petersen issued a report and recommendation responding to the defendants' motion to dismiss. The magistrate recommended that the motion to dismiss be granted as to both of the plaintiffs' claims (usury and unjust enrichment). On September 21, 2020, the District Court accepted the magistrate's recommendation and dismissed all claims. The District Court found that the usury claims were expressly preempted by the National Bank Act and referenced the OCC's recent rulemaking (discussed further below) that "[i]nterest on a loan that is permissible under [the National Bank Act] shall not be affected by the sale, assignment, or other transfer of the loan." Among other things, the Court deferred to the "OCC's reasoned judgment that enforcing New York's usury laws against the Chase defendants would significantly interfere with [the bank's] exercise of its [National Bank Act] powers." The Cohen case was dismissed on September 29, 2020 and plaintiffs in both Cohen and Petersen have filed appeals to the second circuit.

As noted above, federal prudential regulators have also taken actions to address the *Madden* decision. On May 29, 2020, the OCC issued a final rule clarifying that, when a national bank or savings association sells, assigns, or otherwise transfers a loan, interest permissible before the transfer continues to be permissible after the transfer. That rule took effect on August 3, 2020. As discussed further below, the OCC also has issued a rule pertaining to the "true lender" issue. Similarly, the FDIC finalized on June 25, 2020 its 2019 proposal declaring that the interest rate for a loan is determined when the loan is made, and will not be affected by subsequent events. On July 29, 2020, California, New York and Illinois filed suit in the U.S. District Court for the Northern District of California to enjoin enforcement of the OCC rule (Case No. 20-CV-5200) and, similarly in the same court, on August 20, 2020 California, Illinois, Massachusetts, Minnesota, New Jersey, New York, North Carolina, and the District of Columbia sought to enjoin enforcement of the FDIC rule (Case No. 20-CV-5860), in each case related to permissible interest rates post-loan transfer on the grounds that the OCC and FDIC exceeded their authority when promulgating those rules.

There are factual distinctions between our program and the circumstances addressed in the Second Circuit's Madden decision, as well as the circumstances in the Colorado UCCC settlement, credit card securitization litigation, and similar cases. As noted above, there are also bases on which the Madden decision's validity might be subject to challenge or the Madden decision may be addressed by federal regulation or legislation. Nevertheless, there can be no guarantee that a Madden-like claim will not be brought successfully against us or other Upstart program participants.

If a borrower or any state agency were to successfully bring a claim against us, our bank partners, our securitization vehicles and/or the trustees of such vehicles or our institutional investors for a state usury law or fee restriction violation and the rate or fee at issue on the loan was impermissible under applicable state law, we, our bank partners, securitization vehicles and/or trustees or investors in our loan funding programs may face various commercial and legal repercussions, including that such parties would not receive the total amount of interest expected, and in some cases, may not receive any interest or principal, may hold loans that are void, voidable, rescindable, or otherwise impaired or may be subject to monetary, injunctive or criminal penalties. Were such repercussions to apply to us, we may suffer direct monetary loss or may be a less attractive candidate for bank partners, securitization trustees or institutional investors to enter into or renew relationships; and were such repercussions to apply to our bank partners or institutional investors, such parties could be discouraged from using our platform. We may also be subject to payment of damages in situations where we agreed to provide indemnification, as well as fines and penalties assessed by state and federal regulatory agencies.

If loans facilitated through our platform for one or more bank partners were subject to successful challenge that the bank partner was not the "true lender," such loans may be unenforceable, subject to rescission or otherwise impaired, we or other program participants may be subject to penalties, and/or our commercial relationships may suffer, each which would adversely affect our business and results of operations.

Upstart-powered loans are originated in reliance on the fact that our bank partners are the "true lenders" for such loans. That true lender status determines various Upstart-powered loan program details, including that we do not hold licenses required solely for being the party that extends credit to consumers, and Upstart-powered loans may involve interest rates and structures (and certain fees and fees structures) permissible at origination only because the loan terms and lending practices are permissible only when the lender is a bank, and/or the disclosures provided to borrowers would be accurate and compliant only if the lender is a bank. Because the loans facilitated by our platform are originated by our bank partners, many state consumer financial regulatory requirements, including usury restrictions (other than the restrictions of the state in which a bank partner originating a particular loan is located) and many licensing requirements and substantive requirements under state consumer credit laws, are treated as inapplicable based on principles of federal preemption or express exemptions provided in relevant state laws for certain types of financial institutions or loans they originate.

Certain recent litigation and regulatory enforcement has challenged, or is currently challenging, the characterization of bank partners as the "true lender" in connection with programs involving origination and/or servicing relationships between a bank partner and non-bank lending platform or program manager. As noted above, the Colorado Administrator has entered into a settlement agreement with certain banks and nonbanks that addresses this true lender issue. Specifically, the settlement agreement sets forth a safe harbor indicating that a bank is the true lender if certain specific terms and conditions are met. However, other states could also bring lawsuits based on these types of relationships. For example, on June 5, 2020, the Washington, DC Attorney General filed a lawsuit against online lender Elevate for allegedly deceptively marketing high-cost loans with interest rates above the Washington, DC usury cap. The usury claim is based on an allegation that Elevate, which was not licensed in Washington, DC, and not its partner bank, originated these loans, and were therefore in violation of the state's usury laws.

We note that the OCC issued on October 27, 2020, a final rule to address the "true lender" issue for lending transactions involving a national bank. For certain purposes related to federal banking law, including the ability of a national bank to "export" interest-related requirements from the state from which they lend, the rule would treat a national bank as the "true lender" if it is named as the lender in the loan agreement or funds the loan. It remains possible that the rule could be challenged by state regulators or private parties, or rescinded or otherwise limited by a future administration. In addition, the OCC rule does not apply to state-chartered banks and there can be no assurance that the FDIC will issue a similar rule applicable to state-chartered banks.

We, bank partners, securitization vehicles and similarly situated parties could become subject to challenges like that presented by the Colorado settlement and, if so, we could face penalties and/or Upstart-powered loans may be void, voidable or otherwise impaired in a manner that may have adverse effects on our operations (directly, or as a result of adverse impact on our relationships with our bank partners, institutional investors or other commercial counterparties). However, we are also taking steps to confirm that our business model conforms with the requirements of the Colorado safe harbor.

There have been no formal proceedings against us or indication of any proceedings against us to date, but there can be no assurance that the Colorado Administrator will not make assertions similar to those made in its present actions with respect to the loans facilitated by our platform in the future.

It is also possible that other state agencies or regulators could make similar assertions. If a court, or a state or federal enforcement agency, were to deem Upstart, rather than our bank partners, the "true lender" for loans originated on our platform, and if for this reason (or any other reason) the loans were deemed subject to and in violation of certain state consumer finance laws, we could be subject to fines, damages, injunctive relief (including required modification or discontinuation of our business in certain areas) and other penalties or consequences, and the loans could be rendered void or enforceable in whole or in part, any of which could have a material adverse effect on our business (directly, or as a result of adverse impact on our relationships with our bank partners, institutional investors or other commercial counterparties).

It may be difficult and costly to protect our intellectual property rights, and we may not be able to ensure their protection.

Our ability to operate our platform depends, in part, upon our proprietary technology. We may be unable to protect our proprietary technology effectively which would allow competitors to duplicate our AI models or AI lending platform and adversely affect our ability to compete with them. We rely on a combination of copyright, trade secret, patent, trademark laws and other rights, as well as confidentiality procedures, contractual provisions and our information security infrastructure to protect our proprietary technology, processes and other intellectual property. While we have two patent applications pending, we do not yet have patent protection and our patent applications may not be successful. The steps we take to protect our intellectual property rights may be inadequate. For example, a third party may attempt to reverse engineer or otherwise obtain and use our proprietary technology without our consent. The pursuit of a claim against a third party for infringement of our intellectual property could be costly, and there can be no guarantee that any such efforts would be successful. Our failure to secure, protect and enforce our intellectual property rights could adversely affect our brand and adversely impact our business.

Our proprietary technology, including our AI models, may actually or may be alleged to infringe upon third-party intellectual property, and we may face intellectual property challenges from such other parties. We may not be successful in defending against any such challenges or in obtaining licenses to avoid or resolve any intellectual property disputes. If we are unsuccessful, such claim or litigation could result in a requirement that we pay significant damages or licensing fees, or we could in some circumstances be required to make changes to our business to avoid such infringement, which would negatively impact our financial performance. We may also be obligated to indemnify parties or pay substantial settlement costs, including royalty payments, in connection with any such claim or litigation and to modify applications or refund fees, which could be costly. Even if we were to prevail in such a dispute, any litigation regarding our intellectual property could be costly and time consuming and divert the attention of our management and key personnel from our business operations.

Moreover, it has become common in recent years for individuals and groups to purchase intellectual property assets for the sole purpose of making claims of infringement and attempting to extract settlements from companies such as ours. Even in instances where we believe that claims and allegations of intellectual property infringement against us are without merit, defending against such claims is time consuming and expensive and could result in the

diversion of time and attention of our management and employees. In addition, although in some cases a third party may have agreed to indemnify us for such costs, such indemnifying party may refuse or be unable to uphold its contractual obligations. In other cases, our insurance may not cover potential claims of this type adequately or at all, and we may be required to pay monetary damages, which may be significant.

Furthermore, our technology may become obsolete or inadequate, and there is no guarantee that we will be able to successfully develop, obtain or use new technologies to adapt our models and systems to compete with other technologies as they develop. If we cannot protect our proprietary technology from intellectual property challenges, or if our technology becomes obsolete or inadequate, our ability to maintain our model and systems, facilitate loans or perform our servicing obligations on the loans could be adversely affected.

Some aspects of our business processes include open source software, and any failure to comply with the terms of one or more of these open source licenses could negatively affect our business.

We incorporate open source software into processes supporting our business. Such open source software may include software covered by licenses like the GNU General Public License and the Apache License. The terms of various open source licenses have not been interpreted by U.S. courts, and there is a risk that such licenses could be construed in a manner that limits our use of the software, inhibits certain aspects of our systems and negatively affects our business operations.

Some open source licenses contain requirements that we make source code available at no cost for modifications or derivative works we create based upon the type of open source software we use. We may face claims from third parties claiming ownership of, or demanding the release or license of, such modifications or derivative works (which could include our proprietary source code or AI models) or otherwise seeking to enforce the terms of the applicable open source license. If portions of our proprietary AI models are determined to be subject to an open source license, or if the license terms for the open source software that we incorporate change, we could be required to publicly release the affected portions of our source code, re-engineer all or a portion of our model or change our business activities, any of which could negatively affect our business operations and potentially our intellectual property rights. If we were required to publicly disclose any portion of our proprietary models, it is possible we could lose the benefit of trade secret protection for our models.

In addition to risks related to license requirements, the use of open source software can lead to greater risks than the use of third-party commercial software, as open source licensors generally do not provide warranties or controls on the origin of the software. Use of open source software may also present additional security risks because the public availability of such software may make it easier for hackers and other third parties to determine how to breach our website and systems that rely on open source software. Many of the risks associated with the use of open source software cannot be eliminated and could adversely affect our business.

We may evaluate and potentially consummate acquisitions, which could require significant management attention, consume our financial resources, disrupt our business and adversely affect our financial results.

Our success will depend, in part, on our ability to grow our business. In some circumstances, we may determine to do so through the acquisition of complementary businesses and technologies rather than through internal development. The identification of suitable acquisition candidates can be difficult, time-consuming, and costly, and we may not be able to successfully complete identified acquisitions. In the future, we may acquire, assets or businesses. The risks we face in connection with acquisitions include:

- diversion of management time and focus from operating our business to addressing acquisition integration challenges;
- utilization of our financial resources for acquisitions or investments that may fail to realize the anticipated benefits;
- inability of the acquired technologies, products or businesses to achieve expected levels of revenue, profitability, productivity or other benefits;
- coordination of technology, product development and sales and marketing functions and integration of administrative systems;
- transition of the acquired company's borrowers to our systems;
- retention of employees from the acquired company;
- regulatory risks, including maintaining good standing with existing regulatory bodies or receiving any necessary approvals, as well as being subject to new regulators with oversight over an acquired business;
- attracting financing;
- cultural challenges associated with integrating employees from the acquired company into our organization;
- the need to implement or improve controls, procedures and policies at a business that prior to the acquisition may have lacked effective controls, procedures and policies;
- potential write-offs of loans or intangibles or other assets acquired in such transactions that may have an adverse effect on our results of operations in a given period;
- liability for activities of the acquired company before the acquisition, including patent and trademark infringement claims, violations of laws, commercial disputes, tax liabilities and other known and unknown liabilities;

- assumption of contractual obligations that contain terms that are not beneficial to us, require us to license or waive intellectual property or increase our risk for liability; and
- litigation, claims or other liabilities in connection with the acquired company.

Our failure to address these risks or other problems encountered in connection with any future acquisitions and investments could cause us to fail to realize the anticipated benefits of these acquisitions or investments, cause us to incur unanticipated liabilities and harm our business generally. Future acquisitions could also result in dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities, amortization expenses or the write-off of goodwill, any of which could harm our financial condition.

We rely on borrowings under our corporate and warehouse credit facilities to fund certain aspects of our operations, and any inability to meet our obligations as they come due or to comply with various covenants could harm our business.

Our corporate credit facilities consist of term loans and revolving loan facilities that we have drawn on to finance our operations and for other corporate purposes. As of September 30, 2020, we had $21.0 million outstanding principal under the term loans and revolving credit facilities. These borrowings are secured by all the assets of the company that have not otherwise been sold or pledged to secure bank debt or securities associated with structured finance facilities, such as assets belonging to our consolidated warehouse trust special purpose entities and securitization trusts. These credit agreements contain operating and financial covenants, including customary limitations on the incurrence of certain indebtedness and liens, restrictions on certain transactions and limitations on dividends and stock repurchases. We have in the past, and may in the future, fail to comply with certain operating or financial covenants in our credit agreements, requiring a waiver from our lenders. Our ability to comply with or renegotiate these covenants may be affected by events beyond our control, and breaches of these covenants could result in a default under such agreements and any future financial agreements into which we may enter. If we were to default on our credit obligations and such defaults were not waived, our lenders may require repayment of any outstanding debt and terminate their agreements with us.

In addition, we, through our warehouse trust special purpose entities, have entered into warehouse credit facilities to partially finance the purchase of loans from certain banks that originate loans through our platform, which credit facilities are secured by the purchased loans. We generally hold these loans on our balance sheet until we can contribute them into term securitization transactions or otherwise liquidate them. Occasionally some of these loans may stay on our balance sheet indefinitely, including some loans that are the result of product development activities. As of September 30, 2020, outstanding borrowings under these warehouse credit facilities were $70.2 million, and $109.2 million of aggregate fair value of loans purchased were pledged as collateral.[59] On

[59] See the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Term loans and revolving loan facilities” and Note 7 to our consolidated financial statements for more information about our term loans and revolving loan facilities.

November 2, 2020, we repaid all outstanding borrowings under one of our warehouse credit facilities in the amount of $4.0 million and terminated the corresponding warehouse credit facility.

Under our remaining warehouse credit facility, we may borrow up to $100.0 million until May 2021, and any outstanding principal, together with any accrued and unpaid interest, are due and payable by the warehouse trust special purpose entity in May 2022. As of September 30, 2020, the amount borrowed under this credit facility was $52.7 million.

Our warehouse credit facility imposes operating and financial covenants on the warehouse trust special purpose entity, and under certain events of default, the lender could require that all outstanding borrowings become immediately due and payable or terminate their agreement with us. We have in the past, and may in the future, fail to comply with certain operating or financial covenants in our warehouse credit facility, requiring a waiver from our lenders. If we are unable to repay our obligations at maturity or in the event of default, the borrowing warehouse trust special purpose entity may have to liquidate the loans held as collateral at an inopportune time or price or, if the lender liquidated the loans, such warehouse trust would have to pay any amount by which the original purchase price exceeded their sale price. An event of default would negatively impact our ability to purchase loans from our platform and require us to rely on alternative funding sources, which might increase our costs or which might not be available when needed. If we were unable to arrange new or alternative methods of financing on favorable terms, we might have to curtail our loan funding programs, which could have an adverse effect on our bank partners’ ability or willingness to originate new loans, which in turn would have an adverse effect on our business, results of operations and financial condition.

Some of our borrowings carry a floating rate of interest linked to the London Inter-bank Offered Rate, or LIBOR. On July 27, 2017, the United Kingdom Financial Conduct Authority, or FCA, announced that it intends to stop persuading or compelling banks to submit rates for the calculation of LIBOR after 2021. As a result, while the FCA and the submitting LIBOR banks have indicated they will support the LIBOR indices through 2021 to allow for an orderly transition to an alternative reference rate, it is possible that beginning in 2022, LIBOR will no longer be available as a reference rate. In particular, the interest rate of borrowings under our warehouse credit facilities and certain related interest rate hedging arrangements are predominately based upon LIBOR. While these agreements generally include alternative rates to LIBOR, if a change in indices results in interest rate increases on our debt, debt service requirements will increase, which could adversely affect our cash flow and results of operations. We do not expect a materially adverse change to our financial condition or liquidity as a result of any such changes or any other reforms to LIBOR that may be enacted in the United Kingdom or elsewhere.

We may need to raise additional funds in the future, including through equity, debt or convertible debt financings, to support business growth and those funds may not be available on acceptable terms, or at all.

We intend to continue to make investments to support our business growth and may require additional funds to respond to business challenges, including the need to develop new loan products, enhance our AI models, improve our operating infrastructure, or acquire complementary businesses and technologies. Accordingly, we may need to engage in equity, debt or convertible debt financings to secure additional funds. If we raise additional funds by

issuing equity securities or securities convertible into equity securities, our stockholders may experience dilution. Debt financing, if available, may involve covenants restricting our operations or our ability to incur additional debt. Any debt or additional equity financing that we raise may contain terms that are not favorable to us or our stockholders.

If we are unable to obtain adequate financing or on terms satisfactory to us when we require it, we may be unable to pursue certain business opportunities and our ability to continue to support our business growth and to respond to business challenges could be impaired and our business may be harmed.

Taxing authorities may successfully assert that we should have collected or in the future should collect sales and use, gross receipts, value added or similar taxes and may successfully impose additional obligations on us, and any such assessments or obligations could adversely affect our business, financial condition and results of operations.

The application of indirect taxes, such as sales and use tax, value-added tax, goods and services tax, business tax and gross receipts tax, to platform businesses is a complex and evolving issue. Many of the fundamental statutes and regulations that impose these taxes were established before the adoption and growth of the Internet and e-commerce. Significant judgment is required on an ongoing basis to evaluate applicable tax obligations and as a result amounts recorded are estimates and are subject to adjustments. In many cases, the ultimate tax determination is uncertain because it is not clear how new and existing statutes might apply to our business.

In addition, governments are increasingly looking for ways to increase revenue, which has resulted in discussions about tax reform and other legislative action to increase tax revenue, including through indirect taxes. For example, on November 6, 2018, voters in San Francisco approved "Proposition C," which authorizes San Francisco to impose additional taxes on businesses in San Francisco that generate a certain level of gross receipts. Such taxes would adversely affect our financial condition and results of operations.

We may face various indirect tax audits in various U.S. jurisdictions. In certain jurisdictions, we collect and remit indirect taxes. However, tax authorities may raise questions about or challenge or disagree with our calculation, reporting or collection of taxes and may require us to collect taxes in jurisdictions in which we do not currently do so or to remit additional taxes and interest, and could impose associated penalties and fees. For example, after the U.S. Supreme Court decision in *South Dakota v. Wayfair Inc.*, certain states have adopted, or started to enforce, laws that may require the calculation, collection and remittance of taxes on sales in their jurisdictions, even if we do not have a physical presence in such jurisdictions. A successful assertion by one or more tax authorities requiring us to collect taxes in jurisdictions in which we do not currently do so or to collect additional taxes in a jurisdiction in which we currently collect taxes, could result in substantial tax liabilities, including taxes on past sales, as well as penalties and interest, could harm our business, financial condition and results of operations. Although we have reserved for potential payments of possible past tax liabilities in our financial statements, if these liabilities exceed such reserves, our financial condition will be harmed.

As a result of these and other factors, the ultimate amount of tax obligations owed may differ from the amounts recorded in our financial statements and any such difference may adversely impact our results of operations in future periods in which we change our estimates of our tax obligations or in which the ultimate tax outcome is determined.

Our ability to use our deferred tax assets to offset future taxable income may be subject to certain limitations that could subject our business to higher tax liability.

We may be limited in the portion of net operating loss carryforwards, or NOLs, that we can use in the future to offset taxable income for U.S. federal and state income tax purposes. The Tax Cuts and Jobs Act, or the Tax Act, made broad and complex changes to U.S. tax law, including changes to the uses and limitations of NOLs. For example, while the Tax Act allows for federal NOLs incurred in tax years beginning after December 31, 2017 to be carried forward indefinitely, the Tax Act also imposes an 80% limitation on the use of NOLs that are generated in tax years beginning after December 31, 2017. However, NOLs generated prior to December 31, 2017 will still have a 20-year carryforward period, but are not subject to the 80% limitation. As of December 31, 2019, we had federal and state NOLs of approximately $61.3 million and $53.0 million, respectively, to offset future taxable income. Certain of these federal and state net operating loss carry-forwards will begin expiring in 2034. A lack of future taxable income would adversely affect our ability to utilize these NOLs. In addition, under Section 382 of the Internal Revenue Code of 1986, as amended, or the Code, a corporation that undergoes an "ownership change" is subject to limitations on its ability to utilize its NOLs to offset future taxable income. We performed an ownership analysis and identified two previous ownership changes, as defined under Section 382 and 383 of the Code in 2013 and 2015. However, neither resulted in a material limitation that will reduce the total amount of our NOLs and credits that can be utilized. Future changes in our stock ownership, including this or future offerings, as well as other changes that may be outside of our control, could result in additional ownership changes under Section 382 of the Code. Our NOLs may also be impaired under similar provisions of state law. We assess the available positive and negative evidence to estimate if sufficient future taxable income will be generated to utilize the existing deferred tax assets. On the basis of this evaluation, a full valuation allowance has historically been recorded to recognize only deferred tax assets that are more likely than not to be realized. Certain of our deferred tax assets may expire unutilized or underutilized, which could prevent us from offsetting future taxable income.

Changes in U.S. tax laws could have a material adverse effect on our business, financial condition and results of operations.

The Tax Act contains significant changes to U.S. tax law, including a reduction in the corporate tax rate and a transition to a new territorial system of taxation. The primary impact of the new legislation on our provision for income taxes was a reduction of the future tax benefits of our deferred tax assets as a result of the reduction in the corporate tax rate. The impact of the Tax Act will likely be subject to ongoing technical guidance and accounting interpretation, which we will continue to monitor and assess. As we expand the scale of our business activities, any changes in the U.S. taxation of such activities may increase our effective tax rate and harm our business, financial condition and results of operations.

Our business is subject to the risks of natural disasters and other catastrophic events, and to interruption by man-made problems.

Significant natural disasters or other catastrophic events, such as earthquakes, fires, hurricanes, blizzards, or floods (many of which are becoming more acute and frequent as a result of climate change), or interruptions by strikes, crime, terrorism, epidemics, pandemics, cyber-attacks, computer viruses, internal or external system failures, telecommunications failures, power outages or increased risk of cybersecurity breaches due to a swift transition to

remote work brought about by a catastrophic event, could have an adverse effect on our business, results of operations and financial condition. For example, the outbreak of the COVID-19 pandemic beginning in early 2020 has had a significant impact on the global economy and consumer confidence. If the outbreak persists or worsens, it could continue to adversely impact the economy and consumer confidence, and could negatively impact our operations and our platform, each of which could seriously harm our business. In addition, it is possible that continued widespread remote work arrangements may have a negative impact on our operations, the execution of our business plans, the productivity and availability of key personnel and other employees necessary to conduct our business, or otherwise cause operational failures due to changes in our normal business practices necessitated by the outbreak and related governmental actions. There is no guarantee that we will be as effective while working remotely because our team is dispersed, employees may have less capacity to work due to increased personal obligations (such as childcare, eldercare, or caring for family members who become sick), may become sick themselves and be unable to work, or may be otherwise negatively affected, mentally or physically, by the COVID-19 pandemic and prolonged social distancing. Additionally, remote work arrangements may make it more difficult to scale our operations efficiently, as the recruitment, onboarding and training of new employees may be prolonged or delayed. If a natural disaster, power outage, connectivity issue, or other event occurred that impacted our employees' ability to work remotely, it may be difficult or, in certain cases, impossible, for us to continue our business for a substantial period of time. The increase in remote working may also result in privacy, data protection, data security, and fraud risks. Further, one of our headquarters is located in the San Francisco Bay Area, a region known for seismic activity and wildfires, and our other headquarters is located in Columbus, Ohio, a region subject to blizzards.

In addition, acts of war and other armed conflicts, disruptions in global trade, travel restrictions and quarantines, terrorism and other civil, political and geo-political unrest could cause disruptions in our business and lead to interruptions, delays or loss of critical data. Any of the foregoing risks may be further increased if our business continuity plans prove to be inadequate and there can be no assurance that both personnel and non-mission critical applications can be fully operational after a declared disaster within a defined recovery time. If our personnel, systems or data centers are impacted, we may suffer interruptions and delays in our business operations. In addition, to the extent these events impact the ability of borrowers to timely repay their loans, our business could be negatively affected.

We may not maintain sufficient business interruption or property insurance to compensate us for potentially significant losses, including potential harm to our business that may result from interruptions in our ability to provide our financial products and services.

If our estimates or judgments relating to our critical accounting policies prove to be incorrect or financial reporting standards or interpretations change, our results of operations could be adversely affected.

The preparation of financial statements in conformity with generally accepted accounting principles in the United States requires our management to make estimates and assumptions that affect the amounts reported and disclosed in our consolidated financial statements and accompanying notes. We base our estimates and assumptions on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. The results of these estimates form the basis for making judgments about the carrying values of assets, liabilities, and equity, and the amount of revenue and expenses that are not readily apparent from other sources. Significant assumptions and estimates used in preparing our consolidated financial statements include those related to fair value determinations, stock-based compensation, consolidation of variable interest entities, and provision for income taxes, net of valuation allowance for deferred tax assets. Our results of operations may be adversely affected if our assumptions change or if actual circumstances differ from those in our assumptions, which could cause our results of operations to fall below the expectations of industry or financial analysts and investors, resulting in a decline in the trading price of our common stock.

Additionally, we regularly monitor our compliance with applicable financial reporting standards and review new pronouncements and drafts thereof that are relevant to us. As a result of new standards, or changes to existing standards, and changes in their interpretation, we might be required to change our accounting policies, alter our operational policies and implement new or enhance existing systems so that they reflect new or amended financial reporting standards, or we may be required to restate our published financial statements. Such changes to existing standards or changes in their interpretation may have an adverse effect on our reputation, business, financial condition, and profit and loss, or cause an adverse deviation from our revenue and operating profit and loss target, which may negatively impact our results of operations.

If we fail to maintain an effective system of disclosure controls and internal control over financial reporting, our ability to produce timely and accurate financial statements or comply with applicable regulations could be impaired.

As a public company, we will be subject to the reporting requirements of the Securities Exchange Act of 1934, or the Exchange Act, the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, and the rules and regulations of the applicable listing standards of the Nasdaq Global Select Market. We expect that the requirements of these rules and regulations will continue to increase our legal, accounting, and financial compliance costs, make some activities more difficult, time-consuming, and costly, and place significant strain on our personnel, systems, and resources.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. We are continuing to develop and refine our disclosure controls and other procedures that are designed to ensure that information required to be disclosed by us in the reports that we will file with the SEC is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms and that information required to be disclosed in reports under the Exchange Act is accumulated and communicated to our principal executive and financial officers. We are also continuing to improve our internal control over financial reporting. In order to maintain and improve the effectiveness of our disclosure controls and procedures and internal control over financial reporting, we have expended, and anticipate that we will continue to expend, significant resources, including accounting-related costs, and significant management oversight. Our current controls and any new controls that we develop may become inadequate because of changes in conditions in our business.

Further, weaknesses in our disclosure controls and internal control over financial reporting have been discovered in the past and may be discovered in the future. For example, we identified a material weakness in our internal control over financial reporting that contributed to the revision of our previously-issued 2017 and 2018 financial statements. A "material weakness" is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a

timely basis. This material weakness principally related to a lack of adequate review processes and controls within our accounting and finance organization and a lack of sufficient financial reporting and accounting personnel with the technical expertise to appropriately account for certain transactions including loan servicing and securitizations. During 2019 and 2020, we took a number of actions to improve our internal control over financial reporting, such as hiring external specialists and personnel with technical accounting expertise, designing additional review procedures in our accounting and finance organization, and identifying and implementing improved processes and controls. Our management believes that these and other actions taken during this time have been fully implemented and are operating effectively. As a result, we have concluded that our remediation efforts have been successful and that the previously-identified material weakness in our internal controls has been remediated as of December 31, 2019.

However, we cannot assure you that the measures we have taken to date, or any measures we may take in the future, will be sufficient to identify or prevent future material weaknesses or deficiencies. The nature of our business is such that our financial statements involve a number of complex accounting policies, many of which involve significant elements of judgment, including determinations regarding the consolidation of variable interest entities, determinations regarding the fair value of financial assets and liabilities (including loans, notes receivable, payable to securitization note holders and residual certificate holders, notes payable and servicing assets and liabilities) and the appropriate classification of various items within our financial statements. See Note 1 to our consolidated financial statements for more information about our significant accounting policies. The inherent complexity of these accounting matters and the nature and variety of transactions in which we are involved require that we have sufficient qualified accounting personnel with an appropriate level of experience and controls in our financial reporting process commensurate with the complexity of our business. While we believe we have sufficient internal accounting personnel and external resources and appropriate controls to address the demands of our business, we expect that the growth and development of our business will place significant additional demands on our accounting resources. Any failure to develop or maintain effective controls or any difficulties encountered in their implementation or improvement could harm our results of operations or cause us to fail to meet our reporting obligations and may result in a restatement of our financial statements for prior periods. Any failure to implement and maintain effective internal control over financial reporting could also adversely affect the results of periodic management evaluations and annual independent registered public accounting firm attestation reports regarding the effectiveness of our internal control over financial reporting that we will eventually be required to include in our periodic reports that will be filed with the SEC. Ineffective disclosure controls and procedures and internal control over financial reporting could also cause investors to lose confidence in our reported financial and other information, which would likely have a negative effect on the trading price of our common stock. In addition, if we are unable to continue to meet these requirements, we may not be able to remain listed on the Nasdaq Global Select Market. We are not currently required to comply with the SEC rules that implement Section 404 of the Sarbanes-Oxley Act and are therefore not required to make a formal assessment of the effectiveness of our internal control over financial reporting for that purpose. As a public company, we will be required to provide an annual management report on the effectiveness of our internal control over financial reporting. There can be no assurance that we will maintain internal control over financial reporting sufficient to enable us to identify or avoid material weaknesses in the future.

Our independent registered public accounting firm is not required to formally attest to the effectiveness of our internal control over financial reporting until after we are no longer an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. At such time, our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our internal control over financial reporting is documented, designed, or operating. Any failure to maintain effective disclosure controls and internal control over financial reporting could materially and adversely affect our business, results of operations, and financial condition and could cause a decline in the trading price of our common stock.

Some of our market opportunity estimates, growth forecasts and key metrics included in this prospectus could prove to be inaccurate, and any real or perceived inaccuracies may harm our reputation and negatively affect our business.

Market opportunity estimates and growth forecasts included in this prospectus, including those we have generated ourselves, are subject to significant uncertainty and are based on assumptions and estimates that may not prove to be accurate. The estimates and forecasts in this prospectus relating to the size and expected growth of our target market may prove to be inaccurate. It is impossible to offer every loan product, term or feature that every customer wants or that any given bank partner is necessarily capable of supporting, and our competitors may develop and offer loan products, terms or features that we do not offer. The variables that go into the calculation of our market opportunity are subject to change over time, and there is no guarantee that any particular number or percentage of the loans covered by our market opportunity estimates will generate any particular level of revenues for us. Even if the markets in which we compete meet the size estimates and growth forecasted in this prospectus, we may be unable to address these markets successfully and our business could fail to grow for a variety of reasons outside of our control, including competition in our industry. We regularly review and may adjust our processes for calculating our key metrics to improve their accuracy. Our key metrics may differ from estimates published by third parties or from similarly titled metrics of our competitors due to differences in methodology. If investors or analysts do not perceive our metrics to be accurate representations of our business, or if we discover material inaccuracies in our metrics, our reputation, business, results of operations, and financial condition would be adversely affected.

Risks Related to Our Regulatory Environment

Litigation, regulatory actions and compliance issues could subject us to significant fines, penalties, judgments, remediation costs and/or requirements resulting in increased expenses.

In the ordinary course of business, we have been named as a defendant in various legal actions, including a class action lawsuit and other litigation. Generally, this litigation arises from the dissatisfaction of a consumer with the products or services offered on our platform; some of this litigation, however, has arisen from other matters, including claims of violation of laws related to do-not-call, credit reporting and collections. All such legal actions are inherently unpredictable and, regardless of the merits of the claims, litigation is often expensive, time-consuming, disruptive to our operations and resources, and distracting to management. In addition, certain actions may include claims for indeterminate amounts of damages. Our involvement in any

such matter also could cause significant harm to our or our bank partners' reputations and divert management attention from the operation of our business, even if the matters are ultimately determined in our favor. If resolved against us, legal actions could result in excessive verdicts and judgments, injunctive relief, equitable relief, and other adverse consequences that may affect our financial condition and how we operate our business.

In addition, a number of participants in the consumer financial services industry have been the subject of putative class action lawsuits, state attorney general actions and other state regulatory actions, federal regulatory enforcement actions, including actions relating to alleged unfair, deceptive or abusive acts or practices, violations of state licensing and lending laws, including state usury and disclosure laws, actions alleging discrimination on the basis of race, ethnicity, gender or other prohibited bases, and allegations of noncompliance with various state and federal laws and regulations relating to originating, servicing, and collecting consumer finance loans and other consumer financial services and products. The current regulatory environment, increased regulatory compliance efforts and enhanced regulatory enforcement have resulted in us undertaking significant time-consuming and expensive operational and compliance improvement efforts, which may delay or preclude our or our bank partners' ability to provide certain new products and services. There is no assurance that these regulatory matters or other factors will not, in the future, affect how we conduct our business and, in turn, have a material adverse effect on our business. In particular, legal proceedings brought under state consumer protection statutes or under several of the various federal consumer financial services statutes may result in a separate fine assessed for each statutory and regulatory violation or substantial damages from class action lawsuits, potentially in excess of the amounts we earned from the underlying activities.

Some of our agreements used in the course of our business include arbitration clauses. If our arbitration agreements were to become unenforceable for any reason, we could experience an increase to our consumer litigation costs and exposure to potentially damaging class action lawsuits, with a potential material adverse effect on our business and results of operations.

We contest our liability and the amount of damages, as appropriate, in each pending matter. The outcome of pending and future matters could be material to our results of operations, financial condition and cash flows, and could materially adversely affect our business.

In addition, from time to time, through our operational and compliance controls, we identify compliance issues that require us to make operational changes and, depending on the nature of the issue, result in financial remediation to impacted borrowers. These self-identified issues and voluntary remediation payments could be significant, depending on the issue and the number of borrowers impacted, and could generate litigation or regulatory investigations that subject us to additional risk.

We are subject to or facilitate compliance with a variety of federal, state, and local laws, including those related to consumer protection and loan financings.

We must comply with regulatory regimes or facilitate compliance with regulatory regimes on behalf of our bank partners that are independently subject to federal and/or state oversight by bank regulators, including those applicable to our referral and marketing services, consumer credit transactions, loan servicing and collection activities and the purchase and sale of whole loans and other related transactions. Certain state laws generally regulate interest rates and other charges and require certain disclosures. In addition, other federal and state laws may apply to the origination, servicing and collection of loans originated on our platform, the purchase and sale of whole loans or asset-backed securitizations. In particular, certain laws, regulations and rules we or our bank partners are subject to include:

- state lending laws and regulations that require certain parties to hold licenses or other government approvals or filings in connection with specified activities, and impose requirements related to loan disclosures and terms, fees and interest rates, credit discrimination, credit reporting, servicemember relief, debt collection, repossession, unfair or deceptive business practices and consumer protection, as well as other state laws relating to privacy, information security, conduct in connection with data breaches and money transmission;
- the Truth-in-Lending Act and Regulation Z promulgated thereunder, and similar state laws, which require certain disclosures to borrowers regarding the terms and conditions of their loans and credit transactions, require creditors to comply with certain lending practice restrictions, limit the ability of a creditor to impose certain loan terms and impose disclosure requirements in connection with credit card origination;
- the Equal Credit Opportunity Act and Regulation B promulgated thereunder, and similar state fair lending laws, which prohibit creditors from discouraging or discriminating against credit applicants on the basis of race, color, sex, age, religion, national origin, marital status, the fact that all or part of the applicant's income derives from any public assistance program or the fact that the applicant has in good faith exercised any right under the federal Consumer Credit Protection Act;
- the Fair Credit Reporting Act and Regulation V promulgated thereunder, imposes certain obligations on users of consumer reports and those that furnish information to consumer reporting agencies, including obligations relating to obtaining consumer reports, marketing using consumer reports, taking adverse action on the basis of information from consumer reports, addressing risks of identity theft and fraud and protecting the privacy and security of consumer reports and consumer report information;
- Section 5 of the Federal Trade Commission Act, which prohibits unfair and deceptive acts or practices in or affecting commerce, and Section 1031 of the Dodd-Frank Act, which prohibits unfair, deceptive or abusive acts or practices in connection with any consumer financial product or service, and analogous state laws prohibiting unfair, deceptive or abusive acts or practices;
- the Credit Practices Rule which (i) prohibits lenders from using certain contract provisions that the Federal Trade Commission has found to be unfair to consumers; (ii) requires lenders to advise consumers who co-sign obligations about their potential liability if the primary obligor fails to pay; and (iii) prohibits certain late charges;
- the Fair Debt Collection Practices Act and similar state debt collection laws, which provide guidelines and limitations on the conduct of third-party debt collectors (and some limitation on creditors collecting their own debts) in connection with the collection of consumer debts;
- the Gramm-Leach-Bliley Act and Regulation P promulgated thereunder, which includes limitations on financial institutions' disclosure of nonpublic personal information about a

consumer to nonaffiliated third parties, in certain circumstances requires financial institutions to limit the use and further disclosure of nonpublic personal information by nonaffiliated third parties to whom they disclose such information and requires financial institutions to disclose certain privacy notices and practices with respect to information sharing with affiliated and unaffiliated entities as well as to safeguard personal borrower information, and other privacy laws and regulations;

- the Bankruptcy Code, which limits the extent to which creditors may seek to enforce debts against parties who have filed for bankruptcy protection;
- the Servicemembers Civil Relief Act, which allows military members to suspend or postpone certain civil obligations, requires creditors to reduce the interest rate to 6% on loans to military members under certain circumstances, and imposes restrictions on enforcement of loans to servicemembers, so that the military member can devote his or her full attention to military duties;
- the Military Lending Act, which requires those who lend to "covered borrowers", including members of the military and their dependents, to only offer Military APRs (a specific measure of all-in-cost-of-credit) under 36%, prohibits arbitration clauses in loan agreements, and prohibits certain other loan agreement terms and lending practices in connection with loans to military servicemembers, among other requirements, and for which violations may result in penalties including voiding of the loan agreement;
- the Electronic Fund Transfer Act and Regulation E promulgated thereunder, which provide guidelines and restrictions on the electronic transfer of funds from consumers' bank accounts, including a prohibition on a creditor requiring a consumer to repay a credit agreement in preauthorized (recurring) electronic fund transfers and disclosure and authorization requirements in connection with such transfers;
- the Telephone Consumer Protection Act and the regulations promulgated thereunder, which impose various consumer consent requirements and other restrictions in connection with telemarketing activity and other communication with consumers by phone, fax or text message, and which provide guidelines designed to safeguard consumer privacy in connection with such communications;
- the Federal Controlling the Assault of Non-Solicited Pornography and Marketing Act of 2003 and the Telemarketing Sales Rule and analogous state laws, which impose various restrictions on marketing conducted use of email, telephone, fax or text message;
- the Electronic Signatures in Global and National Commerce Act and similar state laws, particularly the Uniform Electronic Transactions Act, which authorize the creation of legally binding and enforceable agreements utilizing electronic records and signatures and which require creditors and loan servicers to obtain a consumer's consent to electronically receive disclosures required under federal and state laws and regulations;
- the Right to Financial Privacy Act and similar state laws enacted to provide the financial records of financial institution customers a reasonable amount of privacy from government scrutiny;
- the Bank Secrecy Act and the USA PATRIOT Act, which relate to compliance with anti-money laundering, borrower due diligence and record-keeping policies and procedures;
- the regulations promulgated by the Office of Foreign Assets Control under the U.S. Treasury Department related to the administration and enforcement of sanctions against foreign jurisdictions and persons that threaten U.S. foreign policy and national security goals, primarily to prevent targeted jurisdictions and persons from accessing the U.S. financial system;
- federal and state securities laws, including, among others, the Securities Act of 1933, as amended, or the Securities Act, the Exchange Act, the Investment Advisers Act of 1940, as amended, or the IAA, and the Investment Company Act of 1940, as amended, or the Investment Company Act, rules and regulations adopted under those laws, and similar state laws and regulations, which govern how we offer, sell and transact in our loan financing products; and
- other state-specific and local laws and regulations.

We may not always have been, and may not always be, in compliance with these and other applicable laws, regulations and rules. Compliance with these requirements is also costly, time-consuming and limits our operational flexibility. Additionally, Congress, the states and regulatory agencies, as well as local municipalities, could further regulate the consumer financial services industry in ways that make it more difficult or costly for us to offer our AI lending platform and related services or facilitate the origination of loans for our bank partners. These laws also are often subject to changes that could severely limit the operations of our business model. For example, in 2019, a bill was introduced in the U.S. Senate that would create a national cap of the lesser of 15% APR or the maximum rate permitted by the state in which the consumer resides. Although such a bill may never be enacted into law, if such a bill were to be enacted, it would greatly restrict the number of loans that could be funded through our platform. Further, changes in the regulatory application or judicial interpretation of the laws and regulations applicable to financial institutions also could impact the manner in which we conduct our business. The regulatory environment in which financial institutions operate has become increasingly complex, and following the financial crisis that began in 2008, supervisory efforts to apply relevant laws, regulations and policies have become more intense. Additionally, states are increasingly introducing and, in some cases, passing laws that restrict interest rates and APRs on loans similar to the loans made on our platform. For example, California is actively considering legislation to create a "mini-CFPB," which could, if enacted, increase its oversight over bank partnership relationships and strengthen state consumer protection authority of state regulators to police debt collections and unfair, deceptive or abusive acts and practices. Additionally, voter referendums have been introduced and, in some cases, passed, restrictions on interest rates and/or APRs. If such legislation or bills were to be propagated, or state or federal regulators seek to restrict regulated financial institutions such as our bank partners from engaging in business with Upstart in certain ways, our bank partners' ability to originate loans in certain states could be greatly reduced, and as a result, our business, financial condition and results of operations would be adversely affected.

Where applicable, we seek to comply with state broker, credit service organization, small loan, finance lender, servicing, collection, money transmitter and similar statutes. Nevertheless, if we are found to not comply with applicable laws, we could lose one or more of our licenses or authorizations, become subject to greater scrutiny by other state regulatory agencies, face other sanctions or be required to obtain a license in such jurisdiction, which may have an

adverse effect on our ability to continue to facilitate loans, perform our servicing obligations or make our platform available to consumers in particular states, which may harm our business. Further, failure to comply with the laws and regulatory requirements applicable to our business and operations may, among other things, limit our ability to collect all or part of the principal of or interest on Upstart-powered loans. In addition, non-compliance could subject us to damages, revocation of required licenses, class action lawsuits, administrative enforcement actions, rescission rights held by investors in securities offerings and civil and criminal liability, all of which would harm our business.

Internet-based loan origination processes may give rise to greater risks than paper-based processes and may not always be allowed under state law.

We use the internet to obtain application information and distribute certain legally required notices to applicants and borrowers, and to obtain electronically signed loan documents in lieu of paper documents with actual borrower signatures. These processes may entail greater risks than would paper-based loan origination processes, including risks regarding the sufficiency of notice for compliance with consumer protection laws, risks that borrowers may challenge the authenticity of loan documents, and risks that despite internal controls, unauthorized changes are made to the electronic loan documents. In addition, our software could contain "bugs" that result in incorrect calculations or disclosures or other non-compliance with federal or state laws or regulations. If any of those factors were to cause any loans, or any of the terms of the loans, to be unenforceable against the borrowers, or impair our ability to service loans, the performance of the underlying promissory notes could be adversely affected.

For auto loans issued under our new auto lending platform, certain state laws may not allow for electronic lien and title transfer, which would require us to use a paper-based title process to secure title to the underlying collateral. While this process may help mitigate some of the risks associated with online processes, because it is outside of our usual practices and titling rules can vary by state, we may encounter greater difficulty complying with the proper procedures. If we fail to effectively follow such procedures we may, among other things, be limited in our ability to secure the collateral associated with loans issued under our auto lending platform.

If we are found to be operating without having obtained necessary state or local licenses, our business, financial condition and results of operations could be adversely affected.

Certain states have adopted laws regulating and requiring licensing by parties that engage in certain activities regarding consumer finance transactions, including facilitating and assisting such transactions in certain circumstances. Furthermore, certain states and localities have also adopted laws requiring licensing for consumer debt collection or servicing and/or purchasing or selling consumer loans. While we believe we have obtained or are in the process of obtaining all necessary licenses, the application of some consumer finance licensing laws to our AI lending platform and the related activities we perform is unclear. In addition, state licensing requirements may evolve over time, including, in particular, recent trends toward increased licensing requirements and regulation of parties engaged in loan solicitation and student loan servicing activities. If we were found to be in violation of applicable state licensing requirements by a court or a state, federal, or local enforcement agency, we could be subject to fines, damages, injunctive relief (including required modification or discontinuation of our business in certain areas), criminal penalties and other penalties or consequences, and the loans originated by our bank partners on our platform could be rendered void or unenforceable in whole or in part, any of which could have a material adverse effect on our business.

The CFPB is a relatively new agency that has sometimes taken expansive views of its authority to regulate consumer financial services, creating uncertainty as to how the agency's actions or the actions of any other new agency could impact our business.

The CFPB, which commenced operations in July 2011, has broad authority to create and modify regulations under federal consumer financial protection laws and regulations, such as the Truth in Lending Act and Regulation Z, ECOA and Regulation B, the Fair Credit Reporting Act, the Electronic Funds Transfer Act and Regulation E, among other regulations, and to enforce compliance with those laws. The CFPB supervises banks, thrifts and credit unions with assets over $10 billion and examines certain of our bank partners. Further, the CFPB is charged with the examination and supervision of certain participants in the consumer financial services market, including short-term, small dollar lenders, and larger participants in other areas of financial services. The CFPB is also authorized to prevent "unfair, deceptive or abusive acts or practices" through its rulemaking, supervisory and enforcement authority. To assist in its enforcement, the CFPB maintains an online complaint system that allows consumers to log complaints with respect to various consumer finance products, including our loan products. This system could inform future CFPB decisions with respect to its regulatory, enforcement or examination focus. The CFPB may also request reports concerning our organization, business conduct, markets and activities and conduct on-site examinations of our business on a periodic basis if the CFPB were to determine, through its complaint system, that we were engaging in activities that pose risks to consumers.

Although we are the only online lending platform to have ever received a no-action letter from the CFPB with respect to our ECOA compliance as it pertains to underwriting applicants for unsecured non-revolving credit, there continues to be uncertainty about the future of the CFPB and as to how its strategies and priorities, including in both its examination and enforcement processes, will impact our business and our results of operations going forward. That no-action letter expires on December 1, 2020 and there is no assurance that the CFPB will permit us to continue to operate under its current no-action letter policies or that it will not change its position regarding supervisory or enforcement action against us in the future. In addition, evolving views regarding the use of alternative variables and machine learning in assessing credit risk could result in the CFPB taking actions that result in requirements to alter or cease offering affected financial products and services, making them less attractive and restricting our ability to offer them. For example, in response to a February 2020 inquiry, three members of the U.S. Senate recommended as part of their findings, that the CFPB further review Upstart's use of educational variables in its model. The CFPB could also implement rules that restrict our effectiveness in servicing our financial products and services.

Although we have committed resources to enhancing our compliance programs, future actions by the CFPB (or other regulators) against us, our bank partners or our competitors could discourage the use of our services or those of our bank partners, which could result in reputational harm, a loss of bank partners, borrowers or investors in our loan funding programs, or discourage the use of our or their services and adversely affect our business. If the CFPB changes regulations that were adopted in the past by other regulators and transferred to the CFPB by the Dodd-Frank Act, or modifies through supervision or enforcement past regulatory guidance or interprets existing regulations in a different or stricter manner than they have been interpreted in the past by us,

the industry or other regulators, our compliance costs and litigation exposure could increase materially. This is particularly true with respect to the application of ECOA and Regulation B to credit risk models that rely upon alternative variables and machine learning, an area of law where regulatory guidance is currently uncertain and still evolving, and for which there are not well-established regulatory norms for establishing compliance. If future regulatory or legislative restrictions or prohibitions are imposed that affect our ability to offer certain of our products or that require us to make significant changes to our business practices, and if we are unable to develop compliant alternatives with acceptable returns, these restrictions or prohibitions could have a material adverse effect on our business. If the CFPB were to issue a consent decree or other similar order against us, this could also directly or indirectly affect our results of operations.

Our compliance and operational costs and litigation exposure could increase if and when the CFPB amends or finalizes any proposed regulations, including the regulations discussed above or if the CFPB or other regulators enact new regulations, change regulations that were previously adopted, modify, through supervision or enforcement, past regulatory guidance, or interpret existing regulations in a manner different or stricter than have been previously interpreted.

We have been in the past and may in the future be subject to federal and state regulatory inquiries regarding our business.

We have, from time to time in the normal course of our business, received, and may in the future receive or be subject to, inquiries or investigations by state and federal regulatory agencies and bodies such as the CFPB, state Attorneys General, the SEC, state financial regulatory agencies and other state or federal agencies or bodies regarding the Upstart platform, including the marketing of loans for lenders, underwriting and pricing of consumer loans for our bank partners, our fair lending compliance program and licensing and registration requirements. We have addressed these inquiries directly and engaged in open dialogue with regulators. For example, following constructive and transparent discussions with the CFPB regarding the manner in which our platform operates in compliance with federal fair lending laws, we applied for and received a no-action letter from the CFPB that stated the CFPB had no present intent to recommend initiation of supervisory or enforcement action against us with respect to ECOA as it pertains to underwriting applicants for unsecured non-revolving credit. Under the terms of the no-action letter, we are required to continue to share certain information with the CFPB regarding the loan applications we receive, updates to our model and the variables it considers, how we decide which loans should be recommended to bank partners for approval and how we will mitigate risk to consumers, as well as information on how our AI models expand access to credit for traditionally underserved populations. Such no action letter expires on December 1, 2020. We are currently discussing with the CFPB whether we can continue to operate under its no-action letter policies, which were revised in 2018 and replaced the prior policy under which our no-action letter was issued. We can provide no assurance that the CFPB will continue to provide such relief, and it is possible the CFPB will change its position regarding supervisory or enforcement action against us in the future. Moreover, were we determined to be conducting business contrary to the facts presented to, and relied on, by the CFPB in issuing the no-action letter, we would be subject to heightened enforcement risk by the CFPB. We have also received an inquiry from the North Carolina Department of Justice regarding our role in facilitating the origination of loans for educational purposes. We are providing information in response to that inquiry, and cannot provide any assurances regarding the outcome of that inquiry.

We have also received inquiries from state regulatory agencies regarding requirements to obtain licenses from or register with those states, including in states where we have determined that we are not required to obtain such a license or be registered with the state, and we expect to continue to receive such inquiries. Any such inquiries or investigations could involve substantial time and expense to analyze and respond to, could divert management's attention and other resources from running our business, and could lead to public enforcement actions or lawsuits and fines, penalties, injunctive relief, and the need to obtain additional licenses that we do not currently possess. Our involvement in any such matters, whether tangential or otherwise and even if the matters are ultimately determined in our favor, could also cause significant harm to our reputation, lead to additional investigations and enforcement actions from other agencies or litigants, and further divert management attention and resources from the operation of our business. As a result, the outcome of legal and regulatory actions arising out of any state or federal inquiries we receive could be material to our business, results of operations, financial condition and cash flows and could have a material adverse effect on our business, financial condition or results of operations.

The collection, processing, storage, use and disclosure of personal data could give rise to liabilities as a result of existing or new governmental regulation, conflicting legal requirements or differing views of personal privacy rights.

We receive, transmit and store a large volume of personally identifiable information and other sensitive data from applicants and borrowers. Each bank partner can access information about their respective borrowers and declined applicants via daily loan reports and other reporting tools that are provided via the platform. For loan investors, while we generally limit access to personally identifiable information, we do share some personally identifiable information about borrowers with certain investors in our loan funding programs. There are federal, state and foreign laws regarding privacy and the storing, sharing, use, disclosure and protection of personally identifiable information and sensitive data. Specifically, cybersecurity and data privacy issues, particularly with respect to personally identifiable information are increasingly subject to legislation and regulations to protect the privacy and security of personal information that is collected, processed and transmitted. For example, the Gramm-Leach-Bliley Act includes limitations on financial institutions' disclosure of nonpublic personal information about a consumer to nonaffiliated third parties, in certain circumstances requires financial institutions to limit the use and further disclosure of nonpublic personal information by nonaffiliated third parties to whom they disclose such information and requires financial institutions to disclose certain privacy notices and practices with respect to information sharing with affiliated and unaffiliated entities as well as to safeguard personal borrower information. In addition, the California Consumer Privacy Act, or the CCPA, which went into effect on January 1, 2020, requires, among other things, that covered companies provide disclosures to California consumers and afford such consumers new abilities to opt-out of certain sales or retention of their personal information by us. The CCPA has been amended on multiple occasions and the California Attorney General approved final regulations on August 14, 2020. Although the regulations will bring some clarity regarding compliance with the CCPA, aspects of the CCPA and its interpretation remain unclear. We cannot fully predict the impact of the CCPA on our business or operations, but it may require us to further modify our data infrastructure and data processing practices and policies and to incur additional costs and expenses in an effort to continue to comply. Additionally, other U.S. states are proposing and enacting laws and regulations that impose obligations similar to the CCPA or that otherwise involve significant obligations and restrictions. Compliance with current and future borrower privacy data protection and information security laws and regulations could result in higher compliance, technical or operating costs. Further, any actual or perceived violations of these laws and regulations may require us to

change our business practices, data infrastructure or operational structure, address legal claims and regulatory investigations and proceedings and sustain monetary penalties and/or other harms to our business. We could also be adversely affected if new legislation or regulations are adopted or if existing legislation or regulations are modified such that we are required to alter our systems or change our business practices or privacy policies.

As the regulatory framework for artificial intelligence and machine learning technology evolves, our business, financial condition and results of operations may be adversely affected.

The regulatory framework for artificial intelligence and machine learning technology is evolving and remains uncertain. It is possible that new laws and regulations will be adopted in the United States, or existing laws and regulations may be interpreted in new ways, that would affect the operation of our platform and the way in which we use artificial intelligence and machine learning technology, including with respect to fair lending laws. Further, the cost to comply with such laws or regulations could be significant and would increase our operating expenses, which could adversely affect our business, financial condition and results of operations.

If we are required to register under the Investment Company Act, our ability to conduct business could be materially adversely affected.

The Investment Company Act contains substantive legal requirements that regulate the manner in which "investment companies" are permitted to conduct their business activities. In general, an "investment company" is a company that holds itself out as an investment company or holds more than 40% of the total value of its assets (minus cash and government securities) in "investment securities." We believe we are not an investment company. We do not hold ourselves out as an investment company. We understand, however, that the loans held on our balance sheet could be viewed by the SEC or its staff as "securities," which could in turn cause the SEC or its staff to view Upstart Holdings, Inc., Upstart Network, Inc., or an affiliate as an "investment company" subject to regulation under the Investment Company Act. To provide clarity on this issue, we have applied for an exemptive order from the SEC exempting us from regulation under the Investment Company Act, subject to certain conditions. We anticipate, but cannot guarantee, that an exemptive order under the Investment Company Act will be approved. While we applied for, and expect to receive, the anticipated order to provide clarity, we believe that we have never been an investment company because, among other reasons, we are primarily engaged in the business of providing an AI-based lending platform to banks.

Exemptive orders provided by the SEC under the Investment Company Act may cease to be effective if the facts and analysis upon which they are based materially change or the recipient of the order fails to comply with conditions outlined in the order. Although not currently anticipated, it is possible that our business will change in the future in a way that causes the exemptive order to no longer apply to our business, either because the facts of how we conduct our business change or because we no longer meet the conditions outlined in the order. If the exemptive order ceases to apply to our business, we could be deemed an investment company and may be required to institute burdensome compliance requirements, restricting our activities in a way that could adversely affect our business, financial condition and results of operations. If we were ever deemed to be in non-compliance with the Investment Company Act, we could also be subject to various penalties, including administrative or judicial proceedings that might result in censure, fine, civil penalties, cease-and-desist orders or other adverse consequences, as well as private rights of action, any of which could materially adversely affect our business.

If we are required to register under the Investment Advisers Act, our ability to conduct business could be materially adversely affected.

The IAA contains substantive legal requirements that regulate the manner in which "investment advisers" are permitted to conduct their business activities. We do not believe that we or our affiliates are required to register as an investment adviser with either the SEC or any of the various states, because our business consists of providing a platform for consumer lending and loan financing for which investment adviser registration and regulation does not apply under applicable federal or state law. However, one of our affiliates, Upstart Network, Inc., has notice filed as an exempt reporting adviser with the state of California based on its limited activities advising two funds.

While we believe our current practices do not require us or any of our other affiliates subsidiaries to register or notice file as an investment adviser, or require us to extend regulations related to Upstart Network, Inc.'s status as an exempt reporting adviser to our other operations, if a regulator were to disagree with our analysis with respect to any portion of our business, we or a subsidiary may be required to register or notice file as an investment adviser and to comply with applicable law. Registering as an investment adviser could adversely affect our method of operation and revenues. For example, the IAA requires that an investment adviser act in a fiduciary capacity for its clients. Among other things, this fiduciary obligation requires that an investment adviser manage a client's portfolio in the best interests of the client, have a reasonable basis for its recommendations, fully disclose to its client any material conflicts of interest that may affect its conduct and seek best execution for transactions undertaken on behalf of its client. The IAA also limits the ways in which a company can market its services and offerings. It could be difficult for us to comply with these obligations without meaningful changes to our business operations, and there is no guarantee that we could do so successfully. If we were ever deemed to be in non-compliance with applicable investment adviser regulations, we could also be subject to various penalties, including administrative or judicial proceedings that might result in censure, fine, civil penalties, cease-and-desist orders or other adverse consequences, as well as private rights of action, any of which could materially adversely affect our business.

If our transactions with investors in our loan funding programs are found to have been conducted in violation of the Securities Act or similar state law, or we have generally violated any applicable law, our ability to obtain financing for loans facilitated through our platform could be materially adversely affected, and we could be subject to private or regulatory actions.

Certain transactions in our loan funding programs have relied on exemptions from the registration requirements of the Securities Act provided for in Regulation D or Section 4(a)(2) of the Securities Act. If any of these transactions were found to not be in compliance with the requirements necessary to qualify for these exemptions from Securities Act registration, or otherwise found to be in violation of the federal or state securities laws, our business could be materially adversely affected. The SEC or state securities regulators could bring enforcement actions against us, or we could be subject to private

litigation risks as a result of any violation of the federal or state securities laws, which could result in civil penalties, injunctions and cease and desist orders from further violations, as well as monetary penalties of disgorgement, pre-judgment interest, rescission of securities sales, or civil penalties, any of which could materially adversely affect our business.

If we are found to be in violation of state or federal law generally, we also may be limited in our ability to conduct future transactions. For example, we could in the future become ineligible to sell securities under Regulation D if we become subject to "bad actor" disqualification pursuant to Rule 506(d) of Regulation D. Under Rule 506(d), issuers are ineligible "bad actors" if they or certain related persons, including directors and certain affiliates, are subject to disqualifying events, including certain cease-and-desist orders obtained by the SEC. If we were subject to this or other "bad actor" provisions of the securities laws, we may not be able to continue sales of whole loans, fractional interests in loans, or asset-backed securities, or we could be subject to significant additional expense associated with making our offerings, which would adversely affect our business, financial condition and results of operations.

If we are required to register with the SEC or under state securities laws as a broker-dealer, our ability to conduct business could be materially adversely affected.

We are not currently registered with the SEC as a broker-dealer under the Exchange Act or any comparable state law. The SEC heavily regulates the manner in which broker-dealers are permitted to conduct their business activities. We believe we have conducted, and we intend to continue to conduct, our business in a manner that does not result in our being characterized as a broker-dealer, based on guidance published by the SEC and its staff. Among other reasons, this is because we do not believe we take any compensation that would be viewed as being based on any transactions in securities in any of our business lines. To the extent that the SEC or its staff publishes new or different guidance with respect to these matters, we may be required to adjust our business operations accordingly. Any additional guidance from the SEC staff could provide additional flexibility to us, or it could inhibit our ability to conduct our business operations. There can be no assurance that the laws and regulations governing our broker-dealer status or that SEC guidance will not change in a manner that adversely affects our operations. If we are deemed to be a broker-dealer, we may be required to institute burdensome compliance requirements and our activities may be restricted, which would adversely affect our business, financial condition and results of operations. We may also be subject to private litigation and potential rescission of certain investments investors in our loan financing products have made, which would harm our operations as well.

Similarly, we do not believe that our sales of whole loans and asset-backed securities will subject us to broker-dealer registration in any state in which we operate, primarily because we do not accept compensation that we believe could be viewed as transaction-based. However, if we were deemed to be a broker-dealer under a state's securities laws, we could face civil penalties, or costly registration requirements, that could adversely affect our business.

Anti-money laundering, anti-terrorism financing, anti-corruption and economic sanctions laws could have adverse consequences for us.

We maintain a compliance program designed to enable us to comply with all applicable anti-money laundering and anti-terrorism financing laws and regulations, including the Bank Secrecy Act and the USA PATRIOT Act and U.S. economic sanctions laws administered by the Office of Foreign Assets Control. This program includes policies, procedures, processes and other internal controls designed to identify, monitor, manage and mitigate the risk of money laundering and terrorist financing and engaging in transactions involving sanctioned countries persons and entities. These controls include procedures and processes to detect and report suspicious transactions, perform borrower due diligence, respond to requests from law enforcement, and meet all recordkeeping and reporting requirements related to particular transactions involving currency or monetary instruments. We are also subject to anti-corruption and anti-bribery and similar laws, such as the U.S. Foreign Corrupt Practices Act of 1977, as amended, or the FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, and the U.S. Travel Act, which prohibit companies and their employees and agents from promising, authorizing, making, or offering improper payments or other benefits to government officials and others in the private sector in order to influence official action, direct business to any person, gain any improper advantage, or obtain or retain business. We have implemented an anti-corruption policy to ensure compliance with these anti-corruption and anti-bribery laws. No assurance is given that our programs and controls will be effective to ensure compliance with all applicable anti-money laundering and anti-terrorism financing and anti-corruption laws and regulations, and our failure to comply with these laws and regulations could subject us to significant sanctions, fines, penalties, contractual liability to our bank partners or institutional investors, and reputational harm, all of which could harm our business.

Our securitizations, whole loan sales and warehouse facilities expose us to certain risks, and we can provide no assurance that we will be able to access the securitization or whole loan sales markets, or secured warehouse credit facilities, in the future, which may require us to seek more costly financing.

We have facilitated the securitizations, and may in the future facilitate securitizations, of certain loans acquired from our bank partners in order to allow certain of our originating bank partners, our whole loan purchasers and ourselves to liquidate their loans through the asset-backed securities markets or through other capital markets products. In term asset-backed securities transactions, we sell and convey pools of loans to a special purpose entity, or SPE. We likewise fund certain loans on our balance sheet by selling loans to warehouse trust SPEs, which loan sales are partially financed with associated warehouse credit facilities from banks. Concurrently, each securitization SPE issues notes or certificates pursuant to the terms of indentures and trust agreements, or in the case of the warehouse facilities, the warehouse trust SPE borrows money from banks pursuant to credit and security agreements. The securities issued by the SPEs in asset-backed securitization transactions and the lines of credit borrowed by the warehouse SPEs are each secured by the pool of loans owned by the applicable SPE. In exchange for the sale of a portion of a given pool of loans to the SPE, we and/or our whole loan purchasers who contribute loans to the transactions receive cash and/or securities representing equity interests in such SPE, which are the proceeds from the sale of the securities. The equity interests the SPEs are residual interests in that they entitle the equity owners of such SPEs, including us, to a certain proportion of the residual cash flows, if any, from the loans and to any assets remaining in such SPEs once the notes are satisfied and paid in full (or in the case of a revolving loan, paid in full and all commitments terminated). As a result of challenging credit and liquidity conditions, the value of the subordinated securities we or other transaction participants retain in such SPEs might be reduced or, in some cases, eliminated.

During periods of financial disruption, such as the financial crisis that began in 2008 and the COVID-19 pandemic that began in early 2020, the securitization market has constrained, and this could continue or occur again in the future. In addition, other matters, such as (i) accounting standards applicable to securitization transactions and (ii) capital and leverage requirements applicable to banks and other regulated financial institutions holding asset-backed securities, could result in decreased investor demand for securities issued through our securitization transactions, or increased competition from other institutions that undertake securitization transactions. In addition, compliance with certain regulatory requirements, including the Dodd-Frank Act, the Investment Company Act and the so-called "Volcker Rule," may affect the type of securitizations that we are able to complete.

If it is not possible or economical for us to securitize loans in the future, we would need to seek alternative financing to support our loan funding programs and to meet our existing debt obligations. Such funding may not be available on commercially reasonable terms, or at all. If the cost of such loan funding mechanisms were to be higher than that of our securitizations, the fair value of the loans would likely be reduced, which would negatively impact our results of operations. If we are unable to access such financing, our ability to originate loans and our results of operations, financial condition and liquidity would be materially adversely affected.

The gain on sale and related servicing fees generated by our whole loan sales, and the servicing fees based on sales of asset-backed securities and interests in our legacy fractional loan program, also represent a significant source of our earnings. We cannot assure you that our loan purchasers will continue to purchase loans or interests in loans on our platform (either through whole loan sales or asset-backed securities) or that they will continue to purchase loans in transactions that generate the same spreads and/or fees that we have historically obtained. Factors that may affect loan purchaser demand for loans include:

- competition among loan originators that can sell either larger pools of loans than we are able to sell or pools of loans that have characteristics that are more desirable to certain loan purchasers than the characteristics that our loan pools have;
- the extent to which servicing fees and other expenses may reduce overall net return on purchased pools of loans;
- the actual or perceived credit performance and loan grade and term mix of the portfolios of loans offered for sale;
- loan purchasers' sector and company investment diversification requirements and strategies;
- higher yielding investment opportunities at a risk profile deemed similar to our sold loan portfolios;
- borrower prepayment behavior within the underlying pools;
- regulatory or investment practices related to maintaining net asset value, mark-to-market and similar metrics surrounding pools of purchased loans; and
- the ability of our loan purchasers to access funding and liquidity channels, including securitization markets, on terms they find acceptable to deliver an appropriate return net of funding costs, as well as general market trends that affect the appetite for loan financing investments.

Potential investors in our loan funding programs may also reduce the prices investors in those products are willing to pay for the loans or interests in loans they purchase during periods of economic slowdown or recession to compensate for any increased risks. A reduction in the sale price of the loans and loan financing products we sell would negatively impact our operations and returns. Any sustained decline in demand for loans or loan financing products, or any increase in delinquencies, defaults or losses that result from economic downturns, may also reduce the price we receive on future loan sales.

Our securitizations are subject to regulation under federal law, and failure to comply with those laws could adversely affect our business.

Our loan securitizations and sales of asset-backed securities are subject to regulation under federal law, and banks and other regulated financial institutions acquiring and holding asset-based securities, including asset-backed securities sponsored by us, are subject to capital and leverage requirements. These requirements, which are costly to comply with, could decrease investor demand for securities issued through our securitization transactions. For example, the Credit Risk Retention rule, codified as Regulation RR under the Exchange Act, was jointly adopted by the SEC, the Department of the Treasury, the Federal Reserve System, the Federal Deposit Insurance Corporation, the Federal Housing Finance Agency, and the Department of Housing and Urban Development in 2014. Regulation RR generally requires the sponsor of asset-backed securities to retain not less than five percent of the credit risk of the assets collateralizing the securities, and generally prohibits the sponsor or its affiliate from directly or indirectly hedging or otherwise selling or transferring the retained credit risk for a specified period of time, depending on the type of asset that is securitized. Some aspects of these risk retention rules have not been the subject of significant separate guidance. We believe, but cannot be certain, that we have conducted our business, and will continue to conduct our business, in such a way that we are compliant with these risk retention rules. However, if we have failed to comply, or should fall out of compliance with these rules, it could adversely affect our source of funding and our business.

We may also face regulatory risks related to compliance with Section 13 of the Bank Holding Company Act, commonly known as the "Volcker Rule," which prohibits banking entities from acquiring an ownership interest in entities that are investment companies for purposes of the Investment Company Act, or would be investment companies but for Sections 3(c)(1) or 3(c)(7) of the Investment Company Act, which are generally known as "private funds." This means that in order for a banking entity regulated under the Volcker Rule to purchase certain asset-backed securities issued by our affiliates, such affiliates may need to rely on another exemption or exception from being deemed "investment companies" if they wish to continue selling to banking entities. Currently, those affiliates generally rely on Rule 3a-7 under the Investment Company Act, which provides an exclusion to the definition of an investment company for issuers that pool income-producing assets and issue securities backed by those assets. However, if a regulator or other third party were to find or assert that our analysis under Rule 3a-7 (or, where applicable, some other exemption or exemption) is incorrect, banks that have purchased asset-backed

securities may be able to rescind those sales, which would adversely affect our business. We believe, but cannot guarantee, that we have conducted our business, and will continue to conduct our business, in such a way that enables our applicable banking entity investors to be compliant with the Volcker Rule.

Risks Related to This Offering and Ownership of Our Common Stock

An active trading market for our common stock may never develop or be sustained.

We have applied to list our common stock on the Nasdaq Global Select Market under the symbol "UPST". However, we cannot assure you that an active trading market for our common stock will develop on that exchange or elsewhere or, if developed, that any market will be sustained. Accordingly, we cannot assure you of the liquidity of any trading market, your ability to sell your shares of our common stock when desired, or the prices that you may obtain for your shares.

The trading price of our common stock may be volatile, and you could lose all or part of your investment.

Prior to this offering, there has been no public market for shares of our common stock. The initial public offering price of our common stock was determined through negotiation among us, the selling stockholders and the underwriters. This price does not necessarily reflect the price at which investors in the market will be willing to buy and sell shares of our common stock following this offering. In addition, the trading price of our common stock following this offering is likely to be volatile and could be subject to fluctuations in response to various factors, some of which are beyond our control. These fluctuations could cause you to lose all or part of your investment in our common stock since you might be unable to sell your shares at or above the price you paid in this offering. Factors that could cause fluctuations in the trading price of our common stock include:

- price and volume fluctuations in the overall stock market from time to time;
- volatility in the trading prices and trading volumes of financial technology stocks;
- changes in operating performance and stock market valuations of other financial technology companies and technology companies that offer services to financial institutions;
- sales of shares of our common stock by us or our stockholders;
- failure of securities analysts to maintain coverage of us, changes in financial estimates by securities analysts who follow our company, or our failure to meet these estimates or the expectations of investors;
- the financial projections we may provide to the public, any changes in those projections, or our failure to meet those projections;
- announcements by us or our competitors of new products, features, or services;
- the public's reaction to our press releases, other public announcements, and filings with the SEC;
- rumors and market speculation involving us or other companies in our industry;
- actual or anticipated changes in our results of operations or fluctuations in our results of operations;
- changes in prevailing interest rates;
- quarterly fluctuations in demand for the loans we facilitate through our platform;
- fluctuations in the trading volume of our shares or the size of our public float;
- actual or anticipated developments in our business, our competitors' businesses or the competitive landscape generally;
- litigation involving us, our industry, or both, or investigations by regulators into our operations or those of our competitors;
- compliance with government policies or regulations;
- the issuance of any cease-and-desist orders from regulatory agencies that we are subject to;
- developments or disputes concerning our intellectual property or other proprietary rights;
- actual or perceived data security breaches or other data security incidents;
- announced or completed acquisitions of businesses, products, services, or technologies by us or our competitors;

- new laws or regulations or new interpretations of existing laws or regulations applicable to our business;
- changes in accounting standards, policies, guidelines, interpretations, or principles;
- recruitment or departure of key personnel;
- other events or factors, including those resulting from war, incidents of terrorism, political unrest, natural disasters, pandemics or responses to these events; and
- general economic conditions and slow or negative growth of our markets.

The stock market in general has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of listed companies. Broad market and industry factors may seriously affect the market price of our common stock, regardless of our actual operating performance. In the past, following periods of volatility in the overall market and the market prices of particular companies' securities, securities class action litigation has often been instituted against these companies. Litigation of this type, if instituted against us, could result in substantial costs and a diversion of our management's attention and resources.

Certain insiders have significant voting power, which could limit your ability to influence the outcome of key transactions, including a change of control.

Our directors, officers, and each of our stockholders who own greater than 5% of our outstanding capital stock and their affiliates, in the aggregate, beneficially own a majority of the outstanding shares of our capital stock. As a result, these stockholders, if acting together, will be able to influence matters requiring approval by our stockholders, including the election of directors and the approval of mergers, acquisitions, or other extraordinary transactions. They may also have interests that differ from yours and may vote in a way with which you disagree and which may be adverse to your interests. This concentration of ownership may have the effect of delaying, preventing or deterring a change of control, could deprive our stockholders of an opportunity to receive a premium for their common stock as part of a sale, and might ultimately affect the trading price of our common stock.

A substantial portion of the outstanding shares of our common stock after this offering will be restricted from immediate resale but may be sold on a stock exchange in the near future. The large number of shares of our capital stock eligible for public sale or subject to rights requiring us to register them for public sale could depress the market price of our common stock.

The market price of our common stock could decline as a result of sales of a large number of shares of our common stock in the market after this offering, and the perception that these sales could occur may also depress the market price of our common stock. Based on shares of our common stock (after giving effect to the Capital Stock Conversion and the automatic net exercise of a preferred stock warrant) outstanding as of September 30, 2020, we will have shares of our common stock outstanding immediately after this offering. Our executive officers, directors, and the holders of substantially all of our capital stock and securities convertible into or exchangeable for our capital stock have entered into market standoff agreements with us or have entered into lock-up agreements with the underwriters under which they have agreed, subject to specific exceptions, not to sell any of our stock for 180 days following the date of this prospectus. We refer to such period as the lock-up period. In addition, the underwriter representatives may, in their discretion, release all or some portion of the shares subject to lock-up agreements prior to the expiration of the lock-up period. See "Shares Eligible for Future Sale" for more information. Sales of a substantial number of such shares upon expiration, or the perception that such sales may occur, or early release of the lock-up, could cause our share price to fall or make it more difficult for you to sell your common stock at a time and price that you deem appropriate.

As a result of these agreements and the provisions of our investors' rights agreement described further in the section titled "Description of Capital Stock—Registration Rights," and subject to the provisions of Rule 144 or Rule 701 under the Securities Act, shares of our common stock will be available for sale in the public market as follows based on the shares of our capital stock outstanding as of September 30, 2020 (after giving effect to the Capital Stock Conversion):

- beginning on the date of this prospectus, all shares of our common stock sold in this offering will be immediately available for sale in the public market; and
- beginning 181 days after the date of this prospectus (subject to the terms of the lock-up agreements and market standoff agreements described above), an additional shares of our common stock will be eligible for sale in the public market from time to time thereafter, of which shares of our common stock will be subject to the volume and other restrictions of Rule 144, as described below.

Upon completion of this offering, stockholders owning an aggregate of up to shares of our common stock will be entitled, under our investors' rights agreement, to require us to register shares owned by them for public sale in the United States. In addition, we intend to file a registration statement to register shares reserved for future issuance under our equity compensation plans. Upon effectiveness of the registration statement of which this prospectus forms a part, subject to the satisfaction of applicable exercise periods and the expiration or waiver of the market standoff agreements and lock-up agreements referred to above, the shares issued upon exercise of outstanding stock options will be available for immediate resale in the United States in the open market.

Sales of our shares as restrictions end or pursuant to registration rights may make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate. These sales also could cause the trading price of our common stock to fall and make it more difficult for you to sell shares of our common stock.

Our common stock does not provide any rights directly related to the loans we hold.

Investors in our common stock own a form of equity that may provide returns based on either an increase in the value of the stock or any distributions made to common stockholders. Investors will not, however, receive any interest in or fees based on the loans or other assets we hold on our balance sheet. In particular, investors in our common stock will not receive any distributions directly based on principal or interest payments made by borrowers on the loans we hold. Those loans are not directly related in any way to the common stock investors' purchase.

You may be diluted by the future issuance of additional common stock in connection with our equity incentive plans, acquisitions or otherwise.

After this offering and the use of proceeds to us therefrom, we will have an aggregate of shares of common stock authorized but unissued, and our amended and restated certificate of incorporation will authorize us to issue these shares of common stock and rights relating to common stock for the consideration and on the terms and conditions established by our board of directors in its sole discretion, whether in connection with acquisitions or otherwise. We have reserved shares for issuance under our 2020 Equity Incentive Plan subject to adjustment in certain events. See "Executive Compensation—2020 Equity Incentive Plan." Any common stock that we issue, including under our 2020 Equity Incentive Plan or other equity incentive plans that we may adopt in the future, could dilute the percentage ownership held by the investors who purchase common stock in this offering.

If you purchase our common stock in this offering, you will incur immediate and substantial dilution in the book value of your investment.

The initial public offering price of our common stock is substantially higher than the pro forma as adjusted net tangible book value per share of our outstanding common stock of $ per share as of September 30, 2020. Investors purchasing shares of our common stock in this offering will pay a price per share that substantially exceeds the book value of our tangible assets after subtracting our liabilities. As a result, investors purchasing common stock in this offering will incur immediate dilution of $ per share, based on an assumed initial public offering price of $ per share.

This dilution is due in large part to the substantially lower price paid by our investors who purchased shares prior to this offering as compared to the price offered to the public in this offering, and any previous exercise of stock options granted to our service providers. In addition, as of September 30, 2020, options to purchase shares of our common stock were outstanding with a weighted-average exercise price of $ per share. The exercise of any of these options would result in additional dilution. As a result of the dilution to investors purchasing shares in this offering, investors may receive less than the purchase price paid in this offering, if anything, in the event of our liquidation. See the section titled "Dilution" for more information.

We have broad discretion over the use of the net proceeds from this offering and we may not use them effectively.

We cannot specify with any certainty the particular uses of the net proceeds that we will receive from this offering. Our management will have broad discretion in the application of the net proceeds from this offering, including for any of the purposes described in "Use of Proceeds," and you will not have the opportunity as part of your investment decision to assess whether the net proceeds are being used appropriately. Because of the number and variability of factors that will determine our use of the net proceeds from this offering, their ultimate use may vary substantially from their currently intended use. If our management fails to apply these proceeds effectively, such failure could adversely affect our business, results of operations, financial condition, and the price of our common stock. Pending their use, we may invest our proceeds in a manner that does not produce income or that loses value. Our investments may not yield a favorable return to our investors and may negatively impact the price of our common stock.

Delaware law and provisions in our amended and restated certificate of incorporation and amended and restated bylaws could make a merger, tender offer, or proxy contest difficult, thereby depressing the market price of our common stock.

Our status as a Delaware corporation and the anti-takeover provisions of the Delaware General Corporation Law may discourage, delay, or prevent a change in control by prohibiting us from engaging in a business combination with an interested stockholder for a period of three years after the person becomes an interested stockholder, even if a change of control would be beneficial to our existing stockholders. In addition, our amended and restated certificate of incorporation and amended and restated bylaws, as they will be in effect following this offering, contain provisions that may make the acquisition of our company more difficult, including the following:

- our Board of Directors is classified into three classes of directors with staggered three-year terms and directors are only able to be removed from office for cause;
- vacancies on our Board of Directors will be able to be filled only by our Board of Directors and not by stockholders;
- only the Chair of our Board of Directors, our Chief Executive Officer, or a majority of our entire Board of Directors are authorized to call a special meeting of stockholders;
- certain litigation against us can only be brought in Delaware;
- advance notice procedures apply for stockholders to nominate candidates for election as directors or to bring matters before an annual meeting of stockholders; and
- any amendment of the above anti-takeover provisions in our amended and restated certificate of incorporation or amended and restated bylaws will require the approval of two-thirds of the combined vote of our then-outstanding shares of our common stock.

These anti-takeover defenses could discourage, delay, or prevent a transaction involving a change in control of our company. These provisions could also discourage proxy contests and make it more difficult for stockholders to elect directors of their choosing and to cause us to take other corporate actions they desire, any of which, under certain circumstances, could limit the opportunity for our stockholders to receive a premium for their shares of our capital stock, and could also affect the price that some investors are willing to pay for our common stock.

Our amended and restated bylaws will designate a state or federal court located within the State of Delaware as the exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to choose the judicial forum for disputes with us or our directors, officers or employees.

Our amended and restated bylaws, which will become effective immediately prior to the completion of this offering, will provide that, unless we consent in writing to the selection of an alternative forum, to the fullest extent permitted by law, the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, or other employees to us or our stockholders, (iii) any action arising pursuant to any provision of the Delaware General Corporation Law, our amended and restated certificate of incorporation, or our amended and restated bylaws, or (iv) any other action asserting a claim that is governed by the internal affairs doctrine shall be the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, the federal district court for the District of Delaware), in all cases subject to the court having jurisdiction over indispensable parties named as defendants. Our amended and restated bylaws further provide that the federal district courts of the United States will be the exclusive forum for resolving any complaints asserting a cause of action arising under the Securities Act of 1933, as amended, or the Securities Act.

Any person or entity purchasing or otherwise acquiring any interest in any of our securities shall be deemed to have notice of and consented to this provision. This exclusive-forum provision may limit a stockholder's ability to bring a claim in a judicial forum of its choosing for disputes with us or our directors, officers, or other employees, which may discourage lawsuits against us and our directors, officers, and other employees. This exclusive forum provision will not apply to any causes of action arising under the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. Further, the enforceability of similar choice of forum provisions in other companies' charter documents has been challenged in legal proceedings, and it is possible that a court could find these types of provisions to be inapplicable or unenforceable. For example, the Court of Chancery of the State of Delaware recently determined that a provision stating that U.S. federal district courts are the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act is not enforceable. However, this decision may be reviewed and ultimately overturned by the Delaware Supreme Court. If a court were to find either exclusive-forum provision in our amended and restated bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving the dispute in other jurisdictions, which could harm our results of operations.

Our common stock market price and trading volume could decline if equity or industry analysts do not publish research or publish inaccurate or unfavorable research about our business.

The trading market for our common stock will depend in part on the research and reports that equity or industry analysts publish about us or our business. The analysts' estimates are based upon their own opinions and are often different from our estimates or expectations. If one or more of the analysts who cover us downgrade our common stock or publish inaccurate or unfavorable research about our business, the price of our securities would likely decline. If few securities analysts commence coverage of us, or if one or more of these analysts cease coverage of us or fail to publish reports on us regularly, demand for our securities could decrease, which might cause the price and trading volume of our common stock to decline.

We are an "emerging growth company" and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an "emerging growth company," as defined in the JOBS Act, and we intend to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies," including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, exemptions from the requirements of holding a non-binding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. In addition, under the JOBS Act, emerging growth companies can delay the adoption of certain new or revised accounting standards until those standards would otherwise apply to private companies. We have elected to avail ourselves of this exemption from new or revised accounting standards and, therefore, we will not be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies or that have opted out of using such extended transition period, which may make comparison of our financial statements with those of other public companies more difficult. We may take advantage of these exemptions for so long as we are an "emerging growth company," which could be as long as five years following the effectiveness of this offering. We expect, however, that we will cease being an "emerging growth company" prior to such time. We cannot predict if investors will find our common stock less attractive to the extent that we rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and the price of our common stock may be more volatile.

The requirements of being a public company may strain our resources, divert management's attention and affect our ability to attract and retain qualified board members.

As a public company, we will be subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act, the Dodd-Frank Act, the listing requirements of the Nasdaq Global Select Market and other applicable securities rules and regulations. Compliance with these rules and regulations will increase our legal and financial compliance costs, make some activities more difficult, time-consuming or costly and increase demand on our systems and resources. The Exchange Act requires, among other things, that we file annual, quarterly and current reports with respect to our business and results of operations. In addition, we expect that our management and other personnel will need to divert attention from operational and other business matters to devote substantial time to these public company requirements. We cannot predict or estimate the amount of additional costs we may incur as a result of becoming a public company or the timing of such costs.

We also expect that being a public company will make it more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced coverage, incur substantially higher costs to obtain coverage or only obtain coverage with a significant deductible. These factors could also make it more difficult for us to attract and retain qualified executive officers and qualified members of our board of directors, particularly to serve on our audit committee and compensation committee.

In addition, changing laws, regulations and standards relating to corporate governance and public disclosure are creating uncertainty for public companies, increasing legal and financial compliance costs and making some activities more time-consuming. These laws, regulations and standards are subject to varying interpretations in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management's time and attention from revenue-generating activities to compliance activities. If, notwithstanding our efforts, we fail to comply with new laws, regulations and standards or our efforts differ from the activities intended by regulatory or governing bodies due to ambiguities related to their application and practice, regulatory authorities may initiate legal proceedings against us, and our business may be adversely affected.

Our management team has limited experience managing a public company.

Our management team has limited or no experience managing a publicly traded company, interacting with public company investors, and complying with the increasingly complex laws pertaining to public companies. These new obligations and constituents will require significant attention from our management team and could divert their attention away from the day-to-day management of our business, which could harm our business, results of operations, and financial condition.

We do not intend to pay dividends for the foreseeable future.

We have never declared nor paid cash dividends on our capital stock. We currently intend to retain any future earnings to finance the operation and expansion of our business, and we do not expect to declare or pay any dividends in the foreseeable future. In addition, the terms of our existing corporate debt agreements do, and any future debt agreements may, preclude us from paying dividends. As a result, capital appreciation of our common stock, if any, will be the only way for stockholders to realize any future gains on their investment for the foreseeable future.

Special Note Regarding Forward-Looking Statements

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS This prospectus contains forward-looking statements within the meaning of the federal securities laws about us and our industry, which statements involve substantial risks and uncertainties. Forward-looking statements generally relate to future events or our future financial or operating performance. In some cases, you can identify forward-looking statements because they contain words such as "may," "will," "should," "expect," "plan," "anticipate," "seek," "could," "intend," "target," "aim," "project," "contemplate," "believe," "estimate," "predict," "potential," or "continue," or the negative of these words or other similar terms or expressions that concern our expectations, strategy, plans, or intentions. Forward-looking statements contained in this prospectus include statements about:

- our future financial performance, including our expectations regarding our revenue, our operating expenses, our ability to determine reserves and our ability to remain profitable;
- our ability to improve the effectiveness and predictiveness of our AI models and our expectations that improvements in our AI models can lead to higher approval rates and lower interest rates;
- our ability to increase the volume of loans facilitated by our AI lending platform;
- our ability to enter into new and maintain existing bank partnerships;
- our ability to successfully maintain a diversified loan funding strategy, including bank partnerships and whole loan sales and securitization transactions;
- our ability to maintain competitive interest rates offered to borrowers on our platform, while enabling our bank partners to achieve an adequate return over their cost of funding;
- our ability to successfully build our brand and protect our reputation from negative publicity;
- our ability to increase the effectiveness of our marketing strategies, including our direct consumer marketing initiatives;
- the impact of the COVID-19 pandemic and any associated economic downturn on our business and results of operations;
- our expectations and management of future growth, including expanding the number of potential borrowers;
- our ability to successfully adjust our proprietary AI models, products and services in a timely manner in response to changing macroeconomic conditions and fluctuations in the credit market;
- our compliance with applicable local, state and federal laws;
- our ability to comply with and successfully adapt to complex and evolving regulatory environments, including regulation of artificial intelligence and machine learning technology;

- our expectations regarding regulatory support of our approach to AI-based lending, including our ongoing discussions with the CFPB;
- our ability to protect against increasingly sophisticated fraudulent borrowing and online theft;
- our ability to service loans and the ability of third-party collection agents, to pursue collection of delinquent and defaulted loans;
- our ability to successfully compete with companies that are currently in, or may in the future enter, the markets in which we operate;
- our expectations regarding new and evolving markets and our ability enter into new markets and introduce new products and services, such as our recent introduction of auto loans;
- our ability to effectively secure and maintain the confidentiality of the information received, accessed, stored, provided and used across our systems;
- our ability to successfully obtain and maintain funding and liquidity to support continued growth and general corporate purposes;
- our ability to attract, integrate and retain qualified employees;
- our ability to effectively manage and expand the capabilities of our operations teams, outsourcing relationships and other business operations;
- our ability to maintain, protect and enhance our intellectual property;
- our expectations regarding outstanding litigation and regulatory investigations;
- the increased expenses associated with being a public company; and
- our anticipated uses of net proceeds from this offering.

We caution you that the foregoing list may not contain all of the forward-looking statements made in this prospectus.

You should not rely upon forward-looking statements as predictions of future events. We have based the forward-looking statements contained in this prospectus primarily on our current expectations and projections about future events and trends that we believe may affect our business, financial condition, results of operations, and prospects. The outcome of the events described in these forward-looking statements is subject to risks, uncertainties, and other factors, including those described in the section titled “Risk Factors” and elsewhere in this prospectus. Moreover, we operate in a very competitive and rapidly changing environment. New risks and uncertainties emerge from time to time and it is not possible for us to predict all risks and uncertainties that could have an impact on the forward-looking statements contained in this prospectus. We cannot assure you that the results, events, and circumstances reflected in the forward-looking statements will be achieved or occur, and actual results, events, or circumstances could differ materially from those described in the forward-looking statements.

Neither we nor any other person assumes responsibility for the accuracy and completeness of any of these forward-looking statements. Moreover, the forward-looking statements made in this prospectus relate only to events as of the date on which the statements are made. We undertake no obligation to update any forward-looking statements made in this prospectus to reflect events or circumstances after the date of this prospectus or to reflect new information or the occurrence of unanticipated events, except as required by law. We may not actually achieve the plans, intentions, or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures, or investments we may make.

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain, and investors are cautioned not to unduly rely upon these statements.

Industry, Market and Other Data

INDUSTRY, MARKET AND OTHER DATA Unless otherwise indicated, estimates and information contained in this prospectus concerning our industry and the market in which we operate, including our general expectations, market position, market opportunity, and market size, are based on industry publications and reports generated by third-party providers, other publicly available studies, and our internal sources and estimates. This information involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. Although we are responsible for all of the disclosure contained in this prospectus and we believe the information from the industry publications and other third-party sources included in this prospectus is reliable, we have not independently verified the accuracy or completeness of the data contained in such sources. The content of, or accessibility through, the below sources and websites, except to the extent specifically set forth in this prospectus, does not constitute a portion of this prospectus and is not incorporated herein, and any websites are an inactive textual reference only.

The source of certain statistical data, estimates and forecasts contained in this prospectus are the following independent industry publications or reports:

- Adrian D. Garcia, Bankrate: JPM, Big Banks Spend Billions on Tech but Innovation Lags, July 2018.
- Bain & Company, Inc., Evolving the Customer Experience in Banking, 2017.
- Board of Governors of the Federal Reserve System, Consumer Financial Protection Bureau, Federal Deposit Insurance Corporation, National Credit Union Administration and Office of the Comptroller of the Currency, Interagency Statement on the Use of Alternative Data in Credit Underwriting, December 2019.
- Eldar Beiseitov, Federal Reserve Bank of St. Louis: Unsecured Personal Loans Get a Boost From Fintech Lenders, July 2019.
- Consumer Financial Protection Bureau, No-Action Letter to Upstart Network, Inc. dated September 14, 2017, as modified on September 11, 2020.
- Consumer Financial Protection Bureau, Policy on No-Action Letters, September 2019.
- Federal Home Loan Bank of San Francisco, Cost of Funds Index, December 2019.
- Federal Deposit Insurance Corporation, Statistics on Depository Institutions, December 2019.
- The Federal Reserve Board, Statistical Release: Consumer Credit, December 2019.
- The Federal Reserve Board, Household Debt Service and Financial Obligations Ratios, December 2019.
- Forbes, citing Temkin Group Insight Report, NPS Benchmark Study, 2018, October 2018.
- Matt Komos, TransUnion: Consumer Credit Origination, Balance and Delinquency Trends: Q2 2020, September 2020.
- Matt Komos, TransUnion: Consumer Credit Origination, Balance and Delinquency Trends: Q1 2020, June 2020.
- Matt Komos, TransUnion: Consumer Credit Origination, Balance and Delinquency Trends: Q4 2019, March 2020.
- Matt Komos, TransUnion: Consumer Credit Origination, Balance and Delinquency Trends: Q3 2019, November 2019.
- Kathleen L. Kraninger, Consumer Financial Protection Bureau: Director Kraninger's Remarks at TCH-BPI Conference, November 2019.
- Kirsten Wysen, Open Source Solutions: Why Credit Scores and Payday Lending Matter for Health, October 2019.
- Kroll Bond Rating Agency, KBRA Surveillance Reports, December 2019.
- McKinsey Global Institute, Notes From the AI Frontier: Modeling the Impact of AI on the World Economy, September 2018.
- Naeem Siddiqi, Intelligent Credit Scoring: Building and Implementing Better Credit Risk Scorecards—2nd Edition, 2017.
- Northwestern Mutual, 2019 Planning & Progress Study: The Debt Debacle, 2019.
- Patrice Ficklin and Paul Watkins, Consumer Financial Protection Bureau Blog: An Update on Credit Access and the Bureau's First No-Action Letter, August 2019.
- PricewaterhouseCoopers LLP, Experience Is Everything: Here's How to Get It Right, 2018.
- RedPoint Global and the Harris Poll, Addressing the Gaps in Customer Experience: A Benchmark Study Exploring the Ever Evolving Customer Experience and How Marketers and Consumers Are Adapting, March 2019.
- Rob Kaufman, myFico Blog: The History of the FICO Score, August 2018.
- Statista: Value of Loans of all Commercial Banks in the United States from March 2014 to August 2020, September 2020.
- Wei Wu, Vadim Verkhoglyad and Alex Kale, dv01 Insights: Covid-19 Performance Report Volume 9, July 2020.

References to market size estimates are based on quarterly U.S. loan origination data published by TransUnion as part of its quarterly Consumer Credit Origination, Balance and Delinquency Trends reports.

As disclosed in this prospectus, the Net Promoter Scores for our bank partners' lending programs are approximately 79, which represents the weighted average of the Net Promoter Scores of each of our bank partners in the third quarter of 2020. The Net Promoter Scores of our bank partners were derived through a third-party service that administers surveys to loan applicants immediately following the applicants' acceptance of a loan on Upstart's platform. Net Promoter Scores are calculated based on responses measured on a scale of one to ten to the survey question, "how likely is it that you would recommend us?" Responses of nine or 10 are considered "promoters," responses of seven or eight are considered neutral or "passives," and responses of six or less are considered "detractors." The number of detractors is subtracted from the number of promoters, and the resulting number is divided by the total number of respondents to obtain the Net Promoter Score using the methodology developed by Bain & Company, Inc. References to our bank partners' Net Promoter Scores are based on survey data gathered in the third quarter of 2020. Net Promoter Scores for other banks used for comparison were obtained from Forbes, citing the Temkin Group Insight Report, NPS Benchmark Study, 2018, October 2018. While the Net Promoter Score methodology used by Upstart's third-party service was designed to be consistent with the methodology used in the referenced benchmark study, any differences in the timing or method in which the surveys were administered could negatively impact the comparability of such Net Promoter Scores.

The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the section titled "Risk Factors" and elsewhere in this prospectus. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

Use of Proceeds

USE OF PROCEEDS We estimate that the net proceeds to us from the sale of shares of our common stock in this offering will be approximately $, based upon the assumed initial public offering price of $ per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriters' option to purchase additional shares of our common stock from us is exercised in full, we estimate that the net proceeds to us would be approximately $, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We will not receive any proceeds from the sale of common stock by the selling stockholders in this offering.

Each $1.00 increase or decrease in the assumed initial public offering price of $ per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, would increase or decrease the net proceeds that we receive from this offering by approximately $, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions payable by us. Similarly, each increase or decrease of 1.0 million in the number of shares of our common stock offered by us would increase or decrease the net proceeds that we receive from this offering by approximately $, assuming the assumed initial public offering price remains the same and after deducting the estimated underwriting discounts and commissions payable by us.

The principal purposes of this offering are to increase our capitalization and financial flexibility, create a public market for our common stock, and enable access to the public equity markets for us and our stockholders.

We intend to use the net proceeds we receive from this offering for general corporate purposes, including working capital, operating expenses, and capital expenditures. Additionally, we may use a portion of the net proceeds we receive from this offering to acquire or invest in businesses, products, services, or technologies. However, we do not have agreements or commitments for any material acquisitions or investments at this time. We cannot specify with certainty the particular uses of the net proceeds that we will receive from this offering. Accordingly, we will have broad discretion in using these proceeds. Pending the use of proceeds from this offering as described above, we may invest the net proceeds that we receive in this offering in short-term, investment grade, interest-bearing instruments.

Dividend Policy

DIVIDEND POLICY We have never declared or paid any cash dividends on our capital stock. We currently intend to retain any future earnings and do not expect to pay any dividends in the foreseeable future. Any future determination to declare cash dividends will be made at the discretion of our board of directors, subject to applicable laws, and will depend on a number of factors, including our financial condition, results of operations, capital requirements, contractual restrictions, general business conditions, and other factors that our board of directors may deem relevant. Additionally, our ability to pay cash dividends on our common stock is limited by restrictions under the terms of our credit facilities with Silicon Valley Bank.

Capitalization

CAPITALIZATION The following table sets forth our cash and capitalization as of September 30, 2020 as follows:

- on an actual basis;
- on a pro forma basis, giving effect to (i) the Capital Stock Conversion, as if such conversions had occurred on September 30, 2020, (ii) the automatic net exercise of an outstanding warrant to purchase up to 600,208 shares of our Series B preferred stock and the reclassification of the associated warrant liability to additional paid-in capital and (iii) the filing and effectiveness of our amended and restated certificate of incorporation in Delaware that will become effective immediately prior to the completion of this offering; and
- on a pro forma as adjusted basis, giving effect to (i) the pro forma adjustments set forth above, (ii) the sale and issuance by us of shares of our common stock in this offering, based upon the assumed initial public offering price of $ per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, and (iii) the issuance of shares of common stock upon the exercise of options held by certain selling stockholders in connection with the sale of such shares by such selling stockholders in this offering.

The pro forma as adjusted information set forth in the table below is illustrative only and will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing. You should read this table together with our consolidated financial statements and related notes, and the sections titled "Selected Consolidated Financial and Other Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" that are included elsewhere in this prospectus.

	As of September 30, 2020		
(In thousands, except share and per share amounts)	Actual	Pro forma	Pro forma asadjusted (1)
Cash	$53,234		$$
Convertible preferred stock warrant liability	$7,458	$—	$—
Total borrowings	100,588		
Convertible preferred stock, par value $0.0001 per share: 53,927,657 shares authorized, 47,349,577 issued and outstanding, actual; no shares authorized, issued and outstanding, pro forma and pro forma as adjusted	162,546	—	—
Preferred stock, par value $0.0001 per share: no shares authorized, issued and outstanding, actual; shares authorized, no shares issued and outstanding, pro forma and pro forma as adjusted	—	—	—
Stockholders' equity:			
Common stock, par value $0.0001 per share: 90,000,000 shares authorized, 15,044,707 shares issued and outstanding, actual; shares authorized, shares issued and outstanding, pro forma; and shares authorized, shares issued and outstanding, pro forma as adjusted	2		
Additional paid-in capital	22,914		
Accumulated deficit	(70,249)		
Noncontrolling interests	—		
Total stockholders' (deficit) equity	(47,333)		
Total capitalization	$223,259		$$

(1) Each $1.00 increase or decrease in the assumed initial public offering price of $ per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, would increase or decrease the amount of our pro forma as adjusted cash, additional paid-in capital, total stockholders' equity, and total capitalization by $, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions payable by us. An increase or decrease of 1.0 million shares in the number of shares offered by us would increase or decrease, as applicable, the amount of our pro forma as adjusted cash, additional paid-in capital, total stockholders' equity, and total capitalization by $, assuming the assumed initial public offering price remains the same, and after deducting estimated underwriting discounts and commissions payable by us.

If the underwriters' option to purchase additional shares of our common stock from us were exercised in full, pro forma as adjusted cash, additional paid-in capital, total stockholders' equity, total capitalization, and shares outstanding as of September 30, 2020 would be $, $, $, $, and , respectively.

The pro forma and pro forma as adjusted columns in the table above are based on shares of our common stock (including shares of preferred stock issuable upon the automatic net exercise of a warrant to purchase Series B preferred stock and the Capital Stock Conversion) outstanding as of September 30, 2020, and exclude the following:

- 19,356,042 shares of our common stock issuable upon the exercise of options to purchase shares of our common stock outstanding as of September 30, 2020, with a weighted-average exercise price of $3.11 per share (other than shares to be issued upon exercise of options to purchase common stock by certain selling stockholders in connection with the sale of such shares by such selling stockholders in this offering);
- 319,669 shares of our common stock issuable upon the exercise of warrants outstanding as of September 30, 2020, with a weighted-average exercise price of $1.77 per share;
- shares of our common stock issuable upon the exercise of options to purchase shares of our common stock issued after September 30, 2020, with a weighted-average exercise price of $ per share; and
- shares of our common stock reserved for future issuance under our equity compensation plans, consisting of:
- 5,520,000 shares of our common stock to be reserved for future issuance under our 2020 Plan, which will become effective prior to the completion of this offering;
- shares of our common stock reserved for future issuance under our 2012 Plan, provided that we will cease granting awards under our 2012 Plan upon the effectiveness of the 2020 Plan; and
- 1,380,000 shares of our common stock reserved for future issuance under our ESPP, which will become effective prior to the completion of this offering.

Our 2020 Plan and our ESPP will each provide for annual automatic increases in the number of shares reserved thereunder and our 2020 Plan will also provide for increases to the number of shares that may be granted thereunder based on awards under our 2012 Plan that expire, are forfeited, or otherwise repurchased by us, as more fully described in the section titled "Executive Compensation—Employee Benefit and Stock Plans."

Dilution

DILUTION

If you invest in our common stock in this offering, your ownership interest will be diluted to the extent of the difference between the initial public offering price per share of our common stock and the pro forma as adjusted net tangible book value per share of our common stock immediately after this offering. Net tangible book value dilution per share to new investors represents the difference between the amount per share paid by purchasers of shares of our common stock in this offering and the pro forma as adjusted net tangible book value per share of our common stock immediately after completion of this offering.

Our historical net tangible book value per share is determined by dividing our total tangible assets less our convertible preferred stock and our total liabilities by the number of shares of our common stock outstanding. Our historical net tangible book value as of September 30, 2020 was $(67,698) million, or $(4.50) per share. Our pro forma net tangible book value as of September 30, 2020 was $ million, or $ per share, based on the total number of shares of our common stock outstanding as of September 30, 2020, after giving effect to (i) the Capital Stock Conversion, (ii) the automatic net exercise of an outstanding warrant to purchase shares of preferred stock resulting in the issuance of shares of our common stock and the related reclassification of our convertible preferred stock warrant liability to additional paid-in capital and (iii) the filing and effectiveness of our amended and restated certificate of incorporation in Delaware that will become effective immediately prior to the completion of this offering.

After giving effect to (i) the sale by us of shares of our common stock in this offering at the assumed initial public offering price of $ per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, and (ii) the issuance of shares of common stock upon the exercise of options held by certain selling stockholders in connection with the sale of such shares by such selling stockholders in this offering, our pro forma as adjusted net tangible book value as of September 30, 2020 would have been $, or $ per share. This represents an immediate increase in pro forma net tangible book value of $ per share to our existing stockholders and an immediate dilution in pro forma net tangible book value of $ per share to investors purchasing shares of our common stock in this offering at the assumed initial public offering price. The following table illustrates this dilution:

Assumed initial public offering price per share	$
Pro forma net tangible book value per share as of September 30, 2020	$4.50
Increase in pro forma net tangible book value per share attributable to new investors purchasing shares of common stock in this offering	
Pro forma as adjusted net tangible book value per share immediately after this offering	
Dilution in pro forma net tangible book value per share to new investors in this offering	$

Each $1.00 increase or decrease in the assumed initial public offering price of $ per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, our pro forma as adjusted net tangible book value per share to new investors by $, and would increase or decrease, as applicable, dilution per share to new investors purchasing shares of common stock in this offering by $, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase or decrease of 1.0 million shares in the number of shares of our common stock offered by us would increase or decrease, as applicable, our pro forma as adjusted net tangible book value by approximately $ per share and increase or decrease, as applicable, the dilution to new investors purchasing shares of common stock in this offering by $ per share, assuming the assumed initial public offering price remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters' option to purchase additional shares of our common stock from us is exercised in full, the pro forma as adjusted net tangible book value per share of our common stock would be $ per share, and the dilution in pro forma net tangible book value per share to new investors purchasing shares of common stock in this offering would be $ per share.

The following table presents, as of September 30, 2020, after giving effect to the automatic net exercise of an outstanding warrant to purchase shares of our Series B preferred stock and the Capital Stock Conversion, the differences between the existing stockholders and the new investors purchasing shares of our common stock in this offering with respect to the number of shares purchased from us, the total consideration paid or to be paid to us, which includes net proceeds received from the issuance of our common stock, and the average price per share paid or to be paid to us at the assumed initial public offering price of $ per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, before deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us:

	Shares Purchased		Total Consideration		Average PricePerShare
	Number	Percent	Amount	Percentage	
Existing stockholders		%		$%	$
New investors				$%	$
Totals		100%		$100%	$

Sales by the selling stockholders in this offering will reduce the number of shares held by existing stockholders to , or approximately % of the total shares of common stock outstanding after this offering, and will increase the number of shares held by new investors to , or approximately % of the total shares of common stock outstanding after this offering.

Each $1.00 increase or decrease in the assumed initial public offering price of $ per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, the total consideration paid by new investors and total consideration paid by all stockholders by $ million, assuming that the number of shares of our common stock offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase or decrease of 1.0 million in the number of shares of our common stock offered by us would increase or decrease the total consideration paid by new investors and total consideration paid by all stockholders by $, assuming the assumed initial public offering price remains the same and after deducting the estimated underwriting discounts and commissions payable by us.

Except as otherwise indicated, the above discussion and tables assume no exercise of the underwriters' option to purchase additional shares of our common stock from us. If the underwriters' option to purchase additional shares of our common stock were exercised in full, our existing stockholders would own % and our new investors would own % of the total number of shares of our common stock outstanding upon completion of this offering.

The number of shares of our common stock that will be outstanding after this offering is based on shares of our common stock (including the preferred stock issuable upon the automatic net exercise of a warrant to purchase Series B preferred stock and the Capital Stock Conversion) outstanding as of September 30, 2020, and excludes:

- 19,356,042 shares of our common stock issuable upon the exercise of options to purchase shares of our common stock outstanding as of September 30, 2020, with a weighted-average exercise price of $3.11 per share (other than shares to be issued upon exercise of options to purchase common stock by certain selling stockholders in connection with the sale of such shares by such selling stockholders in this offering);
- 319,669 shares of our common stock issuable upon the exercise of warrants outstanding as of September 30, 2020, with a weighted-average exercise price of $1.77 per share;
- shares of common stock issuable upon the exercise of options to purchase shares of our common stock issued after September 30, 2020, with a weighted-average exercise price of $ per share; and
- shares of our common stock reserved for future issuance under our equity compensation plans, consisting of:
- 5,520,000 shares of our common stock to be reserved for future issuance under our 2020 Plan, which will become effective prior to the completion of this offering;
- shares of our common stock reserved for future issuance under our 2012 Plan, provided that we will cease granting awards under our 2012 Plan upon the effectiveness of the 2020 Plan; and
- 1,380,000 shares of our common stock reserved for future issuance under our 2012 Plan, which number of shares will be added to the shares of our common stock to be reserved for future issuance under our 2020 Plan upon its effectiveness, at which time we will cease granting awards under our 2012 Plan.

Our 2020 Plan will provide for annual automatic increases in the number of shares reserved thereunder, and our 2020 Plan will also provide for increases to the number of shares that may be granted thereunder based on shares under our 2012 Plan that expire, are forfeited, or otherwise repurchased by us, as more fully described in the section titled "Executive Compensation—Employee Benefit and Stock Plans."

To the extent that any outstanding options to purchase our common stock are exercised, or new awards are granted under our equity compensation plans, there will be further dilution to investors participating in this offering.

Selected Consolidated Financial and Other Data

SELECTED CONSOLIDATED FINANCIAL AND OTHER DATA The following selected consolidated statements of operations data for the years ended December 31, 2017, 2018 and 2019 and the consolidated balance sheet data as of December 31, 2018 and 2019 have been derived from our audited consolidated financial statements included elsewhere in this prospectus. The selected consolidated statements of operations data for the nine months ended September 30, 2019 and 2020 and the consolidated balance sheet data as of September 30, 2020 have been derived from our unaudited interim consolidated financial statements included elsewhere in this prospectus. We have prepared the unaudited interim consolidated financial statements on the same basis as the audited consolidated financial statements and have included all adjustments, consisting only of normal recurring adjustments that, in our opinion, are necessary to state fairly the financial information set forth in those statements. Our historical results are not necessarily indicative of the results that may be expected in the future. You should read the following selected consolidated financial and other data below in conjunction with the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included elsewhere in this prospectus.

Consolidated Statements of Operations Data

	Year Ended December 31,			Nine Months Ended September 30,	
(In thousands, except share and per share amounts)	**2017**	**2018**	**2019**	**2019**	**2020**
Revenue:					
Revenue from fees, net	$51,161	$88,482	$159,847	$98,699	$144,179
Interest income and fair value adjustments, net	6,128	10,831	4,342	2,918	2,527
Total revenue	57,289	99,313	164,189	101,617	146,706

Operating expenses:					
Sales and marketing[1]	33,838	63,633	93,175	61,236	65,113
Customer operations[1]	10,232	15,416	24,947	16,593	24,792
Engineering and product development[1]	5,324	8,415	18,777	11,480	24,651
General, administrative, and other[1]	15,431	19,820	31,865	20,399	30,778
Total operating expenses	64,825	107,284	168,764	109,708	145,334
(Loss) income from operations	(7,536)	(7,971)	(4,575)	(8,091)	1,372
Other income	330	487	1,036	832	5,497
Expense on warrants and convertible notes, net	(1,649)	(3,734)	(1,407)	(2,626)	(2,317)
Net (loss) income before income taxes	(8,855)	(11,218)	(4,946)	(9,885)	4,552
Provision for income taxes	6	—	74	—	—
Net (loss) income before attribution to noncontrolling interests	(8,861)	(11,218)	(5,020)	(9,885)	4,552
Net (loss) income attributable to noncontrolling interests	(1,144)	1,101	(4,554)	(3,368)	(404)
Net (loss) income attributable to Upstart Holdings, Inc. common stockholders	$(7,717)	$(12,319)	$(466)	$(6,517)	$4,956
Net (loss) income per common share attributable to Upstart Holdings, Inc. common stockholders, basic and diluted[2]	$(0.56)	$(0.87)	$(0.03)	$(0.46)	$—
Weighted-average number of shares outstanding used in computing net loss per share attributable to Upstart Holdings, Inc. common stockholders, basic and diluted[2]	13,873,810	14,128,183	14,335,611	14,313,262	14,663,623
Pro forma net loss per share attributable to Upstart Holdings, Inc. common stockholders, basic and diluted[2]					$$
Weighted-average number of shares used to compute pro forma net loss per share attributable to Upstart Holdings, Inc. common stockholders, basic and diluted[2]					

(1) Includes stock-based compensation expense as follows:

	Year ended December 31,			Nine Months EndedSeptember 30,	
(In thousands)	**2017**	**2018**	**2019**	**2019**	**2020**
Sales and marketing	$32	$183	$278	$157	$1,136
Customer operations	124	178	433	252	625
Engineering and product development	574	753	1,803	932	3,181
General, administrative, and other	560	931	1,292	863	2,160
Total stock-based compensation	$1,290	$2,045	$3,806	$2,204	$7,102

(2) See Note 16 to our consolidated financial statements for an explanation of the calculations of our basic and diluted net loss per share attributable to Upstart Holdings, Inc. common stockholders, pro forma net loss per share attributable to Upstart Holdings, Inc. common stockholders and the weighted-average number of shares used in the computation of the per share amounts.

Consolidated Balance Sheet Data

	As of December 31,		As of September 30,
(In thousands)	**2018**	**2019**	**2020**
Cash	$73,038	$44,389	$53,234
Loans (at fair value)	502,666	232,305	122,708
Notes receivable and residual certificates (at fair value)	8,314	34,116	22,053
Total assets	645,908	393,462	309,804
Borrowings	74,983	118,609	100,588
Payable to securitization note holders and residual certificate holders	373,068	96,107	—
Total liabilities	542,655	292,604	194,591
Convertible preferred stock	157,923	162,546	162,546
Accumulated deficit	(75,078)	(75,205)	(70,249)
Total Upstart Holdings, Inc. stockholders' deficit	(66,671)	(62,714)	(47,333)

Noncontrolling interests	12,001	1,026	—
Total stockholders' deficit	(54,670)	(61,688)	(47,333)
Total liabilities, convertible preferred stock and stockholders' deficit	645,908	393,462	$309,804

Key Operating Metrics

We review a number of operating and financial metrics, including the following key metrics to evaluate our business, measure our performance, identify trends affecting our business, formulate business plans, and make strategic decisions.

	Year Ended December 31,			Nine Months Ended September 30,	
	2017	2018	2019	2019	2020
Number of Loans Transacted	70,457	114,125	215,122	136,468	176,983
Conversion Rate	8.1%	9.1%	13.1%	12.2%	14.0%
Percentage of Loans Fully Automated	34%	53%	66%	64%	69%

See the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Operating Metrics" for a description of Number of Loans Transacted, Conversion Rate and Percentage of Loans Fully Automated.

Non-GAAP Financial Measures

	Year Ended December 31,			Nine Months Ended September 30,	
(In thousands)	2017	2018	2019	2019	2020
Contribution Profit	$9,265	$13,098	$48,940	$25,560	$63,697
Adjusted EBITDA	$(4,679)	$(6,226)	$5,595	$(1,363)	$16,006

Contribution Profit

We define Contribution Profit as our revenue from fees, net, less certain costs that we consider to be variable and closely correlated to our fee revenue. Our revenue from fees, net consists of platform and referral fees, net and servicing fees, net. Platform fees and referral fees are contracted for and charged separately, although they are generally combined for accounting purposes as they usually represent a single performance obligation. To derive Contribution Profit, we subtract from revenue from fees, net our borrower acquisition costs as well as our borrower verification and servicing costs. Borrower acquisition costs consist of our sales and marketing expenses adjusted to exclude costs not directly attributable to attracting a new borrower, such as payroll related expenses for our business development and marketing teams, as well as other operational, brand awareness and marketing activities. Our borrower verification and servicing costs consist of payroll and other personnel related expenses for personnel engaged in loan onboarding, verification and servicing, as well as servicing system costs. It excludes payroll and personnel related expenses and stock-based compensation for certain members of our customer operations team whose work is not directly attributable to onboarding and servicing loans.

The following table provides a calculation of Contribution Profit for the years ended December 31, 2017, 2018 and 2019, and the nine months ended September 30, 2019 and 2020:

	Year Ended December 31,			Nine Months Ended September 30,	
(In thousands)	2017	2018	2019	2019	2020
Referral fees, net	$30,921	$53,869	$90,672	$56,117	$80,828
Platform fees, net	17,146	29,512	53,383	32,932	42,657
Servicing fees, net	3,094	5,101	15,792	9,650	20,694
Revenue from fees, net	51,161	88,482	159,847	98,699	144,179
Borrower acquisition costs	(32,777)	(61,658)	(89,569)	(58,764)	(59,464)
Borrower verification and servicing costs	(9,119)	(13,726)	(21,338)	(14,375)	(21,018)
Total direct expenses	(41,896)	(75,384)	(110,907)	(73,139)	(80,482)
Contribution Profit	$9,265	$13,098	$48,940	$25,560	$63,697

See the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Reconciliation of Non-GAAP Financial Measures" for a reconciliation of loss from operations to Contribution Profit.

Adjusted EBITDA

We calculate Adjusted EBITDA as net loss attributable to Upstart Holdings, Inc. stockholders adjusted to exclude stock-based compensation expense, depreciation and amortization, expense on warrants and convertible notes, net and provision for income taxes. Adjusted EBITDA does include interest expense from corporate debt and warehouse credit facilities which is incurred in the course of earning corresponding interest income.

See the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Reconciliation of Non-GAAP Financial Measures" for a reconciliation of net loss attributable to Upstart Holdings, Inc. common stockholders to Adjusted EBITDA.

Management's Discussion and Analysis of Financial Condition and Results of Operations

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS *The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the section titled "Selected Consolidated Financial and Other Data" and the consolidated financial statements and related notes thereto included elsewhere in this prospectus. This discussion contains forward-looking statements that involve risks and uncertainties. Factors that could cause or contribute to such differences include those identified below and those discussed in the section titled "Risk Factors" and other parts of this prospectus. Our historical results are not necessarily indicative of the results that may be expected for any period in the future.*

Overview

Upstart applies modern data science and technology to the process of underwriting consumer credit. By providing our bank partners with a proprietary AI-based origination platform, we help them originate credit with higher approval rates, lower loss rates and a high degree of automation. As our technology continues to improve and additional banks adopt our platform, consumers benefit from improved access to affordable and frictionless credit.

Since our inception, we have facilitated the origination of over 620,000 personal loans that have generated more than 9 million repayment events. Our key milestones include:

* 2020 metrics are as of September 30, 2020

We believe that banks will continue to be at the forefront of consumer lending in the United States. We believe AI lending will become increasingly critical as this industry continues to undergo a broad digital transformation. Our strategy is to partner with banks, providing them with an exceptional AI lending platform that they can configure as they originate consumer loans under their own brand, according to their own business and regulatory requirements.

Consumers can obtain Upstart-powered loans in one of two ways: either by referral from Upstart.com to one of our bank partners, or directly through our bank partners' own websites, where our lending technology and experience is white-labeled. Our direct bank partner channel represents a small but growing portion of our overall volume, and we believe this portion will continue to grow over time as we onboard new bank partners. Consumers on our platform are generally offered unsecured personal loans ranging from $1,000 to $50,000 in size, at APRs typically ranging from approximately 6.5% to 35.99%, for terms typically ranging from three to five years, with a monthly repayment schedule and no prepayment penalty. These loans are used for a variety of purposes, including credit card consolidation, refinancing of existing debt, home improvements and other personal uses.

Our bank partners can retain loans that align with their business and risk objectives. For loans that are not retained by our bank partners, we help diversify the funding of these loans to a broad base of approximately 100 institutional investors that invest in Upstart-powered loans. In the third quarter of 2020, 22% of the loans funded through our platform were retained by the originating bank (compared to 27% in the third quarter of 2019). 76% of loans were purchased by institutional investors through our loan funding programs in the third quarter of 2020 (compared to 67% in the third quarter of 2019), and the remaining 2% were funded through our balance sheet (compared to 6% in the third quarter of 2019). Over the last few years, the percentage of loans retained by bank partners has fluctuated from quarter-to-quarter, but generally increased, while the percentage of loans funded through our balance sheet has generally decreased and the percentage of loans purchased by institutional investors has remained high and relatively stable.

Our approach has allowed us to achieve rapid growth in recent years while simultaneously improving our margin profile. The Number of Loans Transacted on our platform increased 88% from 114,125 for the year ended December 31, 2018 to 215,122 over the same period in 2019, and 30% to 176,983 in the nine months ended September 30, 2020 from 136,468 over the same period in 2019. Total revenue increased 65% for the year ended December 31, 2019 to $164.2 million from $99.3 million over the same period in 2018, and 44% to $146.7 million in the nine months ended September 30, 2020 from $101.6 million in the same period of 2019. Net loss decreased from $12.3 million in 2018 to $0.5 million in 2019. During the nine months ended September 30, 2020, net income increased to $5.0 million from net loss of $6.5 million in the same period of 2019.

Our Economic Model

Upstart's revenues are primarily earned in the form of three separate usage-based fees, which can be either dollar or percentage based depending on the contractual arrangement. We charge our bank partners a referral fee of 3% to 4% of the loan principal amount each time we refer a borrower who obtains a loan. Separately, we charge bank partners a platform fee of approximately 2% of loan value each time they originate a loan using our platform. These fees are contracted for and charged separately, although they are generally combined for accounting purposes as they usually represent a single performance obligation. We do not charge the borrowers on our platform any referral, platform or other similar fees for our loan matching services.

We also charge the holder of the loan (either a bank or institutional investor) an ongoing 0.5% to 1% annualized servicing fee based on the outstanding principal over the lifetime of the loan for ongoing servicing of the loan. Taken together, these fees represented 98% of our revenue in the nine months ended September 30, 2020. In addition, we earn a small portion of our revenue from interest income and our securitization activities.

The below table summarizes the dollar value of our economics on an average-sized loan, based on our contractual rates that were in effect as of September 30, 2020.

	Paid By	Fees per Loan

Referral Fees	Bank partner	$400–$500 on origination
Platform Fees	Bank partner	$200–$300 on origination
Servicing Fees	Bank partner or institutional investor	0.5%–1% per year

Loans on our platform today are predominantly sourced from Upstart.com. For these loans, we incur variable costs in the form of borrower acquisition costs and borrower verification and servicing costs; in the nine months ended September 30, 2020, this category of loans generated a 44% contribution margin on average. Borrower acquisition cost and borrower verification and servicing cost are highly correlated with the Number of Loans Transacted on our platform and trended upwards on an annual basis. A small number of loans were sourced directly through bank partners in which we received no referral fee and incurred no acquisition cost; in the nine months ended September 30, 2020 this category of loans generated a 67% contribution margin. In 2018, 2019 and the nine months ended September 30, 2020, the average contribution margin per loan of all Upstart-powered loans was 15%, 31% and 44%, respectively. The rising level of automation and continued improvements to our Conversion Rate achieved through our increasingly sophisticated risk models and our evolving channel mix have contributed to improving loan unit economics over time. We further believe that bank-sourced loans can be an important driver of volume growth in the medium-term future; to the extent we are able to increase the number of loans sourced directly through our bank partners, our contribution margin would be positively impacted.

The below table summarizes the contribution economics for loans originated by our bank partners in the nine months ended September 30, 2020, which reflects the COVID-19 impact as described below:

COVID-19 Pandemic Impact

The onset of the COVID-19 pandemic began to impact origination volumes on our platform in the second half of March 2020. A rapid rise in unemployment in the United States led to the potential for increased losses for new originations by our AI models, reduction in originations by bank partners, and a temporary pause in loan funding from institutions and capital markets. These factors collectively resulted in an 86% reduction in the number of loans originated and a 73% reduction in revenue in the second quarter of 2020 compared to the first quarter of 2020.

In response to the market conditions caused by the COVID-19 pandemic, we made certain operational changes, including increases to the fees we charge our bank partners and reductions in our sales and marketing activities and certain operational expenses. We continue to evaluate market and other conditions and may make additional changes to our fees or marketing activities, or implement additional operational changes, in the future.

Origination volumes recovered quickly, beginning in June 2020, as unemployment plateaued. This recovery continued through subsequent months, such that the Number of Loans Transacted in the three months ended September 30, 2020 was 80,893, representing a 26% increase compared to the Number of Loans Transacted in the three months ended September 30, 2019. Our revenue in the three months ended September 30, 2020 was $65.4 million, representing a 32% increase compared to our revenue in the three months ended September 30, 2019.

To support borrowers suffering from income loss due to the pandemic, Upstart worked with its bank partners to offer hardship plans that, among other things, allowed affected borrowers to defer loan payments for up to two months. At the peak, approximately 5.6% of borrowers on our platform had enrolled in a hardship program, less than half the rate of online lending industry benchmarks.[60] Since this time, approximately 95% of these impacted borrowers have exited the hardship program and resumed making loan payments. Further, our model was approximately five times more predictive than FICO credit score alone during the COVID-19 pandemic.[61] Due to the strength of our AI model, we expect that the COVID-19 pandemic will have minimal impact on bank partners and institutional investor performance for Upstart-powered loans originated prior to the second quarter of 2020.

Although significant government assistance was provided during the COVID-19 pandemic, the resilience of our bank partner results during this time provides evidence of the benefits that our AI models can offer to bank lending programs. We believe these benefits are even more compelling and valuable during periods of economic downturn.

Factors Affecting Our Performance

Continued Improvements to Our AI Models

Much of our historical growth has been driven by improvements to our AI models. These models benefit over time from a flywheel effect that is characteristic of machine learning systems: accumulation of repayment data leads to improved accuracy of risk and fraud predictions, which results in higher approval rates and lower interest rates, leading to increased volume, and consequently greater accumulation of repayment data. This virtuous cycle describes an important mechanism by which our business grows simply through model learning and recalibration. We expect to continue to invest significantly in the development of our AI models and platform functionalities.

Beyond the ongoing accumulation of repayment data used to train our models, we also frequently make discrete improvements to model accuracy by upgrading algorithms and incorporating new variables, both of which have historically resulted in higher approval rates, more competitive loan

60 Wei Wu, Vadim Verkhoglyad and Alex Kale, dv01 Insights: Covid-19 Performance Report Volume 9, July 2020.

61 Based on an internal Upstart study conducted in May 2020 comparing the percentage of borrowers requesting to enter the hardship program based on their FICO credit scores and the risk tier assigned at origination by Upstart.

offers, increased automation, and faster growth. As a second order effect, the impact of these improvements on our conversion funnel also allow us to unlock new marketing channels over time that have previously been unprofitable.

We believe that ongoing improvements to our technology in this manner will allow us to further expand access and lower rates for creditworthy borrowers, which will continue to fuel our growth. Should the pace of these improvements slow down or cease, or should we discover forms of model upgrades which improve accuracy at the expense of volume, our growth rates could be adversely affected.

Bank and Market Adoption

Banks play two key roles in Upstart's ecosystem: funding loans and acquiring new customers. Banks tend to enjoy among the most efficient sources of funding due to their expansive base of deposits. As they adopt our technology and fund a growing proportion of our platform transactions, offers made to borrowers will typically improve, generally leading to higher conversion rates and faster growth for our platform. The percent of loans funded and retained by originating banks in the nine months ended September 30, 2020 was 23%, unchanged from 23% in the same period of 2019. Historically, we have observed that each 100 basis point reduction in APR has led to an approximate 15% increase in our conversion rate.[62] New bank partners also represent additional acquisition channels through which we can reach and source prospective new borrowers, as these banks develop and implement their own digital and in-branch campaigns to drive traffic from their existing customer base to our platform. We view this emerging growth channel to be additive to the marketing acquisition programs we currently run at Upstart.

To provide funding support for our bank partners, we have built a broad network of institutional investors that can fund Upstart-powered loans through secondary loan purchasing, issuance of pass-through certificates and investment in asset-backed securitizations. This diverse network of capital helps to minimize our reliance on any one funding source. However, any trend towards reduced participation by banks will generally erode the overall competitiveness of the offers on our platform, and any declining trend in the participation of broader institutional investment markets with respect to funding availability for Upstart-powered loans could adversely affect our business.

Product Expansion and Innovation

We intend to continue developing new financial products that address a broader set of consumer needs over time. We recently announced our entry into the auto lending market and we believe that significant growth opportunities exist to apply our evolving technology to additional segments of credit, such as credit cards, mortgages, student loans, point-of-sale loans, and HELOCs. In addition, we aim to serve a broader role of technology enablement for banks, which we believe will seek more comprehensive technology solutions from their suppliers. For example, we recently began offering an application programming interface product to banks that allows them to utilize our AI underwriting models to support their loan origination process for personal, auto, and student loans. We will incur expenses and opportunity cost to develop and launch new products. Monetization prospects for new products are uncertain, and costs associated with developing and marketing new products might not be recovered, which could weigh on our top-line growth and profitability.

62 In an internal study, Upstart replicated three bank models using their respective underwriting policies and evaluated their hypothetical loss rates and approval rates using Upstart's applicant base in late 2017. Such result represents the average rate of improvement exhibited by Upstart's platform against each of the three respective bank models.

Impact of Macroeconomic Cycles

Economic cycles can impact our financial performance and related metrics, including consumer demand for loans, conversion rates and the interest rates our bank partners and institutional investors are willing to accept. In a potential downturn, we believe consumer lending will generally contract, including the volume transacted on our own platform. However, the performance of Upstart-powered loans through an economic downturn, such as that experienced during the COVID-19 pandemic, will be important in further validating our AI models with banks and institutional investors. If we are able to continue demonstrating the resilience of Upstart-powered loans through future macroeconomic cycles relative to general consumer credit, it could strengthen our competitive positioning as we emerge from such downturns.

Key Operating Metrics

We focus on several key operating metrics to measure the performance of our business and help determine strategic direction.

	Year Ended December 31,			Nine Months Ended September 30,	
	2017	2018	2019	2019	2020
Number of Loans Transacted	70,457	114,125	215,122	136,468	176,983
Conversion Rate	8.1%	9.1%	13.1%	12.2%	14.0%
Percentage of Loans Fully Automated	34%	53%	66%	64%	69%

Number of Loans Transacted

We define the Number of Loans Transacted as the transaction volume, measured by number of loans facilitated on our platform, between a borrower and originating bank during the period presented. We believe this metric to be a good proxy for our overall scale and reach as a platform.

Conversion Rate

We define Conversion Rate as the Number of Loans Transacted in a period divided by the number of rate inquiries received, which we record when a borrower requests a loan offer on our platform. We track this metric to understand the impact of improvements to the efficiency of our borrower funnel on our overall growth. Historically, our Conversion Rate has benefitted from improvements to our technology, which have made our evaluation of risk more

accurate and our verification process more automated, or from the addition of bank partners that have made our offers more competitive. Our ability to continue to improve our Conversion Rate depends in part on our ability to continue to improve our AI models and Percentage of Loans Fully Automated and the mix of marketing channels in any given period.

Percentage of Loans Fully Automated

A key driver of our contribution margin and operating efficiency is the Percentage of Loans Fully Automated, which is defined as the total number of loans in a given period originated end-to-end (from initial rate request to final funding) with no human involvement divided by the Number of Loans Transacted in the same period. We have been successful in increasing the level of loan automation on the platform over the past few years while simultaneously holding fraud rates constant and at very low levels. We believe our growth over the last several years has been driven in part by our ability to rapidly streamline and automate the loan application and origination process on our platform. We expect the Percentage of Loans Fully Automated to level off and remain relatively constant in the long term, and to the extent we expand our loan offerings beyond unsecured personal loans, we expect that such percentage may decrease in the short term.

Components of Results of Operations

Revenue from Fees, Net

Platform and Referral Fees, Net

We charge our bank partners platform fees in exchange for usage of our AI lending platform, which includes collection of loan application data, underwriting of credit risk, verification and fraud detection, and the delivery of electronic loan offers and associated documentation. We also charge referral fees to our bank partners in exchange for the referral of borrowers from Upstart.com. Referral fees are charged to bank partners on a per borrower basis upon origination of a loan. For bank partners that use our loan funding capabilities, these fees are charged net of any fees the bank partner charges Upstart. For the loans Upstart purchases from bank partners after the completion of the minimum holding periods, Upstart pays bank partners a one-time loan premium fee at the time the loan is sold by such bank partner to Upstart. Upstart also pays bank partners monthly loan trailing fees based on the amount and timing of principal and interest payments made by borrowers of the underlying loans.[63]

Servicing Fees, Net

Servicing fees are calculated as a percentage of outstanding principal and are charged monthly to any entities holding loans facilitated through our platform, to compensate us for activities we perform throughout the loan term, including collection, processing and reconciliations of payments received, investor reporting and borrower customer support. Servicing fees are recorded net of any gains, losses or changes to fair value recognized in the underlying servicing rights and obligations, which are carried as assets and liabilities on our consolidated balance sheet. Upstart currently acts as loan-servicer for substantially all outstanding loans facilitated through the Upstart platform.

Interest Income and Fair Value Adjustments, Net

Interest income and fair value adjustments, net is comprised of interest income, interest expense and net changes in the fair value of financial instruments held on our consolidated balance sheets as part of our ongoing operating activities, excluding loan servicing assets and liabilities, common stock warrant liabilities and convertible preferred stock warrant liabilities. Interest income and fair value adjustments, net also includes the full amount of net interest income and expense incurred by consolidated variable interest entities, or VIEs, the majority of which has been historically allocated to third parties in the line item net (loss) income attributable to noncontrolling interests on our consolidated statements of operations and comprehensive income (loss). Interest income and fair value adjustments, net can fluctuate based on the fair value of financial instruments held on our consolidated balance sheet. This amount has historically been a small percentage of our total revenue, and we do not manage our business with a focus on growing this component of revenue.

Sales and Marketing

Sales and marketing expenses primarily consist of costs incurred across various advertising channels, including expenses for partnerships with third parties providing borrower referrals, direct mail and digital advertising campaigns, as well as other expenses associated with building overall brand awareness and experiential marketing costs. Sales and marketing expenses also include payroll and other personnel-related costs, including stock-based compensation expense. These costs are recognized in the period incurred. We expect that our sales and marketing expenses will increase in absolute dollars and may fluctuate as a percentage of our total revenue from period to period as we hire additional sales and marketing personnel, increase our marketing activities and build greater brand awareness.

[63] See Note 2 to our consolidated financial statements for more information about loan premium fees and trailing fees.

Customer Operations

Customer operations expenses include payroll and other personnel-related expenses, including stock-based compensation expense, for personnel engaged in borrower onboarding, loan servicing, customer support and other operational teams. These costs also include systems, third-party services and tools we use as part of loan servicing, information verification, fraud detection and payment processing activities. These costs are recognized in the period incurred. We expect that our customer operations expenses will increase in absolute dollars and may fluctuate as a percentage of our total revenue over time, as we expand our portfolio and increase the Number of Loans Transacted.

Engineering and Product Development

Engineering and product development expenses primarily consist of payroll and other personnel-related expenses, including stock-based compensation expense, for the engineering and product development teams as well the costs of systems and tools used by these teams. These costs are recognized in the period incurred. We expect that our engineering and product development expenses will increase in absolute dollars and may increase as a percentage of

our total revenue over time, as we expand our engineering and product development team to continue to improve our AI models and develop new products and product enhancements.

General, Administrative and Other

General, administrative and other expenses consist primarily of payroll and other personnel-related expenses, including stock-based compensation expense, for legal and compliance, finance and accounting, human resources and facilities teams, as well as depreciation and amortization of property, equipment and software, professional services fees, facilities and travel expenses. These costs are recognized in the period incurred. Following the completion of this offering, we expect to incur additional general, administrative and other expenses as a result of operating as a public company, including expenses related to compliance with the rules and regulations of the SEC, additional insurance expenses, investor relations activities and other administrative and professional services. We also expect to increase the size of our general and administrative function to support the growth of our business. As a result, we expect that our general, administrative and other expenses will increase in absolute dollars but may fluctuate as a percentage of our total revenue from period to period.

Other Income

Other income primarily consists of dividend income earned on our unrestricted cash balances and sublease income. Other income is recognized in the period earned. During the nine months ended September 30, 2020, other income also included the proceeds from a forgivable loan under the Paycheck Protection Program. For additional details, refer to Note 1 “Description of Business and Significant Accounting Policies” of our consolidated financial statements.

Expense on Warrants and Convertible Notes, Net

Expense on warrants and convertible notes, net is primarily comprised of the net changes in the fair value of our common and convertible preferred stock warrant liabilities, as well as interest expense on convertible notes outstanding in 2017 and 2018.

Results of Operations

The following table summarizes our historical consolidated statements of operations data:

	Year Ended December 31,			Nine Months Ended September 30,	
(In thousands)	**2017**	**2018**	**2019**	**2019**	**2020**
Revenue:					
Revenue from fees, net	$51,161	$88,482	$159,847	$ 98,699	$144,179
Interest income and fair value adjustments, net	6,128	10,831	4,342	2,918	2,527
Total revenue	57,289	99,313	164,189	101,617	146,706
Operating expenses:					
Sales and marketing[(1)]	33,838	63,633	93,175	61,236	65,113
Customer operations[(1)]	10,232	15,416	24,947	16,593	24,792
Engineering and product development[(1)]	5,324	8,415	18,777	11,480	24,651
General, administrative, and other[(1)]	15,431	19,820	31,865	20,399	30,778
Total operating expenses	64,825	107,284	168,764	109,708	145,334
(Loss) income from operations	(7,536)	(7,971)	(4,575)	(8,091)	1,372
Other income	330	487	1,036	832	5,497
Expense on warrants and convertible notes, net	(1,649)	(3,734)	(1,407)	(2,626)	(2,317)
Net (loss) income before income taxes	(8,855)	(11,218)	(4,946)	(9,885)	4,552
Provision for income taxes	6	—	74	—	—
Net (loss) income before attribution to noncontrolling interests	(8,861)	(11,218)	(5,020)	(9,885)	4,552
Net (loss) income attributable to noncontrolling interests	(1,144)	1,101	(4,554)	(3,368)	(404)
Net (loss) income attributable to Upstart Holdings, Inc. common stockholders	$(7,717)	$(12,319)	$(466)	(6,517)	$4,956

(1) Includes stock-based compensation expense as follows:

	Year ended December 31,			Nine Months Ended September 30,	
(In thousands)	**2017**	**2018**	**2019**	**2019**	**2020**
Sales and marketing	$32	$183	$278	$157	$1,136
Customer operations	124	178	433	252	625
Engineering and product development	574	753	1,803	932	3,181
General, administrative, and other	560	931	1,292	863	2,160

Total stock-based compensation	$1,290	$2,045	$3,806	$2,204	$7,102

Comparison of Nine Months Ended September 30, 2019 and 2020

Revenue

Revenue from Fees, Net

The following table set forth our revenue from fees, net in the periods shown:

	Nine Months Ended September 30,			
(In thousands)	**2019**	**2020**	**$ Change**	**% Change**
Platform and referral fees, net	$89,049	$123,485	$34,436	39%
Servicing fees, net	9,650	20,694	11,044	114%
Total revenue from fees, net	$98,699	$144,179	$45,480	46%

Revenue from fees, net increased $45.5 million, or 46%, in the nine months ended September 30, 2020, compared to the same period in 2019, which included an increase of $34.4 million in revenue from platform and referral fees, net and an increase of $11.0 million in servicing fees, net. The increase of the platform and referral fees net was primarily driven by a 30% increase in the Number of Loans Transacted from 136,468 in the nine months ended September 30, 2019 to 176,983 for the same period in 2020 as well as an increase in prices of our services in response to the market conditions caused by the COVID-19 pandemic. The increase in the servicing fees, net was primarily due to an 85% increase in outstanding loan principal, as well as a downward revaluation to the net liability of our servicing obligation.

Interest Income and Fair Value Adjustments, Net

	Nine Months Ended September 30,			
(In thousands)	**2019**	**2020**	**$ Change**	**% Change**
Operating entities[(1)]:				
Interest income	$10,655	$16,275	$5,620	53%
Interest expense	(5,187)	(4,655)	(532)	(10%)
Fair value adjustments, net	(1,873)	(9,675)	7,802	417%
Other consolidated entities[(2)]:				
Interest income	40,644	6,430	(34,214)	(84%)
Interest expense	(16,941)	(2,297)	(14,644)	(86%)
Fair value adjustments, net	(24,380)	(3,551)	(20,829)	(85%)
Total Company:				
Interest income	51,299	22,705	(28,594)	(56%)
Interest expense	(22,128)	(6,952)	(15,176)	(69%)
Fair value adjustments, net	(26,253)	(13,226)	(13,027)	(50%)
Total interest income and fair value adjustments, net	$2,918	$2,527	$(391)	(13%)

(1) Consist of balances recognized by entities participating in ongoing operating activities of the Company, including warehouse entities.

(2) Consists of balances recognized by other entities, including securitization entities and the fractional loan program (discontinued in 2019).

Interest income and fair value adjustments, net decreased $0.4 million, or 13%, in the nine months ended September 30, 2020, compared to the same period in 2019. The decrease was driven by a $34.2 million decline in interest income and a decline in interest expense and fair value adjustments, of $14.6 million and $20.8 million, respectively, recognized by other consolidated entities.

These decreases were due to a reduction of consolidated loan balances from securitization-related VIEs caused by the deconsolidation of previously consolidated securitizations 2017-1, 2017-2, and 2018-1. The deconsolidation of these entities was a result of the expiration of the related risk retention requirements, which caused us to conclude that we are no longer a primary beneficiary of these entities. For additional details, refer to Note 3, “Securitizations and Variable Interest Entities” of our consolidated financial statements. The decrease of the total net interest income and fair value adjustment was also caused by an increase of $7.8 million of fair value adjustments recognized by the operating entities. These negative adjustments were primarily due to the market changes caused by the COVID-19 pandemic. This increase was partially offset by an increase of $5.6 million of interest income in these entities. This increase was a result of an increased average loan balances held by the operating entities during these periods.

Operating Expenses

Sales and Marketing

	Nine Months Ended September 30,

(In thousands)	2019	2020	$ Change	% Change
Sales and marketing	$61,236	$65,113	$3,877	6%

Sales and marketing expenses increased by $3.9 million, or 6%, in the nine months ended September 30, 2020, compared to the same period in 2019. The increase was primarily due to a $2.1 million increase in payroll and other personnel-related expenses driven by increased headcount, as well as a $0.7 million increase in advertising and other traffic acquisition costs.

Customer Operations

	Nine Months Ended September 30,			
(In thousands)	2019	2020	$ Change	% Change
Customer Operations	$16,593	$24,792	$8,199	49%

Customer operations expenses increased by $8.2 million, or 49%, in the nine months ended September 30, 2020, compared to the same period in 2019. The increase was primarily due to an increase of $6.4 million in payroll and other personnel-related expenses due to an increase in headcount as well as increased spending of $1.7 million in information verification and platform operations due to a growing volume of loans facilitated through our platform.

Engineering and Product Development

	Nine Months Ended September 30,			
(In thousands)	2019	2020	$ Change	% Change
Engineering and product development	$11,480	$24,651	$13,171	115%

Engineering and product development expenses increased by $13.2 million, or 115%, in the nine months ended September 30, 2020, compared to the same period in 2019. The increase was primarily due to an increase of $10.2 million in payroll and other personnel-related expenses driven by an increase in headcount, as well as a $2.9 million increase in spending on consultants and other engineering support services.

General, Administrative, and Other

	Nine Months Ended September 30,			
(In thousands)	2019	2020	$ Change	% Change
General, administrative, and other	$20,399	$30,778	$10,379	51%

General, administrative, and other expenses increased by $10.4 million, or 51%, in the nine months ended September 30, 2020, compared to the same period in 2019. The increase was primarily due to an increase of $3.1 million in personnel-related costs as a result of increased headcount; an increase of $2.2 million in office rent and other facility-related expenses due to the opening of our second headquarters in Columbus, Ohio, and relocation of our first headquarters from San Carlos, California to San Mateo, California; an increase of $1.5 million in legal and compliance-related expenses; and an increase of $1.1 million in other professional services fees.

Other Income

	Nine Months Ended September 30,			
(In thousands)	2019	2020	$ Change	% Change
Other income	$832	$5,497	$4,665	561%

Other income increased by $4.7 million, or 561%, in the nine months ended September 30, 2020, compared to the same period in 2019. The increase was primarily due to receipt of funds under the PPP, totaling $5.3 million and an increase in unrestricted cash balances held in interest-bearing deposit accounts throughout the year at commercial banks, which was partially offset by a decrease in dividend income of $0.8 million.

Expense on Warrants and Convertible Notes, Net

	Nine Months Ended September 30,			
(In thousands)	2019	2020	$ Change	% Change
Expense on warrants and convertible notes, net	$(2,626)	$(2,317)	$(309)	(12%)

Expense on warrants and convertible notes decreased by $0.3 million, or 12%, in the nine months ended September 30, 2020, compared to the same period in 2019. The decrease was primarily a result of a lower number of instruments outstanding in 2020 due to a repurchase and retirement of certain warrants in the fourth quarter of 2019.

Comparison of the Years Ended December 31, 2017, 2018, and 2019

Revenue

Revenue from Fees, Net

The following table set forth our revenue from fees, net in the periods shown:

	Year Ended December 31,				
(In thousands)	2017	2018	2019	2017 to 2018 % Change	2018 to 2019 % Change

Platform and referral fees, net	$48,067	$83,381	$144,055	73%	73%
Servicing fees, net	3,094	5,101	15,792	65%	210%
Total revenue from fees, net	$51,161	$88,482	$159,847	73%	81%

2018 Compared to 2019 Revenue from fees, net increased $71.4 million, or 81%, in the year ended December 31, 2019, compared to the prior year. The increase was primarily due to an increase of $60.7 million in revenue from platform and referral fees, net. This increase was primarily driven by an 88% increase in the Number of Loans Transacted from 114,125 for the year ended December 31, 2018 to 215,122 for the year ended December 31, 2019. Servicing fees, net increased by $10.7 million due to a doubling in average outstanding loan principal, as well as a downward revaluation to the net liability of our servicing obligation.

2017 Compared to 2018 Revenue from fees, net increased $37.3 million, or 73%, in the year ended December 31, 2018 compared to the prior year, comprised primarily of an increase of $35.3 million in revenue from platform and referral fees, net. This increase was primarily due to an 62% increase in the Number of Loans Transacted from 70,457 for the year ended December 31, 2017 to 114,125 for the year ended December 31, 2018.

Interest Income and Fair Value Adjustments, Net

	Year Ended December, 31			2017 to 2018	2018 to 2019
(in thousands)	2017	2018	2019	% Change	% Change
Operating entities[1]:					
Interest income	$4,386	$9,924	$16,092	126%	62%
Interest expense	(2,335)	(4,818)	(7,184)	106%	49%
Fair value adjustments, net	646	(1,619)	(796)	(351%)	51%
Other consolidated entities[2]:					
Interest income	$16,748	$66,759	$47,221	299%	(29%)
Interest expense	(7,085)	(21,665)	(19,301)	206%	(11%)
Fair value adjustments, net	(6,232)	(37,750)	(31,690)	506%	(16%)
Total Company:					
Interest income	21,134	76,683	63,313	263%	17%
Interest expense	(9,420)	(26,483)	(26,485)	181%	0%
Fair value adjustments, net	(5,586)	(39,369)	(32,486)	605%	(17%)
Total interest income and fair value adjustments, net	$6,128	$10,831	$4,342	77%	(60%)

(1) Consist of balances recognized by entities participating in ongoing operating activities of the Company, including warehouse entities.

(2) Consists of balances recognized by other entities, including securitization entities and the fractional loan program (discontinued in 2019).

2018 Compared to 2019 Interest income and fair value adjustments, net decreased $6.5 million, or 60%, in the year ended December 31, 2019 compared to the prior year. The decrease was primarily driven by a $19.5 million decline in interest income due to a reduction of consolidated loan balances from other consolidated entities, including securitization-related VIEs, in the year ended December 31, 2019. This reduction was primarily a result of the change in the structure of the risk retention for securitizations sponsored by the Company, which allowed the Company to conclude that it is not a primary beneficiary of securitizations completed after the first half of 2018. For additional details, refer to Note 3, “Securitizations and Variable Interest Entities” of our consolidated financial statements. This decrease was partially offset by the increase of $6.2 million in the amount of interest income recognized by the operating entities due to a higher average loan balances held by operating entities as well as the lower amount of fair value adjustments to consolidated assets held by the other consolidated entities, which decreased by $6.0 million, primarily due to a reduction of consolidated loan balances from these entities.

2017 Compared to 2018 Interest income and fair value adjustments, net increased $4.7 million, or 77%, in the year ended December 31, 2018 compared to the prior year. The increase was primarily driven by the increase of $50.0 million in interest income due to growth in consolidated loan balances from other consolidated entities, including securitization-related VIEs, in the year ended December 31, 2018. The increase was a result of securitizations, for which the Company was a primary beneficiary, that were completed in late 2017 and early 2018. For additional details, refer to Note 3, “Securitizations and Variable Interest Entities” of our consolidated financial statements. The increase in the outstanding balance of loans on our consolidated balance sheets was primarily attributable to our securitization program, which launched in June of 2017 and increased during the year ended December 31, 2018. This increase was partially offset by an increase of $31.5 million in the fair value adjustments for assets held by these entities as well as a $14.6 million increase in interest expense recognized by these entities for the year ended December 31, 2018, which were primarily caused by an increase in related consolidated loan balances and senior securities issued against these securitized loan pools.

Operating Expenses

Sales and Marketing

	Year Ended December 31,			2017 to 2018	2018 to 2019
(In thousands)	2017	2018	2019	% Change	% Change
Sales and marketing	$33,838	$63,633	$93,175	88%	46%

2018 Compared to 2019 Sales and marketing expenses increased by $29.5 million, or 46%, in the year ended December 31, 2019 compared to the prior year. The increase was primarily due to increased spending of $26.8 million for partnerships with parties providing borrower referrals and a $1.6 million increase in payroll and other personnel-related expenses driven by increased headcount, as well as a $1.1 million increase in advertising and other traffic acquisition costs. As a percentage of total revenue, sales and marketing expenses decreased from 64% to 57%.

2017 Compared to 2018 Sales and marketing expenses increased by $29.8 million, or 88%, in the year ended December 31, 2018 compared to the prior year. The increase was primarily due to increased spending of $14.6 million in digital and direct mail advertising campaigns, as well as an increase of $13.5 million in spending for partnerships with parties providing borrower referrals. As a percentage of total revenue, sales and marketing expenses increased from 59% to 64%.

Customer Operations

	Year Ended December 31,			2017 to 2018	2018 to 2019
(In thousands)	2017	2018	2019	% Change	% Change
Customer operations	$10,232	$15,416	$24,947	51%	62%

2018 Compared to 2019 Customer operations expenses increased by $9.5 million, or 62%, in the year ended December 31, 2019 compared to the prior year. The increase was primarily due to an increase of $5.0 million in payroll and other personnel-related expenses due to increases in headcount, as well as increased spending of $4.4 million in information verification and platform operations due to a growing volume of loans facilitated through our platform. As a percentage of total revenue, customer operations expenses decreased from 16% to 15%.

2017 Compared to 2018 Customer operations expenses increased by $5.2 million, or 51%, in the year ended December 31, 2018 compared to the prior year. The increase was primarily due to an increase of $2.7 million in payroll and other personnel-related expenses due to increases in headcount, as well as increased spending of $2.3 million related to information verification and platform operations due to a growing volume of loans facilitated through our platform. As a percentage of total revenue, customer operations expenses decreased from 18% to 16%.

Engineering and Product Development

	Year Ended December 31,			2017 to 2018	2018 to 2019
(In thousands)	2017	2018	2019	% Change	% Change
Engineering and product development	$5,324	$8,415	$18,777	58%	123%

2018 Compared to 2019 Engineering and product development expenses increased by $10.4 million, or 123%, in the year ended December 31, 2019 compared to the prior year. The increase was primarily due to an increase of $8.9 million in payroll and other personnel-related expenses driven by an increase in headcount, as well as a $1.5 million increase in spending on consultants and other engineering services. As a percentage of total revenue, engineering and product development expenses increased from 8% to 11%.

2017 Compared to 2018 Engineering and product development expenses increased by $3.1 million, or 58%, in the year ended December 31, 2018 compared to the prior year. The increase was primarily due to an increase of $2.4 million in payroll and other personnel-related expenses driven by an increase in headcount, as well as a $0.7 million increase in spending on consultants and other engineering services. As a percentage of total revenue, engineering and product development expenses decreased from 9% to 8%.

General, Administrative, and Other

	Year Ended December 31,			2017 to 2018	2018 to 2019
(In thousands)	2017	2018	2019	% Change	% Change
General, administrative, and other	$15,431	$19,820	$31,865	28%	61%

2018 Compared to 2019 General, administrative, and other expenses increased by $12.0 million, or 61%, in the year ended December 31, 2019 compared to the prior year. The increase was primarily due to an increase of $6.0 million in personnel-related costs as a result of increased headcount; an increase of $2.6 million in office rent and other facility-related expenses due to the opening of our second headquarters in Columbus, Ohio, and relocation of our first headquarters from San Carlos, California to San Mateo, California; an increase of $1.1 million in legal and compliance-related expenses; and an increase of $1.0 million in professional services fees. As a percentage of total revenue, general, administrative, and other expenses decreased from 20% to 19%.

2017 Compared to 2018 General, administrative, and other expenses increased by $4.4 million, or 28%, in the year ended December 31, 2018 compared to the prior year. The increase was primarily due to an increase of $3.4 million in personnel-related costs as a result of increased headcount; an increase of $2.0 million in office and administrative related expenses; and an increase of $0.7 million in legal and compliance-related expenses. This increase was partially offset by a $2.2 million decrease in professional fees. As a percentage of total revenue, general, administrative, and other expenses decreased from 27% to 20%.

Other Income

	Year Ended December 31,			2017 to 2018	2018 to 2019
(In thousands)	2017	2018	2019	% Change	% Change
Other income	$330	$487	$1,036	48%	113%

2018 Compared to 2019 Other income increased by $0.5 million, or 113%, in the year ended December 31, 2019 compared to the prior year. The increase was primarily due to an increase in unrestricted cash balances held in interest-bearing deposit accounts throughout the year at commercial banks.

2017 Compared to 2018 Other income increased by $0.2 million, or 48%, in the year ended December 31, 2018 compared to the prior year. The increase was primarily due to an increase in unrestricted cash balances held in interest-bearing deposit accounts at commercial banks.

Expense on Warrants and Convertible Notes, Net

	Year Ended December 31,			2017 to 2018	2018 to 2019
(In thousands)	2017	2018	2019	% Change	% Change
Expense on warrants and convertible notes, net	$1,649	$3,734	$1,407	126%	(62)%

2018 Compared to 2019 Expense on warrants and convertible notes decreased by $2.3 million, or 62%, in the year ended December 31, 2019 compared to the prior year. The decrease was primarily due to a decrease of $2.1 million in the fair value of outstanding convertible preferred stock warrants as a result of warrants exercised or repurchased and retired during the year, and a decrease in interest expense on convertible notes of $0.7 million as the convertible notes were converted into convertible preferred stock in the year ended December 31, 2018. The decrease was partially offset by an increase of $0.5 million in the fair value of common stock warrants.

2017 Compared to 2018 Expense on warrants and convertible notes increased by $2.1 million, or 126%, in the year ended December 31, 2018 compared to the prior year. The increase was primarily due to an increase of $1.5 million in the fair value of outstanding convertible preferred stock warrants as well as an increase in interest expense on convertible notes of $0.4 million, which were issued in September and October 2017 and converted into Series C-1 convertible preferred stock in June 2018.

Quarterly Results of Operations

The following table sets forth our unaudited quarterly consolidated results of operations for each of the quarterly periods for the last eight quarters. These unaudited quarterly results of operations have been prepared on the same basis as our audited consolidated financial statements included elsewhere in this prospectus. In the opinion of management, the financial information set forth in the table below reflects all normal recurring adjustments necessary for a fair presentation of the results of operations for these periods. Our historical results are not necessarily indicative of the results that may be expected in the future. The following unaudited quarterly consolidated results of operations should be read in conjunction with our consolidated financial statements and related notes included elsewhere in this prospectus.

	Three Months Ended							
(in thousands)	Dec. 31, 2018	Mar. 31, 2019	June 30, 2019	Sept. 30, 2019	Dec. 31, 2019	Mar. 31, 2020	June 30, 2020	Sept. 30, 2020
Revenue:								
Revenue from fees, net	$23,694	$22,242	$28,558	$47,899	$61,148	$68,013	$13,305	$62,861
Interest income and fair value adjustments, net	197	(2,631)	3,961	1,588	1,424	(4,019)	4,048	2,498
Total revenue	23,891	19,611	32,519	49,487	62,572	63,994	17,353	65,359
Operating expenses:								
Sales and marketing[(1)]	17,109	14,593	19,314	27,329	31,939	35,952	5,436	23,725
Customer operations[(1)]	4,076	4,518	5,386	6,689	8,354	8,811	6,621	9,360
Engineering and product development[(1)]	2,314	2,932	3,485	5,063	7,297	7,018	7,667	9,966
General, administrative, and other[(1)]	4,692	6,022	5,959	8,418	11,466	11,660	9,017	10,101
Total operating expenses	28,191	28,065	34,144	47,499	59,056	63,441	28,741	53,152
(Loss) income from operations	(4,300)	(8,454)	(1,625)	1,988	3,516	553	(11,388)	12,207
Other income	267	358	249	225	204	150	5,297	50
(Expense) income on warrants and convertible notes, net	(1,593)	(89)	(119)	(2,418)	1,219	289	(18)	(2,588)
Net (loss) income before income taxes	(5,626)	(8,185)	(1,495)	(205)	4,939	992	(6,109)	9,669
Provision for income taxes	—	—	—	—	74	—	—	—
Net (loss) income before attribution to noncontrolling interests	(5,626)	(8,185)	(1,495)	(205)	4,865	992	(6,109)	9,669
Net (loss) income attributable to noncontrolling interests	(1,014)	(3,720)	235	117	(1,186)	(488)	84	—

Net (loss) income attributable to Upstart Holdings, Inc. common stockholders	$(4,612)	$(4,465)	$(1,730)	$(322)	$6,051	$1,480	$(6,193)	$9,669

(1) Includes stock-based compensation expense as follows (in thousands):

	Three Months Ended							
	Dec. 31, 2018	Mar. 31, 2019	June 30, 2019	Sept. 30, 2019	Dec. 31, 2019	Mar. 31, 2020	June 30, 2020	Sept. 30, 2020
Sales and marketing	$50	$51	$55	$51	$121	$284	$405	$447
Customer operations	48	59	91	102	181	199	205	221
Engineering and product development	214	234	322	376	871	926	1,112	1,143
General, administrative, and other	296	233	312	318	429	556	797	807
Total stock-based compensation	$608	$577	$780	$847	$1,602	$1,965	$2,519	$2,618

The following table provides the key operating metrics we use to evaluate our business for each of the last eight quarters:

	Three Months Ended							
(in thousands, except percentages)	Dec. 31, 2018	Mar. 31, 2019	June 30, 2019	Sept. 30, 2019	Dec. 31, 2019	Mar. 31, 2020	June 30, 2020	Sept. 30, 2020
Number of Loans Transacted	33,036	30,998	41,211	64,259	78,654	84,214	11,876	80,893
Conversion Rate	10.7%	10.8%	11.3%	13.8%	14.9%	14.1%	8.7%	15.2%
Percentage of Loans Fully Automated	58%	59%	64%	67%	69%	70%	58%	69%

The following table provides the non-GAAP financial measures we use to evaluate our business for each of the last eight quarters:

	Three Months Ended							
(in thousands)	Dec. 31, 2018	Mar. 31, 2019	June 30, 2019	Sept. 30, 2019	Dec. 31, 2019	Mar. 31, 2020	June 30, 2020	Sept. 30, 2020
Contribution Profit	$3,875	$4,556	$5,479	$15,525	$23,380	$25,660	$4,256	$33,780
Adjusted EBITDA	$(2,326)	$(3,709)	$(734)	$3,080	$6,958	$3,671	$(3,121)	$15,456

The following table provides the calculation of Contribution Profit for each of the last eight quarters:

	Three Months Ended							
(in thousands)	Dec. 31, 2018	Mar. 31, 2019	June 30, 2019	Sept. 30, 2019	Dec. 31, 2019	Mar. 31, 2020	June 30, 2020	Sept. 30, 2020
Referral fees, net	$14,141	$13,042	$16,938	$26,137	$34,555	$38,219	$4,597	$38,012
Platform fees, net	7,826	7,267	9,532	16,133	20,451	22,011	3,015	17,631
Servicing fees, net	1,727	1,933	2,088	5,629	6,142	7,783	5,693	7,218
Revenue from fees, net	23,694	22,242	28,558	47,899	61,148	68,013	13,305	62,861
Borrower acquisition costs	(16,260)	(13,724)	(18,466)	(26,575)	(30,804)	(34,703)	(3,578)	(21,183)
Borrower verification and servicing costs	(3,559)	(3,962)	(4,613)	(5,799)	(6,964)	(7,650)	(5,471)	(7,898)
Total direct expenses	(19,819)	(17,686)	(23,079)	(32,374)	(37,768)	(42,353)	(9,049)	(29,081)
Contribution profit	$3,875	$4,556	$5,479	$15,525	$23,380	$25,660	$4,256	$33,780

See the section titled “Reconciliation of Non-GAAP Financial Measures” for a reconciliation of loss from operations to Contribution Profit and of net loss attributable to Upstart Holdings, Inc. common stockholders to Adjusted EBITDA.

Quarterly Trends

Revenue from Fees, Net Revenue from fees, net trended upwards on an annual basis, but fluctuated during the quarters presented. Revenue from fees, net is highly correlated with the Number of Loans Transacted on our platform during the period. The increase in revenue from the second quarter of 2019 to the first quarter of 2020 was primarily a result of the overall growth of our business, continuous improvements to our AI models and technology, and our ability to streamline and automate the loan application and origination process. The changes in the second and the third quarter of 2020 were driven by the impact of the COVID-19 pandemic on our business and a recovery from it, respectively.

Interest Income and Fair Value Adjustments, Net Interest income and fair value adjustments, net fluctuated quarterly primarily due to the outstanding balance of loans included in our consolidated balance sheets and changes to the characteristics of such loans, such as the average age of the loans and the interest rates of the loans, during the respective periods presented. The decrease in interest income and fair value adjustment in the first quarter of 2020 was primarily due to the market changes caused by the COVID-19 pandemic.

Sales and Marketing

Sales and marketing expenses trended upwards on an annual basis, but fluctuated during the quarters presented. The overall increase and the changes between different periods are primarily driven by the timing and extent of borrower acquisition and marketing initiatives across various channels. The changes in the second and the third quarter of 2020 were driven by decreased spending on marketing campaigns as a result of the COVID-19 pandemic and a recovery from it, respectively.

Customer Operations

Similar to sales and marketing, customer operations trended upwards on an annual basis but fluctuated during the quarters presented primarily due variability in the Number of Loans Transacted. The increase was primarily due to increases in payroll and personnel-related expenses driven by increases in our headcount, as well as an overall increase in spending related to our information verification and platform operations due to the growing volume of loans facilitated through our platform. The changes in the second and the third quarter of 2020 were driven by decreased spending on information verification as a result of the COVID-19 pandemic on our business and a recovery from it, respectively.

Engineering and Product Development Engineering and product development generally increased for the quarters presented. This was primarily due to increases in payroll and personnel-related expenses driven by increases in our headcount, as well as increases in infrastructure-related costs.

General, Administrative and Other General, administrative and other expenses have trended upwards on an annual basis but fluctuated during the quarters presented. The overall increase is reflective of increasing costs of fees for professional services, including legal and financial services as well an increase in personnel-related costs driven by additions of legal, human resources, and finance personnel. In the second half of 2019, general, administrative and other expenses also increased as a result of an increase in office rent and other facility-related expenses due to the opening of our second headquarters in Columbus, Ohio and relocation of our first headquarters from San Carlos, California, to San Mateo, California.

(Expense) Income on Warrants and Convertible Notes, Net Expense on warrants and convertible notes, net fluctuated during the quarters presented and reflect the variable nature and timing of the increases and decreases in the fair value of outstanding common stock warrants and convertible preferred stock warrants, which highly correlate with the valuation of the underlying securities. We recorded income on warrants and convertible notes reported in the fourth quarter of 2019 due to a gain on repurchase and retirement of convertible preferred stock warrants.

Number of Loans Transacted Number of Loans Transacted trended upwards on an annual basis but fluctuated during the quarters presented. The overall increase was primarily a result of continuous improvements to our AI models and technology, and our ability to streamline and automate the loan application and origination process. However, such improvements could occasionally impact transaction volume negatively. For example, an upgrade to our AI models in the fourth quarter of 2018 related to prepayment predictions led to a temporary decrease in the total number of loans transacted. In addition, we experience significant seasonality in the demand for Upstart-powered loans, which is generally lower in the first quarter. This seasonal slowdown is primarily attributable to high loan demand around the holidays in the fourth quarter and the general increase in borrowers' available cash flows in the first quarter, including cash received from tax refunds, which temporarily reduces borrowing needs. The changes in the second and the third quarter of 2020 were driven by the impact of the COVID-19 pandemic on our business and a recovery from it, respectively.

Conversion Rate

Conversion Rate has trended upwards on an annual basis but fluctuated during the quarters presented. The overall increase was primarily a result of continuous improvements to our AI models and technology. Historically, our Conversion Rate has benefitted from improvements to our technology, which have made our evaluation of risk more accurate and our verification process more automated, or from the addition of bank partners that have made our offers more competitive. The changes in the second and the third quarter of 2020 were driven by the impact of the COVID-19 pandemic on our business and a recovery from it, respectively.

Percentage of Loans Fully Automated Percentage of Loans Fully Automated has trended upwards on an annual basis, but fluctuated during the quarters presented. The overall increase was primarily a result of continuous improvements to our AI models and technology. Better AI models increased our ability to rapidly streamline and automate the loan application and origination process on our platform. The changes in the second and the third quarter of 2020 were driven by the impact of the COVID-19 pandemic on our business and a recovery from it, respectively.

Contribution Profit

Contribution Profit (which is a function of revenue from fees, net and borrower acquisition cost and borrower verification and servicing cost) is highly correlated with the Number of Loans Transacted on our platform during the period and trended upwards on an annual basis but fluctuated during the quarters presented. The overall increase was primarily due to improvements to borrower acquisition efforts and our operating efficiency. The quarterly fluctuations are primarily due to the timing and extent of borrower acquisition and marketing initiatives across various channels. The changes in the second and the third quarter of 2020 are driven by the impact of the COVID-19 pandemic on our business and a recovery from it, respectively. See the section titled "Reconciliation of Non-GAAP Financial Measures" for a reconciliation of loss from operations to Contribution Profit.

Adjusted EBITDA

Adjusted EBITDA trended upwards on an annual basis but fluctuated during the quarters presented. Adjusted EBITDA is highly correlated with the Number of Loans Transacted on our platform during the period. The overall increase was primarily due to business growth outpacing expense growth. The changes in the second and the third quarter of 2020 are driven by the impact of the COVID-19 pandemic on our business and a recovery from it, respectively. See the section titled "Reconciliation of Non-GAAP Financial Measures" for a reconciliation of net loss attributable to Upstart Holdings, Inc. common stockholders to Adjusted EBITDA.

Reconciliation of Non-GAAP Financial Measures

To supplement our consolidated financial statements prepared and presented in accordance with GAAP, we use the non-GAAP financial measures Contribution Profit and Adjusted EBITDA to provide investors with additional information about our financial performance and to enhance the overall understanding of our past performance and future prospects. We are presenting these non-GAAP financial measures because we believe they provide an additional tool for investors to use in comparing our core financial performance over multiple periods with the performance of other companies.

However, non-GAAP financial measures have limitations in their usefulness to investors because they have no standardized meaning prescribed by GAAP and are not prepared under any comprehensive set of accounting rules or principles. In addition, non-GAAP financial measures may be calculated differently from, and therefore may not be directly comparable to, similarly titled measures used by other companies. As a result, non-GAAP financial measures should be viewed as supplementing, and not as an alternative or substitute for, our consolidated financial statements prepared and presented in accordance with GAAP.

To address these limitations, we provide a reconciliation of Contribution Profit and Adjusted EBITDA to loss from operations and net loss attributable to Upstart Holdings, Inc. common stockholders, respectively. We encourage investors and others to review our financial information in its entirety, not to rely on any single financial measure and to view Contribution Profit and Adjusted EBITDA in conjunction with their respective related GAAP financial measures.

Contribution Profit

We use Contribution Profit as part of our overall assessment of our performance, including the preparation of our annual operating budget and quarterly forecasts, to evaluate the effectiveness of our business strategies, and to communicate with our board of directors concerning our financial performance. We believe Contribution Profit is useful to investors for period-to period comparisons of our business and in evaluating and understanding our operating results and ability to scale. Contribution Profit is also useful to investors because our management uses Contribution Profit, in conjunction with financial measures prepared in accordance with GAAP, to evaluate our operating results and financial performance and the effectiveness of our strategies.

Contribution Profit has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for analysis of our results as reported under GAAP. Contribution Profit is not a GAAP financial measure of, nor does it imply, profitability. Even if our revenue exceeds variable expenses over time, we may not be able to achieve or maintain profitability, and the relationship of revenue to variable expenses is not necessarily indicative of future performance. Contribution Profit does not reflect all of our variable expenses and involves some judgment and discretion around what costs vary directly with loan volume. Other companies that present contribution profit calculate it differently and, therefore, similarly titled measures presented by other companies may not be directly comparable to ours.

The following tables presents a reconciliation of loss from operations to Contribution Profit:

	Year Ended December 31,			Nine Months Ended September 30,	
(In thousands)	**2017**	**2018**	**2019**	**2019**	**2020**
Income (loss) from operations	$(7,536)	$(7,971)	$(4,575)	$(8,901)	$1,372
Sales and marketing, net of borrower acquisition costs[(1)]	1,061	1,975	3,606	2,471	5,650
Customer operations, net of borrower verification and servicing costs[(2)]	1,113	1,690	3,609	2,219	3,773
Engineering and product development	5,324	8,415	18,777	11,480	24,651
General, administrative, and other	15,431	19,820	31,865	20,399	30,778
Interest income and fair value adjustments, net	(6,128)	(10,831)	(4,342)	(2,918)	(2,527)
Contribution Profit	$9,265	$13,098	$48,940	$25,560	$63,697

(1) Borrower acquisition costs were $32.8 million, $61.7 million and $89.6 million for the years ended December 31, 2017, 2018 and 2019, respectively, and $58.8 million and $59.5 million in the nine months ended September 30, 2019 and 2020, respectively. Borrower acquisition costs consist of our sales and marketing expenses adjusted to exclude costs not directly attributable to attracting a new borrower, such as payroll-related expenses for our business development and marketing teams, as well as other operational, brand awareness and marketing activities.

(2) Borrower verification and servicing costs were $9.1 million, $13.7 million and $21.3 million for the years ended December 31, 2017, 2018 and 2019, respectively, and $14.4 million and $21.0 million in the nine months ended September 30, 2019 and 2020, respectively. Borrower verification and servicing costs consist of payroll and other personnel-related expenses for personnel engaged in loan onboarding, verification and servicing, as well as servicing system costs. It excludes payroll and personnel-related expenses and stock-based compensation for certain members of our customer operations team whose work is not directly attributable to onboarding and servicing loans.

	Three Months Ended							
(in thousands)	**Dec. 31, 2018**	**Mar. 31, 2019**	**June 30, 2019**	**Sept. 30, 2019**	**Dec. 31, 2019**	**Mar. 31, 2020**	**June 30, 2020**	**Sept. 30, 2020**
Income (loss) from operations	$(4,300)	$(8,454)	$(1,625)	$1,988	$3,516	$553	$(11,388)	$12,207
Sales and marketing, net of borrower acquisition costs[(1)]	849	869	848	754	1,135	1,249	1,858	2,542
Customer operations, net of borrower verification and servicing costs[(2)]	517	556	773	890	1,390	1,161	1,150	1,462
Engineering and product development	2,314	2,932	3,485	5,063	7,297	7,018	7,667	9,966

General, administrative, and other	4,692	6,022	5,959	8,418	11,466	11,660	9,017	10,101
Interest income and fair value adjustments, net	(197)	2,631	(3,961)	(1,588)	(1,424)	4,019	(4,048)	(2,498)
Contribution Profit	$3,875	$4,556	$5,479	$15,525	$23,380	$25,660	4,256	$33,780

(1) Borrower acquisition costs were $16.3 million for the three months ended December 31, 2018; $13.7 million, $18.5 million, $26.6 million, and $30.8 million for the three months ended March 31, 2019, June 30, 2019, September 30, 2019 and December 31, 2019, respectively; $34.7 million, $3.6 million, and $21.2 million for the three months ended March 31, 2020, June 30, 2020, and September 30, 2020, respectively. Borrower acquisition costs consist of our sales and marketing expenses adjusted to exclude costs not directly attributable to attracting a new borrower, such as payroll-related expenses for our business development and marketing teams, as well as other operational, brand awareness and marketing activities.

(2) Borrower verification and servicing costs were $3.6 million for the three months ended December 31, 2018; $4.0 million, $4.6 million, $5.8 million and $7.0 million for the three months ended March 31, 2019, June 30, 2019, September 30, 2019 and December 31, 2019, respectively, $7.7 million, $5,5 million, and $7.9 million for the three months ended March 31, 2020, June 30, 2020, and September 30, 2020, respectively. Borrower verification and servicing costs consist of payroll and other personnel-related expenses for personnel engaged in loan onboarding, verification and servicing, as well as servicing system costs. It excludes payroll and personnel-related expenses and stock-based compensation for certain members of our customer operations team whose work is not directly attributable to onboarding and servicing loans.

Adjusted EBITDA

We believe that Adjusted EBITDA is useful for investors to use in comparing our financial performance with the performance of other companies for the following reasons:

- Adjusted EBITDA is widely used by investors and securities analysts to measure a company's operating performance without regard to items such as stock-based compensation expense, depreciation and interest expense, that can vary substantially from company to company depending upon their financing and capital structures, and the method by which assets were acquired; and
- Adjusted EBITDA provides consistency and comparability with our past financial performance, and facilitates comparisons with other companies, many of which use similar non-GAAP financial measures to supplement their GAAP results.

Our use of Adjusted EBITDA has limitations as an analytical tool, and you should not consider this measure in isolation or as a substitute for analysis of our financial results as reported under GAAP. Some of these limitations are as follows:

- Although depreciation expense is a non-cash charge, the assets being depreciated may have to be replaced in the future, and Adjusted EBITDA does not reflect cash capital expenditure requirements for such replacements or for new capital expenditure requirements;
- Adjusted EBITDA excludes stock-based compensation expense, which has been, and will continue to be for the foreseeable future, a significant recurring expense for our business and an important part of our compensation strategy;
- Adjusted EBITDA does not reflect: (1) changes in, or cash requirements for, our working capital needs; (2) interest expense, or the cash requirements necessary to service interest or principal payments on our debt, which reduces cash available to us; or (3) tax payments that may represent a reduction in cash available to us; and
- the expenses and other items that we exclude in our calculation of Adjusted EBITDA may differ from the expenses and other items, if any, that other companies may exclude from Adjusted EBITDA when they report their operating results.

Because of these limitations, Adjusted EBITDA should be considered along with other operating and financial performance measures presented in accordance with GAAP. The following table provides a reconciliation of net loss attributable to Upstart Holdings, Inc. common stockholders to Adjusted EBITDA:

	Year Ended December 31,			Nine Months Ended September 30,	
(In thousands)	**2017**	**2018**	**2019**	**2019**	**2020**
Net (loss) income attributable to Upstart Holdings, Inc. common stockholders	$(7,717)	$(12,319)	$(466)	$(6,517)	$4,956
Adjusted to exclude the following:					
Stock-based compensation	1,290	2,045	3,806	2,204	7,102
Depreciation and amortization	93	314	774	324	1,631
Expense on warrants and convertible notes, net[(1)]	1,649	3,734	1,407	2,626	2,317
Provision for income taxes	6	—	74	—	—
Adjusted EBITDA	$(4,679)	$(6,226)	$5,595	$(1,363)	$16,006

(1) Consists of fair value adjustments to our warrant liability and interest expense on convertible notes.

	Three Months Ended							
(in thousands)	**Dec. 31, 2018**	**Mar. 31, 2019**	**June 30, 2019**	**Sept. 30, 2019**	**Dec. 31, 2019**	**Mar. 31, 2020**	**June 30, 2020**	**Sept. 30, 2020**

Net income (loss) attributable to Upstart Holdings, Inc. common stockholders	$(4,612)	$(4,465)	$(1,730)	$(322)	$6,051	$1,480	$(6,193)	$9,669
Adjusted to exclude the following:								
Stock-based compensation	608	577	780	847	1,602	1,965	2,519	2,618
Depreciation and amortization	85	90	97	137	450	515	535	581
Expense on warrants and convertible notes, net[(1)]	1,593	89	119	2,418	(1,219)	(289)	18	2,588
Provision on income taxes	—	—	—	—	74	—	—	—
Adjusted EBITDA	$(2,326)	$(3,709)	$(734)	$3,080	$6,958	$3,671	$(3,121)	$15,456

(1) Consists of fair value adjustments to our warrant liability and interest expense on convertible notes.

Liquidity and Capital Resources

Since inception, we have financed our operations, corporate investments, and capital expenditures primarily through the sale of convertible preferred stock, term loans and draws on our revolving credit facilities, and cash generated from operations. We have also periodically issued convertible promissory notes, none of which were outstanding as of September 30, 2020.

Our outstanding debt consists of borrowings from term loan agreements, advances on our revolving credit facilities, including our warehouse credit facilities, and amounts borrowed under loan and security agreements to finance risk retention balances for certain unconsolidated securitizations we sponsor. As of September 30, 2020, we had an aggregate principal balance of $100.7 million outstanding, of which $30.4 million is due within the next 12 months. See “Note 7. Borrowings” to our consolidated financial statements included elsewhere in this prospectus for further information.

As of September 30, 2020, our primary source of liquidity was cash of $53.2 million. Changes in the balance of cash are generally a result of working capital fluctuations or the timing of purchases of loans facilitated through our platform. To finance purchases of certain loans facilitated through our platform, we rely on our warehouse credit facility, which allows us to borrow up to an aggregate of $100.0 million through the special-purpose trust, or the warehouse trust. Loans purchased by the trust are classified as held-for-sale and can be sold to third-party investors or in securitization transactions to generate additional liquidity. As of September 30, 2020, the amount borrowed under this credit facility was $52.7 million.

We believe that our cash on hand, funds available from our revolving credit facilities, amounts borrowed under our term loans, and our cash flow from operations will be sufficient to meet our liquidity needs for at least the next 12 months. Our future capital requirements will depend on multiple factors, including our revenue growth, working capital requirements, volume of loan purchases for product development purposes and our capital expenditures.

To the extent our cash balances, cash generated by operations, revolving credit facilities, term loans and the proceeds from this offering are insufficient to satisfy our liquidity needs in the future, we may need to raise additional capital through equity or debt financing and may not be able to do so on terms acceptable to us or at all. If we are unable to raise additional capital when needed, our results of operations and financial condition would be materially and adversely impacted.

Term Loans

In 2016, we, along with our wholly owned subsidiary, Upstart Network, Inc., or UNI, as the co-borrower, entered into a loan and security agreement, or LSA, with a third-party lender to obtain a term loan of $5.5 million. The term loan matures on December 1, 2020 and is payable in monthly installments of principal and interest. The loan bears a floating interest of prime rate plus 1.75% per annum. In 2018, we entered into a mezzanine loan and security agreement with the same lender to obtain a second term loan of up to $15.0 million, or the Mezzanine Loan. The Mezzanine Loan bears interest at the greater of prime rate plus 5.25% or 10.00% per annum and matures on October 1, 2021. As of September 30, 2020, the outstanding principal balance of these loans was $15.6 million.

Revolving Credit Facility

Our revolving credit facility has an aggregate credit limit of $5.5 million and as of September 30, 2020, we were fully drawn on such facility. In June 2020, the original maturity date of the facility was extended from June 1, 2020 to December 1, 2020 when the outstanding principal and any accrued and unpaid interest are due and payable in full. Our revolving credit facility bears floating interest rates, payable on a monthly basis, and contains certain financial covenants. Failure to comply with these covenants may result in an acceleration of payment on the outstanding principal and accrued interest. Borrowings under the revolving credit facility are secured by all assets of the company, excluding assets of consolidated securitizations and cash and restricted cash related to other borrowing arrangements. We have in the past not been in compliance with certain financial covenants under our revolving credit facility; however, we have received waivers for all such instances of past non-compliance.

Warehouse Credit Facilities

We have entered into two warehouse credit facilities with separate third-party lenders through our warehouse trusts, which are consolidated VIEs. On November 2, 2020, we repaid all outstanding borrowings under one of our warehouse credit facilities in the amount of $4.0 million and terminated the corresponding warehouse credit facility. The remaining warehouse facility is used to fund purchases of personal whole loans originated by certain bank partners on our platform; the assets of the warehouse trust secure the borrowings provided by the warehouse lender and are not available to settle claims of our general creditors. In May 2020, the maturity date of this credit facility, with a borrowing limit of $100.0 million, was extended to May 2022 when repayment of any outstanding principal, together with any accrued interest and unpaid interest, is due and payable. As of September 30, 2020, we have borrowed $52.7 million under this warehouse credit facility and may continue to borrow under this warehouse credit facility until May 2021. Our warehouse

credit facility bears floating interest rates, payable on a monthly basis, and contain certain financial covenants. Failure to comply with these covenants may result in an acceleration of payment on outstanding principal and accrued interest. As of December 31, 2018 and 2019, and September 30, 2020, we were in compliance with the applicable covenants under our remaining warehouse credit facility.

Risk Retention Funding Loans

We obtained financing under two loan and security agreements to fund the purchase of securitization notes and residual certificates issued by certain of our consolidated VIEs in our sponsored securitization transactions. These purchases were made in the amounts required to satisfy the requirements of U.S. risk retention regulations. The loans under these agreements bear interest at rates of 4.00% and 4.33% per annum. Interest is paid using cash distributions received monthly on the related securitization notes and residual certificates held by these entities. As of September 30, 2020, the aggregate outstanding principal amount of these loans was $9.4 million. These borrowings are solely obligations of these consolidated VIEs and are not available to satisfy potential claims of our creditors.

Cash Flows

The following table summarizes our cash flows during the periods indicated:

	Year ended December 31,			Nine Months Ended September 30,	
(In thousands)	**2017**	**2018**	**2019**	**2019**	**2020**
Net cash (used in) provided by operating activities	$10,357	$50,338	$31,582	$21,027	$(52,817)
Net cash (used in) provided by investing activities	(393,421)	(137,237)	45,433	53,520	127,710
Net cash (used in) provided by financing activities	412,715	135,766	(119,190)	(96,733)	(44,312)
Net (decrease) increase in cash and restricted cash	$29,651	$48,867	$(42,175)	$(22,186)	$30,581

Net Cash from Operating Activities

Our main sources of cash provided by operating activities are our revenue from fees earned under contracts with bank partners and loan investors and interest income we receive for loans held on our balance sheet.

Our main uses of cash in our operating activities include payments to marketing partners, vendor payments, payroll and other personnel-related expenses, payments for facilities, and other general business expenditures.

Net cash used in operating activities was $52.8 million for the nine months ended September 30, 2020, which primarily consisted of a $84.0 million change in net operating assets and liabilities, offset by a change in fair value of financial instruments of $18.8 million, net income before attribution to noncontrolling interests of $4.6 million and stock-based compensation of $7.1 million. The change in fair value of financial instruments was primarily due to a decrease in the fair value of loans. The change in net operating assets and liabilities was mainly related to a $109.1 million increase in purchases of loans held for sale.

Net cash provided by operating activities was $21.0 million for the nine months ended September 30, 2019, which primarily consisted of a net loss before attribution to noncontrolling interests of $9.9 million, offset by a change in fair value of financial instruments of $29.6 million. The change in fair value of financial instruments was primarily related to a $33.1 million decrease in the fair value of loans, partially offset by a $4.3 million decrease in the fair value of payable to securitization note holders and residual certificate holders.

Net cash provided by operating activities was $31.6 million for the year ended December 31, 2019, which primarily consisted of a net loss before attribution to noncontrolling interests of $5.0 million, offset by a change in fair value of financial instruments of $34.7 million. The change in fair value of financial instruments was primarily related to a $42.1 million decrease in the fair value of loans held-for-investment, partially offset by a $6.1 million decrease in the fair value of payable to securitization note holders and residual certificate holders.

Net cash provided by operating activities was $50.3 million for the year ended December 31, 2018, which primarily consisted of a net loss before attribution to noncontrolling interests of $11.2 million, offset by a change in fair value of financial instruments of $42.3 million and a $14.0 million change in net operating assets and liabilities. The change in fair value of financial instruments was primarily related to a $45.8 million decrease in the fair value of loans held-for-investment. The change in net operating assets and liabilities was mainly related to a $14.1 million increase in payable to investors.

Net cash provided by operating activities was $10.4 million for the year ended December 31, 2017, which primarily consisted of a net loss before attribution to noncontrolling interests of $8.9 million and a change in fair value of financial instruments of $5.2 million, offset by a $21.0 million change in net operating assets and liabilities. The change in fair value of financial instruments was primarily related to a $12.3 million decrease in the fair value of payable to securitization note holders and residual certificate holders, partially offset by a $9.5 million decrease in the fair value of loans held-for-investment. The change in net operating assets and liabilities was mainly related to a $23.5 million increase in payable to investors.

Net Cash from Investing Activities

Our primary sources of cash from investing activities are principal repayments received on loans held-for-investment through credit facilities and held by consolidated securitizations, proceeds from the sale of loans and payments on residual certificates held for risk retention purposes in sponsored securitizations.

The primary use of cash for investing activities includes purchases of loans held-for investment, including loans collateralized in consolidated securitizations, as well as purchases of securitization notes and residual certificates to fulfill risk retention requirements in securitizations we have sponsored in the past.

Net cash provided by investing activities was $127.7 million for the nine months ended September 30, 2020 as a result of $88.1 million of net proceeds from sale of loans and $36.3 million of principal payments received for loans.

Net cash provided by investing activities was $53.5 million for the nine months ended September 30, 2019 as a result of $170.9 million of principal payments received on loans, $64.2 million net proceeds from sale of loans, which were partially offset by and $185.3 million of purchase of loans held-for-investment.

Net cash provided by investing activities was $45.4 million for the year ended December 31, 2019 as a result of $207.0 million of principal payments received on loans and $100.7 million in net proceeds from the sale of loans, which were partially offset by $265.3 million in purchase of loans held-for-investment.

Net cash used in investing activities was $137.2 million for the year ended December 31, 2018 as a result of $421.1 million in purchases of loans, which was partially offset by $238.0 million in principal payments received on loans and $45.7 million in net proceeds from the sale of loans.

Net cash used in investing activities was $393.4 million for the year ended December 31, 2017 as a result of $513.9 million in purchases of loans, which was partially offset by $76.2 million in principal payments received on loans and $45.1 million in net proceeds from the sale of loans.

Net Cash from Financing Activities

The main sources of cash from financing activities include proceeds from issuance of securitization notes and residual certificates from consolidated securitizations, proceeds from borrowings, and proceeds from the issuance of convertible preferred stock, notes payable and convertible notes.

The primary uses of cash for financing activities include payments made to holders of securitization notes and residual certificates for consolidated securitizations and repayments of notes payable and borrowings.

Net cash used in financing activities was $44.3 million for the nine months ended September 30, 2020 as a result of $126.0 million in payment on borrowings and securitization notes and certificates, which was partially offset by $81.8 million in proceeds from borrowings.

Net cash used in financing activities was $96.7 million for the nine months ended September 30, 2019 as a result of $245.6 million in payment on borrowings, notes payable and securitization notes and certificates, which was partially offset by $110.8 million in proceeds from borrowings and $39.9 million in proceeds from issuance of notes payable.

Net cash used in financing activities was $119.2 million for the year ended December 31, 2019 as a result of $199.4 million in payment on notes payable and securitization notes and certificates, which was partially offset by $43.6 million in net proceeds from borrowings and $39.9 million in proceeds from issuance of notes payable.

Net cash provided by financing activities was $135.8 million for the year ended December 31, 2018 as a result of $285.0 million in proceeds from issuance of notes payable and securitization notes and certificates, $51.1 million in net proceeds from borrowings and $49.9 million in proceeds from the issuance of convertible preferred stock, net of issuance costs, which were partially offset by $248.2 million in payment on notes payable and securitization notes and certificates.

Net cash provided by financing activities was $412.7 million for the year ended December 31, 2017, primarily driven by $432.3 million in proceeds from the issuance of notes payable and securitization notes and certificates.

Contractual Obligations and Off-Balance Sheet Arrangements

Contractual Obligations

Our principal commitments consist of obligations under our loan purchase agreements, debt obligations related to our revolving credit facilities, term loans and risk retention funding loans, and operating leases for office spaces. The following table summarizes our contractual obligations as of December 31, 2019 and the timing and effect that such commitments are expected to have on our liquidity and capital requirements in future periods:

(In thousands)	Total	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years
Loan purchase obligations[(1)]	$51,854	$51,854	$—	$—	$ —
Term loans	17,200	2,200	15,000	—	—
Interest payments on term loans	3,089	1,727	1,362	—	—
Warehouse and revolving credit facilities	84,596	5,500	79,096	—	—
Risk retention funding loans	16,941	—	3,167	13,774	—
Operating lease obligations	19,566	4,117	8,593	5,959	897
Total contractual obligations	$193,246	$65,398	$107,218	$19,733	$897

(1) Represents loans facilitated through our platform of which certain of our originating banks retain ownership for the duration of the holding period required by our contracts with the banks. This period is generally equal to three business days. We have committed to purchase the loans for the unpaid principal balance, plus accrued interest, at the conclusion of the required period.

For a discussion of our long-term debt obligations, operating lease obligations and loan repurchase agreement as of September 30, 2020, see “Note 7. Borrowings,” “Note 12. Leases,” and “Note 13. Commitments and Contingencies,” respectively, to our consolidated financial statements included elsewhere in this prospectus for further information.

Off-Balance Sheet Arrangements

In the ordinary course of business, we engage in activities that are not reflected on our consolidated balance sheets, generally referred to as off-balance sheet arrangements. These activities involve transactions with unconsolidated VIEs, including our sponsored and co-sponsored securitization transactions, which we contractually service. We use these transactions to provide a source of liquidity to finance our business and to diversify our investor base. When required by law, we retain at least 5% of the credit risk of the securities issued in these securitizations. We also engaged in activities with a personal loan trust entity created to facilitate fractional loan transactions. The fractional loan program was closed to new investments in 2019. We provide additional information regarding transactions with unconsolidated VIEs in "Note 3. Securitizations and Variable Interest Entities" to our consolidated financial statements included elsewhere in this prospectus.

Critical Accounting Policies and Estimates

The preparation of consolidated financial statements requires us to make judgments, estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, costs and expenses and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Actual results could differ significantly from our estimates. To the extent that there are differences between our estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected.

Our significant accounting policies are described in "Note 1. Description of Business and Significant Accounting Policies" to our consolidated financial statements included elsewhere in this prospectus. We believe that the accounting policies described below reflect our most critical accounting policies and estimates, which represent those that involve a significant degree of judgment and complexity. Accordingly, we believe these policies are critical in fully understanding and evaluating our reported financial condition and results of operations.

Variable Interest Entities

A legal entity is considered a VIE if it either has a total equity investment that is insufficient to finance its operations without additional subordinated financial support or whose equity holders lack the characteristics of a controlling financial interest. Our variable interest arises from contractual, ownership, or other monetary interests in the entity. We consolidate a VIE when we are deemed to be the primary beneficiary. We determine whether we are the primary beneficiary if we have the power to direct activities that significantly impact the VIE's economic performance and we have the obligation to absorb losses or receive benefits of the VIE that could be potentially significant to the VIE.

We are required to apply judgment in performing this assessment, including in identifying the activities that most significantly impact a VIE's economic performance and determining significance of our obligation to absorb losses or receive benefits. Factors considered in assessing the significance include: the design of the VIE, including its capitalization structure; subordination of interests; payment priority; relative share of interests held within the VIE's capital structure; and the nature of or reason behind our interest in the entity.

We also apply judgment to determine whether decision-maker or service-provider fees are variable interests. Decision-maker or service-provider fees are not considered variable interests when the arrangement does not expose Upstart to risks of loss that a potential VIE was designed to pass on to its variable interest holders, the fees are commensurate, the arrangement is at market, and we do not have any other interests (including direct interests and certain indirect interests held through related parties) that absorb more than an insignificant amount of a VIE's potential variability. Changes in our level of other interests in a potential VIE, such as those resulting from disposals of investments in securitization trusts serviced by us subsequent to the expiration of applicable risk retention requirements, can affect whether a decision-maker or service-provider fee is deemed a variable interest. This determination can have a significant impact on our consolidation conclusions, as it could affect whether a legal entity is a VIE and whether Upstart is the primary beneficiary of a VIE.

At a VIE's inception, we determine whether we are the primary beneficiary based on the facts and circumstances. We assess whether or not we are the primary beneficiary of a VIE on an ongoing basis.

Upstart has an ongoing contractual relationship with one of its VIEs, Upstart Loan Trust, which is a bankruptcy-remote special purpose borrowing entity. Upstart, from time to time and as-desired, sells loans to Upstart Loan Trust pursuant to a loan sale agreement, and services those loans from the time of transfer to Upstart Loan Trust until such loans are either charged-off or mature pursuant to a loan servicing agreement. Upstart Loan Trust borrows from one bank pursuant to a revolving credit and security agreement in order to finance the purchases of the loans from Upstart.

Upstart has also established a VIE special purpose trust, Upstart Loan Trust 2, that holds loans that have been repurchased by the Company following breaches of loan-level representations and warranties, loans that are ineligible to finance through the warehouse trust or loans that are held by Upstart. Upstart services the loans held by Upstart Loan Trust 2 until the loans are either charged-off or mature pursuant to a loan servicing agreement.

Upstart has also established VIEs and grantor trusts pursuant to its sponsored securitization transactions involving the issuance of asset-backed securities, or ABS. Such VIEs or grantor trusts are respectively referred to elsewhere in this registration statement with the nomenclature Upstart Securitization Trust [Year]-[Number] and Upstart Funding Grantor Trust [Year]-[Number]. For each such securitization transaction, we (along with certain other loan contributors that have previously purchased whole loans from us) sold Upstart-powered loans via a bankruptcy-remote intermediate entity to the issuing trust and then to the grantor trust. For each transaction, the grantor trust holds legal title to the loans and issues a collateral certificate representing the beneficial interest in such loans to the issuing trust. The issuing trust in turn issues various tranches of asset-backed securitization notes and certificates, which are purchased by one or more investment bank initial purchasers for resale to qualified institutional buyers and backed by the payments from the grantor trust to the issuing trust reflecting payments on the underlying securitized loans. Upstart, in addition to being party to various loan transfer agreements that facilitate the contribution of loans to the grantor trust, also services the loans held by each grantor trust from the time of transfer to the trust until the loans are charged off or mature pursuant to a loan servicing agreement.

In connection with each sponsored securitization transaction, Upstart facilitated the creation of a majority-owned affiliate, or MOA, which is a limited liability company and VIE. The purpose of these MOAs is to enable Upstart's compliance with its risk retention obligations as a securitization sponsor pursuant to Regulation RR. Each MOA has held the requisite amount of ABS to comply with these obligations for the length of time required by the regulation. Upstart is party to the limited liability company agreement establishing each MOA.

Upstart has also established Upstart Network Trust, a special purpose entity that purchased loans from Upstart in which individual accredited investors in turn have purchased securities representing fractional interests in such purchased loans. Upstart, in addition to being party to a transfer agreement that facilitates the contribution of loans to Upstart Network Trust, services the loans held by Upstart Network Trust from the time of transfer until the loans are charged off or mature pursuant to a loan servicing agreement. Upstart Network Trust was closed to new investments as of the end of 2019.

Fair Value of Loans, Notes Receivable and Residual Certificates, Payable to Securitization Note Holders and Residual Certificate Holders, and Notes Payable We have elected the fair value option for loans, notes payable to investors who participate in the legacy fractional loan-related securities program, and financial instruments related to securitization transactions, including notes receivable and residual certificates representing required risk retention for sponsored non-consolidated securitizations, and amounts payable to note holders and residual certificate holders in consolidated securitizations. We believe the estimate of fair value of these financial instruments requires significant judgment. We use a discounted cash flow model to estimate the fair value of these financial instruments based on the present value of estimated future cash flows. This model uses both observable and unobservable inputs and reflects our best estimates of the assumptions a market participant would use to calculate fair value. Primary inputs that require significant judgment include discount rates, credit risk rates, and expected prepayment rates. These inputs are based on historical performance of loans facilitated through our platform, as well as the consideration of market participant requirements. See "Note 4. Fair Value Measurement" to our consolidated financial statements included elsewhere in this prospectus for additional information.

Fair Value of Loan Servicing Assets and Liabilities

We also record loan servicing assets and liabilities at estimated fair value when we transfer loans which qualify as sales under Topic 860, *Transfers and Servicing* with servicing rights retained or when we enter into servicing agreements with banks partners that retain Upstart-powered loans. Loan servicing assets and liabilities are reported in other assets and other liabilities on our consolidated balance sheets. The gain or loss on loan sale, as well as changes in the fair value of loan servicing assets and liabilities are reported in revenue from fees, net, on our consolidated statements of operations and comprehensive income (loss) in the period in which the changes occur. We use a discounted cash flow model to estimate the fair values of loan servicing assets and liabilities. The cash flows in the valuation model represent the difference between the servicing fees charged to loan investors and an estimated market servicing fee. Since servicing fees are generally based on the monthly unpaid principal balance of the underlying loans, the expected cash flows in the model incorporate estimated credit risk and expected prepayments on the loans. These inputs are consistent with the assumptions used in the valuation of loans held-for-investment and related securitization notes and residual certificates. See "Note 4. Fair Value Measurement" to our consolidated financial statements included elsewhere in this prospectus for additional information.

Revenue Recognition

Our revenue consists of two components: revenue from fees, net and interest income and fair value adjustments, net.

Revenue From Fees, Net

The revenue from fees, net line item on the consolidated statements of operations is primarily comprised of platform and referral fees, net, which are recognized based on Accounting Standards Update, or ASU, 2014-09, *Revenue from Contracts with Customers* (Topic 606). Income historically recognized under Topic 860, *Transfers and Servicing* and Topic 310, *Receivables* is excluded from the scope of the standard; as such, we have concluded that interest income and fair value adjustments, net and income from servicing fees will not change under the standard. We adopted Topic 606 as of January 1, 2019, using the modified retrospective method for all contracts not completed as of the date of adoption. The adoption of Topic 606 had no material impact on our consolidated balance sheet, consolidated statement of operations and comprehensive income (loss) and consolidated statement of cash flows as of the adoption date or for the year ended December 31, 2019.

Topic 606 outlines a single comprehensive model to use in accounting for revenue arising from contracts with customers. The core principle, involving a five-step process, of the revenue model is that an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services.

Our arrangements for platform and referral services typically consist of an obligation to provide one or both of these services to customers on a when and if needed basis (a stand-ready obligation), and we recognize revenue as such services are performed, which coincides with the amount billable to the customer. Additionally, the services have the same pattern and period of transfer, and when provided individually or together, are accounted for as a single combined performance obligation representing a series of distinct days of service.

Our platform and referral fees represent variable consideration. Since the variable fees relate directly to the day the service is provided, they generally meet the criteria for allocating variable consideration entirely to one or more, but not all, performance obligations in a contract. Accordingly, when the requisite criteria are met, variable fees are allocated to and recognized on the day the services are provided.

We also charge an ongoing loan servicing fee to the holder of the loan (either a bank or institutional investor) based on a predetermined percentage of the outstanding principal balance. Loan servicing fees are recognized in the period the services are provided. Servicing fees, net also includes gains and losses on assets and liabilities recognized under loan servicing arrangements for loans retained by bank partners or loans sold to institutional investors. Such gains or losses are recognized based on whether the benefits of servicing are expected to more than adequately compensate us for carrying out our servicing obligations. Servicing fees also include changes in fair value of loan servicing assets and liabilities in the periods presented.

Interest Income and Fair Value Adjustments, Net

Interest income and fair value adjustments, net is comprised of interest income, interest expense and net changes in fair value of financial instruments from our normal course of business held at fair value, including loans, notes receivable and residual certificates, payable to securitization note holders and residual certificate holders, and notes payable. We record these adjustments in earnings in the period incurred and include both realized and unrealized adjustments to the value of related assets and liabilities. See the subsection titled "Fair Value of Loans, Notes Receivable and Residual Certificates, Payable to Securitization Note Holders and Residual Certificate Holders, and Notes Payable" above for further details on the estimates of fair value of these assets and liabilities.

Stock-Based Compensation

We estimate the grant date fair value of stock options granted to employees and nonemployees using the Black-Scholes option-pricing model. The fair value of stock options that is expected to vest is recognized as compensation expense on a straight-line basis over the requisite service period, which is typically the vesting period of the respective awards.

The Black-Scholes option-pricing model considers several variables and assumptions in estimating the grant date fair value of stock-based awards. These assumptions include:

- *Fair Value of Common Stock*—See the subsection titled "Common Stock Valuations" below.
- *Expected Term*—The expected term represents the period that the stock-based awards are expected to be outstanding. We determined the expected term for employee stock options based on historical terminations and exercise behavior, which factors in an extended post-termination exercise provision for vested awards for certain employees who provide more than three years of service. We use the contractual term for all nonemployee awards.
- *Expected Volatility*—Since we are not yet a public company and do not have any trading history for our common stock, the expected volatility is estimated based on the average historical volatilities of common stock of comparable publicly traded entities over a period equal to the expected term of the stock option grants. We will continue to apply this process until a sufficient amount of historical information regarding the volatility of our own stock price becomes available.
- *Risk-Free Interest Rate*—The risk-free interest rate is based on the U.S. Treasury yield in effect at the time of grant for zero-coupon U.S. Treasury notes with maturities approximately equal to the expected term of the stock option award.
- *Expected Dividend*—We have never paid dividends on our common stock since our inception, nor do we expect to pay dividends in the foreseeable future. Therefore, we used an expected dividend yield of zero.

See "Note 11. Equity Incentive Plans" of our consolidated financial statements included elsewhere in this prospectus for information concerning certain of the specific assumptions we used in applying the Black-Scholes option-pricing model to determine the estimated fair value of our stock options granted in the years ended December 31, 2018 and 2019. Such assumptions involved inherent uncertainties and the application of significant judgment. As a result, if factors or expected outcomes change and we use significantly different assumptions or estimates, our stock-based compensation could be materially different.

Stock-based compensation expense was $1.3 million, $2.0 million, $3.8 million, and $7.1 million during the years ended December 31, 2017, 2018 and 2019, and the nine months ended September 30, 2020, respectively. As of December 31, 2019 and September 30, 2020, we had $15.3 million and $22.9 million, respectively, of total unrecognized stock-based compensation costs which we expect to recognize over a weighted-average period of 2.5 years and 1.3 years, respectively. These amounts reflect our reassessment of the fair value of our common stock in the year ended December 31, 2019 and the nine months ended September 30, 2020.

The intrinsic value of all outstanding options as of September 30, 2020 was approximately $ million, based on the initial public offering price of $ per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, fair value estimated by the board of directors as of that date, of which approximately $ million is related to vested options and approximately $ million is related to unvested options.

Common Stock Valuations

Historically, for all periods prior to this initial public offering, since there has been no public market of our common stock to date, the fair value of the shares of common stock underlying our share-based awards was estimated on each grant date by our board of directors. In order to determine the fair value of our common stock underlying option grants, our board of directors considered, among other things, input from management, valuations of our common stock prepared by unrelated third-party valuation firms in accordance with the guidance provided by the American Institute of Certified Public Accountants Practice Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*, and our board of directors' assessment of additional objective and subjective factors that it believed were relevant, and factors that may have changed from the date of the most recent valuation through the date of the grant. These factors include, but are not limited to:

- our results of operations and financial position, including our levels of available capital resources;
- our stage of development and material risks related to our business;
- our business conditions and projections;
- the valuation of publicly traded companies in the financial technology sectors, as well as recently completed mergers and acquisitions of peer companies;

- the lack of marketability of our common stock as a private company;
- the prices at which we sold shares of our convertible preferred stock to outside investors in arms-length transactions;
- the rights, preferences, and privileges of our convertible preferred stock relative to those of our common stock;
- the likelihood of achieving a liquidity event for our securityholders, such as an initial public offering or a sale of our company, given prevailing market conditions;
- the hiring of key personnel and the experience of management;
- trends and developments in our industry; and
- external market conditions affecting the financial technology industry sector.

Our board of directors considered the fair value of our common stock by first determining the equity value of our company, and then allocating that value among the various classes of our equity securities to derive a per share value of our common stock.

The equity value of our company was determined using the market approach by reference to the closest round of equity financing, if any, preceding the date of valuation and analysis of the trading values of publicly traded companies deemed comparable to us.

In allocating the equity value of our company among various classes of stock, for our valuations performed on and prior to June 30, 2019, we used the option pricing method, or OPM, backsolve method. In an OPM framework, the backsolve method for inferring the equity value implied by a recent financing transaction involves making assumptions for the expected time to liquidity, volatility and risk-free rate and then solving for the value of equity such that value for the most recent financing equals the amount paid. This method was selected as management concluded that the contemporaneous financing transaction was an arms-length transaction. Furthermore, as of June 30, 2019, we were at an early stage of development and future liquidity events were difficult to forecast.

For our valuations performed subsequent to June 30, 2019, we used a hybrid method of the OPM and the Probability-Weighted Expected Return Method, or PWERM. PWERM considers various potential liquidity outcomes. Our approach included the use of different timing of initial public offering scenarios and a scenario assuming continued operation as a private entity. Under the hybrid OPM and PWERM method, the per share value calculated under the OPM and PWERM are weighted based on expected exit outcomes and the quality of the information specific to each allocation methodology to arrive at a final estimated fair value per share value of the common stock before a discount for lack of marketability is applied.

In the course of preparing our consolidated financial statements with a retrospective view, we have reassessed the fair value of our common stock in 2019 solely for accounting purposes. For purposes of this determination, we determined that the reassessed fair value of our common stock increased on a linear basis between the dates of our third-party valuation reports. We believe that linear interpolation between these is appropriate as no single event caused the valuation of our common stock to increase.

Following the closing of this offering, our board of directors will determine the fair market value of our common stock based on its closing price as reported on the date of grant on the primary stock exchange on which our common stock is traded.

Recent Accounting Pronouncements

See “Note 1. Description of Business and Significant Accounting Policies” to our consolidated financial statements included in this prospectus for recently adopted accounting pronouncements and recently issued accounting pronouncements not yet adopted as of the date of this prospectus.

Emerging Growth Company Status

We are an emerging growth company, as defined in the JOBS Act. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. We elected to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that we (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, these consolidated financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates. The JOBS Act does not preclude an emerging growth company from early adopting a new or revised accounting standard earlier than the time that such standard applies to private companies. We early adopted ASU 2016-02, *Leases* (Topic 842) effective January 1, 2019 and have elected not to restate comparative periods presented in the consolidated financial statements. We expect to use the extended transition period for any other new or revised accounting.

Quantitative and Qualitative Discussions of Market Risk

We are exposed to market risks in the ordinary course of our business, which primarily relate to fluctuations in market discount rates, credit risks, and interest rates. We are exposed to market risk directly through loans and securities held on our consolidated balance sheets, access to the securitization markets, investor demand for unsecured personal loans facilitated through our platform, and availability of funding under our current credit facilities and term loans. Such fluctuations to date have not been significant.

Discount Rate Risk

Discount rate sensitivity refers to the risk of loss to future earnings, values or future cash flows that may result from changes in market discount rates.

Loans at Fair Value—As of December 31, 2019 and September 30, 2020, we were exposed to market discount rate risk on $141.6 million and $122.7 million, respectively of loans held-for-investment and held-for-sale on our consolidated balance sheet. The fair value of these loans is estimated using a discounted cash flow methodology, where the discount rate represents an estimate of the required rate of return by market participants. The discount rates for loans facilitated through our platform may change due to changes in expected loan performance or changes in the expected returns of similar financial instruments available in the market. Any gains and losses from discount rate changes are recorded in earnings. As of December 31, 2019, a hypothetical 100 basis point and 200 basis point increase in discount rate would result in a $1.9 million and $3.8 million decrease, respectively, in the fair value of these loans. As of September 30, 2020, a hypothetical 100 basis point and 200 basis point increase in discount rate would result in a $1.5 million and $2.9 million decrease, respectively, in the fair value of these loans.

Assets and Liabilities related to Securitization Transactions—As of December 31, 2019, we were exposed to discount rate risk on $34.1 million of notes receivable and residual certificates and $89.7 million of payable to securitization note holders and residual certificate holders. As of September 30, 2020, we were exposed to discount rate risk on $22.1 million of notes receivable and residual certificates. We assess the sensitivity of securitization notes and residual certificates by reviewing the average impact across all securitization transactions. As of December 31, 2019, a hypothetical 100 basis point and 200 basis point increase in discount rates would result in a decrease in fair value of these securities of 1.40% and 2.77%, respectively, on average across all securitizations. As of September 30, 2020, a hypothetical 100 basis point and 200 basis point increase in discount rates would result in a decrease in fair value of these securities of 1.15% and 2.28%, respectively, on average across all securitizations.

Credit Risk

Credit risk refers to the risk of loss arising from individual borrower default due to inability or unwillingness to meet their financial obligations. The performance of certain financial instruments, including loans, securitization notes and residual certificates, on our consolidated balance sheets are dependent on the credit performance of loans facilitated by us. To manage this risk, we monitor borrower payment performance through our lending platform and utilize our AI capabilities to price loans in a manner that we believe is reflective of their credit risk.

The fair values of these loans, securitization notes, and residual certificates are estimated based on a discounted cash flow model which involves the use of significant unobservable inputs and assumptions. These instruments are sensitive to changes in credit risk.

Loans, at Fair Value—As of December 31, 2019 and September 30, 2020, we were exposed to credit risk on $141.6 million and $122.7 million, respectively of loans in held-for-investment and held-for-sale in our consolidated balance sheet. These loans bear fixed interest rates and are carried on our consolidated balance sheets at fair value. As of December 31, 2019, a hypothetical 10% and 20% increase in credit risk would result in a $2.3 million and $4.7 million decrease, respectively, in the fair value of loans held-for-investment (excluding loans held as collateral by consolidated securitizations). As of September 30, 2020, a hypothetical 10% and 20% increase in credit risk would result in a $2.0 million and $3.9 million decrease, respectively.

Assets and Liabilities related to Securitization Transactions—Transactions—As of December 31, 2019, we were exposed to credit risk on $34.1 million of notes receivable and residual certificates and $89.7 million of payable to securitization note holders and residual certificate holders. As of September 30, 2020, we were exposed to credit risk on $22.1 million of notes receivable and residual certificates.

The securities issued in the securitizations are senior or subordinated based on the waterfall criteria of loan payments to each security class, with the residual interest, or the residual certificates, issued being the first to absorb credit losses in accordance with the waterfall criteria. Accordingly, the residual certificates are the most sensitive to adverse changes in credit risk rates. Depending on the specific securitization, a hypothetical increase in the credit risk rate of 10% to 20% would result in significant decreases in the fair value of the residual certificates. On average, a hypothetical increase in the credit risk rate of 20% would result in a 25% decrease in the fair value of the residual certificates. The remaining classes of securities, with the exception of those in the August 2018 securitization transaction, are all overcollateralized such that changes in credit risk rates are not expected to have significant impacts on their fair values.

As of December 31, 2019 and September 30, 2020, we are exposed to credit risk of $80.1 million and $110.6 million, respectively, related to cash and restricted cash held in business checking accounts and interest-bearing deposit accounts at various financial institutions in the United States. We are exposed to credit risk in the event of default by these financial institutions to the extent the amount recorded on our consolidated balance sheets exceeds the insured amounts by the Federal Deposit Insurance Corporation, or FDIC. We reduce credit risk by placing our cash and restricted cash in reputable institutions.

Interest Rate Risk

The interest rates charged on the loans that our bank partners originate are determined based upon a margin above a market benchmark at the time of onboarding. Increases in the market benchmark would result in increases in the interest rates on new loans. Increased interest rates may adversely impact the spending levels of our individual borrowers and their ability and willingness to borrow money. Higher interest rates often lead to higher payment obligations, which may reduce the ability of individual borrowers to remain current on their obligations to our bank partners and, therefore, lead to increased delinquencies, defaults, customer bankruptcies and charge-offs, and decreasing recoveries, all of which could have a material adverse effect on our business.

Term Loans, Warehouse Credit Facilities and Revolving Credit Facility—As of December 31, 2019 and September 30, 2020, we are exposed to interest rate risk on $101.8 million and $91.3 million, respectively, under the term loans and revolving credit facility arrangements which bear floating interest rates. Changes in interest rates may impact our cost of borrowing. Future funding activities under the revolving credit facilities may increase our exposure to interest rate risk, as the interest rates payable on such funding are tied to short-term market rates. From time to time, we enter into interest rate hedges in connection with our warehouse credit facilities.

Our inability or failure to manage market risks could harm our business, financial condition or results of operations.

Business

BUSINESS

`Overview`

Our mission is to enable effortless credit based on true risk.

We are a leading, cloud-based AI lending platform. AI lending enables a superior loan product with improved economics that can be shared between consumers and lenders. Our platform aggregates consumer demand for high-quality loans and connects it to our network of Upstart AI-enabled bank partners. Consumers on our platform benefit from higher approval rates, lower interest rates, and a highly automated, efficient, all-digital experience. Our bank partners benefit from access to new customers, lower fraud and loss rates, and increased automation throughout the lending process. Since inception, our bank partners have originated over 620,000 personal loans that have generated more than 9 million repayment events. In the nine months ended September 30, 2020, approximately 70% of Upstart-powered loans were entirely automated.

Credit is a cornerstone of the U.S. economy, and access to affordable credit is central to unlocking upward mobility and opportunity. The FICO score was invented in 1989 and remains the standard for determining who is approved for credit and at what interest rate.[64] While FICO is rarely the only input in a lending decision, most banks use simple rules-based systems that consider only a limited number of variables. Unfortunately, because legacy credit systems fail to properly identify and quantify risk, millions of creditworthy individuals are left out of the system, and millions more pay too much to borrow money.[65] The first generation of online lenders focused on bringing credit online. Analogous to earlier internet pioneers, these companies made shopping for and accessing credit simpler and easier for consumers and businesses. It was no longer necessary to stand in line at a bank branch, to sit across the desk from a loan officer and to wait weeks or months for a decision. These lenders enabled the emergence of personal loan products that were previously unprofitable for banks to offer. While they brought the credit process online, they inherited the decision frameworks that banks had used for decades and did not address the more rewarding and challenging opportunity of reinventing the credit decision.

We leverage the power of AI to more accurately quantify the true risk of a loan. Our AI models have been continuously upgraded, trained and refined for more than eight years. We have discrete AI models that target fee optimization, income fraud, acquisition targeting, loan stacking, prepayment prediction, identity fraud and time-delimited default prediction. Our models incorporate more than 1,600 variables and benefit from a rapidly growing training dataset that currently contains more than 9 million repayment events. The network effects generated by our constantly improving AI models provide a significant competitive advantage—more training data leads to higher approval rates and lower interest rates at the same loss rate.

We have been able to demonstrate through several studies that AI lending works. First, in 2019 the CFPB reported that a study by Upstart of its data using a methodology specified by the CFPB showed that our AI model approves 27% more borrowers than a high-quality traditional model, with a 16% lower average APR for approved loans.[66] Second, when compared to credit models from several large banks, our AI models approve approximately 2.7 times as many borrowers at the same loss rate.[67] Third, for pools of securitized loans, our realized loss rates were only approximately half of

[64] Kaufman; see the section titled "Industry, Market and Other Data."

[65] Ficklin and Watkins; see the section titled "Industry, Market and Other Data."

[66] Ficklin and Watkins; see the section titled "Industry, Market and Other Data."

[67] In an internal study, Upstart replicated three bank models using their respective underwriting policies and evaluated their hypothetical loss rates and approval rates using Upstart's applicant base in late 2017. Such result represents the average rate of improvement exhibited by Upstart's platform against each of the three respective bank models.

those predicted by Kroll, a prominent credit rating agency; over that same time period, realized losses for the same pool of loans were on average only 5% different than our internal forecasts.[68] And finally, we regularly monitor the accuracy of our AI models in comparison with simple credit score-based models and have observed higher model accuracy across a variety of statistical measures relating to each model's predictive accuracy.[69] Our AI models are provided to bank partners within a consumer-facing cloud application that streamlines the end-to-end process of originating and servicing a loan. We have built a configurable, multi-tenant cloud application designed to integrate seamlessly into a bank's existing technology systems. Our highly configurable platform allows each bank to define its own credit policy and determine the significant parameters of its lending program. Our AI models use and analyze data from all of our bank partners. As a result, these models are trained by every Upstart-powered loan, and each bank partner benefits from participating in a shared AI lending platform.

Consumers can discover Upstart-powered loans in one of two ways: either via Upstart.com or through a white-labeled product on our bank partners' own websites.

Loans issued through our platform can be retained by our originating bank partners, distributed to our broad base of approximately 100 institutional investors and buyers that invest in Upstart-powered loans or funded by Upstart's balance sheet. In the third quarter of 2020, 22% of the loans funded through our platform were retained by the originating bank and 76% of loans were purchased by institutional investors through our loan funding programs. Our institutional investors and buyers that participate in our loan funding programs, which include Goldman Sachs, PIMCO and funds managed by Morgan Stanley Investment Management, invest in Upstart-powered loans through whole loan purchases, purchases of pass-through certificates and investments in asset-backed securitizations. We enter into nonexclusive agreements with our whole loan purchasers and each of the grantor trust entities in our asset-backed securitizations, or ABS, under which our ABS investors benefit from our loan servicing capabilities.[70] The remaining 2% of loans funded through our platform in the third quarter of 2020 were funded through our balance sheet.

Our revenue is primarily comprised of fees paid by banks. We charge banks referral fees for each loan referred through Upstart.com and originated by a bank partner, platform fees for each loan originated (regardless of its source) and loan servicing fees as consumers repay their loans. Our agreements with our bank partners are nonexclusive, generally have 12-month terms that

[68] In an internal study, Upstart compared the actual realized loss rates of Upstart loans securitized in five securitization transactions between June 2017 and September 2019 and the loss rate predictions for those loans obtained from KBRA Surveillance Reports published by Kroll Bond Rating Agency in December 2019. As compared to Kroll's loss predictions, actual realized losses were approximately 31% to 71% lower, with an average deviation across all five securitization transactions of -48%. As compared to our internal forecasts, actual realized losses ranged from approximately 35% higher (for the earliest securitization transaction) to approximately 17% lower (for the most recent securitization transaction), with an average absolute deviation across all of five securitization transactions of approximately 13%.

[69] Upstart compares on a monthly basis its AI models to (i) a FICO-only model and (ii) a "FICO+" model, which considers loan amount, debt-to-income ratio, monthly income, number of inquiries and number of trade accounts in addition to FICO score, which we believe is representative of the model many of our sophisticated competitors would use. To conduct a comparison of the Upstart AI models to the models described in (i) and (ii), we run applicant information through the Upstart AI models, the FICO-only model, and FICO+ model, comparing performance by analyzing five commonly-used statistical metrics, each of which measures the deviation between predicted losses and actual losses for each model. These metrics include: the root mean square error of net present value of losses, normalized logistic loss, ratio of the gini coefficients of predicted to observed rankings, the area under the receiver operating characteristics curve, and the Kolmogorov-Smirnov statistic.

[70] See the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Term loans and revolving loan facilities" and Note 7 to our consolidated financial statements for more information about our loan funding programs, including the role of our warehouse credit facilities and special purpose entities. See "Note 3. Securitizations and Variable Interest Entities" to our consolidated financial statements for additional information regarding transactions with our VIEs.

automatically renew, subject to certain early termination provisions and minimum fee amounts, and do not include any minimum origination obligation or origination limits. As a usage-based platform, we target positive unit economics on each transaction, resulting in a cash efficient business model that features both high growth rates and profitability. As of September 30, 2020, we had 10 bank partners. In the nine months ended September 30, 2020, Cross River Bank originated 72% of the loans facilitated on our platform and fees received from Cross River Bank accounted for 65% of our total revenue.[71] Our current agreement with Cross River Bank began on January 1, 2019 and has an initial four year term, with a renewal term for an additional two years following the initial four year term.

We have achieved rapid growth while improving our margin profile in recent years. The number of loans facilitated on our platform increased by 88% from 114,125 in 2018 to 215,122 in 2019, and 30% from 136,468 in the nine months ended September 30, 2019 to 176,983 over the same period in 2020. Our revenue for the nine months ended September 30, 2019 and 2020 was $101.6 million and $146.7 million, respectively, representing an increase of 44%. For the nine months ended September 30, 2019 and 2020, our net income (loss) was $(6.5) million and $5.0 million, respectively.

Industry Overview

Affordable Credit is Critical to Unlocking Upward Mobility and Opportunity

With $3.6 trillion of consumer credit originated between April 2019 and March 2020,[72] credit is a cornerstone of the U.S. economy. Access to affordable credit is central to unlocking upward mobility and opportunity. Reducing the price of borrowing for consumers has the potential to dramatically improve the quality of life for millions of people. Studies have demonstrated a strong statistical link among access to affordable credit, personal well-being and income growth.[73] The average American has approximately $29,800 in personal debt.[74] While access to affordable credit has allowed Americans to purchase and improve their homes, buy cars, pay for college tuition and cover emergency expenses, high interest rates can negatively impact a consumer's financial health. The U.S. Federal Reserve reports that on average, 10% of household disposable personal income is spent on debt repayment.[75] In addition, 16% of Americans spend 50% to 100% of their monthly income repaying debt.[76]

Affordable Credit Is Inaccessible for Millions because Existing Systems Fail to Accurately Quantify Risk

The FICO score was invented in 1989 and has not fundamentally changed since that time.[77] The FICO score is used by over 90% of lenders to determine who is approved for credit and at what interest rate.[78] While FICO is rarely used in isolation, many credit models are simple rules-based systems. A leading expert found that bank credit models commonly incorporate eight to 15 variables, with the more sophisticated models using as many as 30.[79] Unsurprisingly, the world is more complicated than can be represented by these models, so they are limited in their ability to reliably estimate the probability of default.

[71] See the section titled "—Bank Partnerships" for more information about our arrangements with CRB and other bank partners.

[72] Based on loan origination dollar amounts published by TransUnion; see the section titled "Industry, Market and Other Data."

[73] Wysen; see the section titled "Industry, Market and Other Data."

[74] Northwestern Mutual; see the section titled "Industry, Market and Other Data."

[75] Federal Reserve Household Debt; see the section titled "Industry, Market and Other Data."

[76] Northwestern Mutual; see the section titled "Industry, Market and Other Data."

[77] Kaufman; see the section titled "Industry, Market and Other Data."

78 Kaufman; see the section titled “Industry, Market and Other Data.”

79 Siddiqi; see the section titled “Industry, Market and Other Data.”

Many borrowers suffer from the effects of inaccurate credit models. Many are approved for a loan that they ultimately will be unable to repay, negatively impacting both the consumer and the lender. Many others may be declined for a loan that they could have successfully repaid if given the opportunity—again doing harm to both consumer and lender. According to an Upstart retrospective study completed in December 2019, four out of five Americans who have taken out a loan have never defaulted, yet less than half of Americans have access to prime credit.[80] Even consumers with high credit scores tend to pay too much for loans because the rates they pay effectively subsidize the losses from borrowers who default.

Banks Will Continue to be at the Forefront of Consumer Lending

Banks have been at the forefront of consumer lending in the U.S. for more than a century. They benefit from long-term structural advantages, including a low cost of funding, a unique regulatory framework, and high levels of consumer trust. Through large and reliable deposit bases, banks are able to maintain a very low cost of funds—approximately 1% on average.[81] These cost savings are passed through to borrowers in the form of lower interest rates, a significant competitive advantage over non-depository lending institutions. Banks also benefit from a regulatory framework that allows them to create nation-wide lending programs that are largely uniform. Given these advantages, we believe that a partnership-based bank enablement approach will be more successful than a disruption strategy.

Banks Must Undergo a Digital Transformation to Remain Competitive

The largest four U.S. banks spend an estimated $38 billion on technology and innovation annually.[82] These four banks may attempt to build AI lending models over time, once general market acceptance has been achieved. However, outside the largest four banks, there are approximately 5,200 FDIC insured institutions[83] that are at risk of falling behind. Despite holding over $8 trillion in deposits,[84] we believe these banks, particularly small to medium-sized banks, have outdated technology and lack the technical resources of larger banks to fund the digitization process.

At the same time, consumers are increasingly seeking digital, personalized and automated experiences.[85] A 2017 Bain survey found that approximately 50% of the U.S. population would be

80 The study defined access to prime credit as individuals with credit reports with VantageScores of 720 or above.

81 Federal Home Loan Bank of San Francisco; see the section titled “Industry, Market and Other Data.”

82 Garcia; see the section titled “Industry, Market and Other Data.”

83 FDIC; see the section titled “Industry, Market and Other Data.”

84 The dollar amount of deposits held by banks, other than the four largest banks, was aggregated by Upstart using data provided by the FDIC; see the section titled “Industry, Market and Other Data.”

85 Bain, PwC and RedPoint Global; see the section titled “Industry, Market and Other Data.”

comfortable buying financial products from technology companies.[86] We believe that as consumers, both young and old, move their financial lives online, small and medium-sized banks will be increasingly ill-equipped to serve them.

We believe that these trends have been accelerated by the COVID-19 pandemic, as the lack of access to physical bank branches has increased the banking industry’s focus on digital capabilities. The performance of our platform through this crisis has also given existing and prospective bank partners an important new data point to underpin their growing confidence in our solution.

Increasing Recognition from Regulators

Many regulators including the FDIC, the OCC, the Federal Reserve and the CFPB increasingly recognize the opportunity to modernize techniques used in lending.[87] In December 2019, these agencies issued an inter-agency report in support of the use of alternative data in lending decisions.[88] Additionally, in November 2019, the CFPB director noted that despite external uncertainty regarding how AI will fit into regulatory frameworks, the CFPB is focused on ensuring a path to regulatory clarity because it recognizes the value AI lending products can offer consumers.[89] In fact, in 2017, in response to a request by Upstart, the CFPB issued Upstart the first no-action letter, which provides that the CFPB has no present intention to recommend enforcement action with regard to the application of the Equal Credit Opportunity Act against Upstart for its use of alternative variables and AI and machine learning in credit decision-making.[90] Such no action letter expires on December 1, 2020. We are currently discussing with the CFPB whether we can continue to operate under its no-action letter policies, which were revised in 2018 and replaced the prior policy under which our no-action letter was issued. However, there is no guarantee that these discussions will be successful.

The AI Opportunity

AI has the potential to add $13 trillion to the current global economic output by 2030, a 16% increase over today's output.[91] According to the McKinsey Global Institute, AI will be slowly adopted in its early stages, followed by steep acceleration as the technology matures and companies learn how to best deploy it.[92] We believe the lending industry will follow this path.

Lending is a compelling application for AI. First, it involves sophisticated decisioning for events that occur millions of times each day. Second, there is an almost unlimited supply of data that has the potential to be predictive and improve the accuracy of credit decisions. Third, given the costs and risks associated with lending, the economic wins from AI are dramatic for both banks and consumers. This means that the significant investment required to overcome the technical and regulatory hurdles is well worth the effort.

With our eight-year head start, our AI lending platform is well-positioned to power a significant portion of the U.S. credit market. To date, we have focused on the unsecured personal loan market, one of the fastest-growing segment of consumer credit.[93] From April 2019 to March 2020, there were $118 billion[94] in U.S. unsecured personal loan originations, representing 8% growth over the prior year.

[86] Bain; see the section titled "Industry, Market and Other Data."

[87] FDIC Interagency Statement; see the section titled "Industry, Market and Other Data."

[88] FDIC Interagency Statement; see the section titled "Industry, Market and Other Data."

[89] Kraninger; see the section titled "Industry, Market and Other Data."

[90] CFPB No-Action Letter; see the section titled "Industry, Market and Other Data."

[91] McKinsey; see the section titled "Industry, Market and Other Data."

[92] McKinsey; see the section titled "Industry, Market and Other Data."

[93] Beiseitov; see the section titled "Industry, Market and Other Data."

[94] Based on loan origination dollar amounts published by TransUnion; see the section titled "Industry, Market and Other Data."

In the same period, we facilitated the origination of $3.5 billion in unsecured personal loans, or less than 5% of the total market.[95] We not only have a large opportunity to capture market share in unsecured personal loans, but by applying our AI models and technology to adjacent opportunities, we believe we are well-positioned to address the U.S. auto loan, credit card and mortgage markets. From April 2019 to March 2020, there were $625 billion in U.S. auto loan originations, $363 billion in U.S. credit card originations and $2.5 trillion in U.S. mortgage originations.[96] In June 2020, we began offering auto loans on our platform, and in September 2020, the first auto loan was originated through the Upstart platform. Over time, we believe we are also capable of capturing market share in student loans, point-of-sales loans and HELOCs.

Our AI Lending Platform

Our AI models are central to our value proposition and unique position in the industry. Our models incorporate more than 1,600 variables, which are analogous to the columns in a spreadsheet. They have been trained by more than 9 million repayment events, analogous to rows of data in a spreadsheet. Interpreting these almost 15 billion cells of data are increasingly sophisticated machine learning algorithms that enable a more predictive model.

These elements of our model are co-dependent; the use of hundreds or thousands of variables is impractical without sophisticated machine learning algorithms to tease out the interactions between them. And sophisticated machine learning depends on large volumes of training data. Over time, we have been able to deploy and blend more sophisticated modeling techniques, leading to a more accurate system. This co-dependency presents a challenge to others who may aim to short-circuit the development of a competitive model. While incumbent lenders may have vast quantities of historical repayment data, their training data lacks the hundreds of columns, or variables, that power our model. For more details regarding the variables, training data, and algorithms in our models, please see "Business—Evolution of Upstart's AI Model."

Despite their sophistication, our AI models are delivered to banks in the form of a simple cloud application that shields borrowers from the underlying complexity. Additionally, our platform allows banks to tailor lending applications based on their policies and business needs. Our bank partners can configure many aspects of their lending programs, including factors such as loan duration, loan amount, minimum credit score, maximum debt-to-income ratio and return target by risk grade. Within the construct of each bank's self-defined lending program, our platform enables the origination of conforming and compliant loans at a low per-loan cost.

Our platform benefits from powerful flywheel effects that drive continuous improvements as our business scales. Our platform benefits first from increasingly sophisticated models, variable expansion and rapid growth of training data. Upgrades to our platform allow us to offer higher approval rates and lower interest rates to consumers, which increases the number of borrowers on our platform. Upgrades to our platform also lead to better borrower selection, which lowers losses and lowers interest rates to borrowers. The flywheel effect created by self-reinforcing AI increases the economic opportunity that can be shared by borrowers and lenders over time.

[95] Based on loan origination dollar amounts published by TransUnion; see the section titled "Industry, Market and Other Data."

[96] Based on loan origination dollar amounts published by TransUnion; see the section titled "Industry, Market and Other Data."

Upstart's AI Flywheel

Our Ecosystem

Our platform connects consumers, banks and institutional investors through a shared AI lending platform. Because AI is a new and disruptive technology, and banking is a traditionally conservative industry, we have brought our technology to market in a way that allows us to grow rapidly and improve on our AI models, while allowing banks to take a prudent and responsible approach to assessing and adopting our platform.

On the consumer side, we aggregate demand on Upstart.com, where consumers are presented with bank-branded offers from our bank partners. In this way, we benefit banks who have adopted our AI lending technology. Bank partners can also offer Upstart-powered loans through a white-labeled interface on their own website or mobile application. Consumers on our platform are generally offered unsecured personal loans ranging from $1,000 to $50,000 in size, at APRs typically ranging from approximately 6.5% to 35.99%, with terms typically ranging from three to five years, with a monthly repayment schedule and no prepayment penalty.

On the funding side, our bank partners can retain loans that align with their business and risk objectives, while the remainder can be sold to our network of institutional investors, which have far broader and more diverse capacity to absorb and distribute risk. This flexible approach allows banks to adopt AI lending at their own pace, while we continue to grow and improve our platform.

Upstart's Ecosystem

Value Proposition to Consumers

- *Higher approval rates and lower interest rates*—The CFPB reported that a study by Upstart of its data using a methodology specified by the CFPB, showed that our AI model approves 27% more borrowers than high-quality traditional lending models with a 16% lower average APR for approved loans.[97] Our analyses suggest that our loan offers have improved significantly over time relative to those of competitors.[98]

- *Superior digital experience*—Whether consumers apply for a loan through Upstart.com or directly through a bank partner's website, the application experience is streamlined into a single application process and the loan offers provided are firm. In the third quarter of 2020, approximately 70% of Upstart-powered loans were instantly approved with no document upload or phone call required, an increase from 0% in late 2016. Such automation improvements were due in large part to improvements to our AI models and the application of such models to different aspects of the loan process, including data verification and fraud detection.

Value Proposition to Bank Partners

- *Competitive digital lending experience*—We provide regional banks and credit unions with a cost effective way to compete with the technology budgets of their much larger competitors. The NPS for our bank partners' lending programs are approximately 79, well above published benchmarks for the largest banks.[99]

- *Expanded customer base*—We refer customers that apply for loans through Upstart.com to our bank partners, helping them grow both loan volumes and number of customers. The most common age of Upstart-referred borrowers in the third quarter of 2020 was 28 years old, a compelling demographic that is often challenging for banks to access.

[97] Ficklin and Watkins; see the section titled "Industry, Market and Other Data."

[98] Since 2017, Upstart has used a third-party service to perform quarterly comparative studies of the interest rates offered for Upstart-powered loans versus the interest rates offered by six other companies offering personal loans online.

[99] Upstart used a third-party service to administer surveys to loan applicants immediately following an applicant's acceptance of a loan on Upstart's platform. The disclosed figure represents the weighted average of the Net Promoter Scores of each of our bank partners in the third quarter of 2020. While the Net Promoter Score methodology used by Upstart's third-party service was designed to be consistent with the methodology used in the referenced benchmark study, any differences in the timing or method in which the surveys were administered could negatively impact the comparability of such Net Promoter Scores. For further information, see the section titled "Industry, Market and Other Data."

- *Lower loss rates*—An internal study comparing our model to that of several large U.S. banks found that our model could enable these banks to lower loss rates by almost 75% while keeping approval rates constant.[100]

- *New product offering*—Personal loans are one of the fastest-growing segment of credit in the U.S.[101] Our platform helps banks provide a product their customers want, rather than letting customers seek loans from competitors.

- *Institutional investor acceptance*—Analyses by credit rating agencies, loan and bond buying institutions, and credit underwriters help banks gain confidence that Upstart-powered loans are subject to significant and constant scrutiny from experts, the results of which are often publicly available.

Our Competitive Strengths

Constantly Improving AI Models

We have been building and refining our AI models for more than eight years, and they have led directly to our growth and profitability. Our models currently incorporate more than 1,600 variables and are trained by more than 9 million repayment events. Beyond the advantages accrued by our constantly growing volume of training data, our data science team continues to update our modeling techniques regularly. Model and technology improvements have

increased our conversion rate from the initial rate inquiry to funded loan by a factor of ten since inception. We have a pipeline of potential model improvements that we expect will further increase our conversion rates in the future.

Flexible Two-Sided Ecosystem

We benefit from aggregating consumer demand on Upstart.com, referring consumers directly to our network of AI-enabled bank partners. Our consumer presence allows us to increase awareness of and interest in Upstart-powered loans, directly contributing to our own growth, as well as the growth and success of our bank partners' lending programs.

With an expanding list of bank partners, we can solve the borrowing needs of an increasingly diverse array of consumers. As more banks leverage the Upstart platform, consumers benefit from better offers of credit, while experiencing a consistently high-quality experience.

Capital Efficient Fee-Based Business

In the third quarter of 2020, we generated 96% of revenue from fees from banks and loan servicing. We have also achieved a high degree of automation, with approximately 70% of Upstart-powered loans approved instantly and fully automated in the third quarter of 2020, driving operating leverage and improving unit economics.

Regulatory Compliance

We have worked with regulators since our inception to ensure we operate in compliance with applicable laws and regulations. AI lending expands access to affordable credit by constantly finding

100 In an internal study, Upstart replicated three bank models using their respective underwriting policies and evaluated their hypothetical loss rates and approval rates using Upstart's applicant base in late 2017. To compare the hypothetical loss rates between Upstart's model and each of the replicated bank models, Upstart held approval rates constant at the rate called for by each bank's respective underwriting policy. Such result represents the average rate of improvement exhibited by Upstart's platform against each of the three respective bank models.

101 Beiseitov; see the section titled "Industry, Market and Other Data."

new ways to identify qualified borrowers, yet AI models must avoid unlawful disparate impact or statistical bias that would be harmful to protected groups. We have demonstrated to the CFPB that our platform does not introduce unlawful bias to the credit decision and we have developed sophisticated reporting procedures to ensure future versions of the model remain fair.[102] In September 2017, we received the CFPB's first no-action letter.[103] The CFPB issues no-action letters to reduce potential regulatory uncertainty for innovative products that may offer significant consumer benefit.[104] At this time, we do not know of any other lending platforms that have received similar no-action letters for fair lending from the CFPB.

Our Growth Strategy

Model Improvements

Our growth has historically been driven by AI model improvements and technology upgrades, and we expect this trend to continue for the foreseeable future. Model upgrades typically result in higher approval rates, better loan offers, higher degrees of automation and other improvements that increase our total number of funded loans. As our model accuracy increases, we are able to re-target and approve consumers who previously visited our site but were not eligible for a loan. A more efficient funnel also has the effect of enabling new marketing and acquisition channels that may not have been economical in the past, providing a second-order growth driver.

More Efficient Funding

Growth is also driven by a reduced cost of funding for Upstart-powered loans. This can happen because more banks adopt our platform, or existing partners increase their budget for Upstart-powered loans. Cost of funding can also be reduced as bank partners gain more confidence in our models and lower some of the constraints, they choose to place on their lending program. The cost of funding through institutional investors can also improve regularly, as credit rating agencies and loan and residual buyers gain confidence in the credit performance of Upstart-powered loans.

Our internal data suggests that each 100 basis point reduction in interest rate offered to the consumer increases conversion by 15%.[105] Therefore, reduced cost of funding can be a direct driver of growth.

Bank Distribution

Today, the vast majority of borrowers are referred to our bank partners via Upstart.com. But these banks are also beginning to offer Upstart-powered loans through their own websites, supported by their own marketing programs. We expect the bank-driven distribution of Upstart-powered loans to grow over time, as more bank partners roll out white-labeled versions of Upstart to serve their new and existing customers directly.

New Products

Personal loans are one of the fastest-growing segment of consumer credit in the U.S., but they are far from the largest.[106] As we apply our AI models and technology to other credit verticals, we will be able to serve the needs of more consumers and to play a broader technology enablement role for

102 Ficklin and Watkins; see the section titled "Industry, Market and Other Data."

103 CFPB No-Action Letter; see the section titled "Industry, Market and Other Data."

104 Consumer Financial Protection Bureau, Policy on No-Action Letters, September 2019.

105 In a series of internal studies conducted in April 2016, September 2016 and January 2018, Upstart compared changes in conversion rates between test groups of Upstart loan applicants when loan offer APRs were increased or decreased for certain groups. The average change in conversion rates across the three studies is presented.

106 Beiseitov; see the section titled "Industry, Market and Other Data."

our bank partners. There is significant opportunity to expand from personal loans to auto loans, credit cards, mortgages, student loans, point-of-sale loans and HELOCs. In June 2020, we began offering auto loans on our platform and in September 2020, the first auto loan was originated through the Upstart platform.

Our Platform

Our AI lending platform enables banks to provide consumers access to credit. The first credit product offered through our platform was an unsecured personal loan.

Consumers

We have built a mobile-responsive web application at Upstart.com, where consumers can quickly and easily inquire about a rate, evaluate and choose a loan offer, provide necessary information for verification and review required disclosures before final acceptance of the loan. A virtually identical experience is also offered as a white-labeled product on bank partners' websites. Further detail on our consumer experience is outlined below.

- *Rate inquiry*—To begin the process, consumers answer a series of questions in an online questionnaire. Questions cover basic personal information, educational background and employment history. The majority of consumers complete the questionnaire in less than five minutes.
- *Offer presentation*—If a consumer is approved, a loan offer will be presented from one of our bank partners on Upstart.com. Consumers are typically able to review potential rates and fees for loans of different amounts and terms. If the rate inquiry was on a bank partner's website, consumers will only see loan offers from that specific bank partner. The loan offer presented will not change in later phases of the application as long as the information provided by the applicant is verified as accurate.
- *Verification*—If a consumer chooses to move forward with a loan offer, we proceed to verify the information provided by the consumer, including their identity, employment or income, education, and bank account information. For the majority of Upstart-powered loans, this process happens automatically and immediately, with no documentation upload or phone call required of the consumer. For applications flagged as involving higher fraud risk, there is a more extensive technology-enabled verification process.
- *Loan funding*—For a consumer who successfully completes the verification process and agrees to their loan terms, loan proceeds will typically be deposited in the consumer's bank account by our bank partner the next business day.
- *Repayment*—A consumer who accepts a loan is directed toward a servicing portal through which the consumer can manage their repayments. Monthly payment dates automatically default to a day when the consumer is most likely to have sufficient cash in their account, but consumers are able to adjust this date as necessary. Consumers can also make one-time pre-payments or make other adjustments as necessary, all from the Upstart-powered web application.

Bank Partners

Our platform is designed to help our bank partners originate loans according to their unique requirements. In order to do this, we provide a wide variety of options for banks to define and control their lending program.

- *Upstart.com referrals*—Once we aggregate consumer demand on our website, we pass those customers to our bank partners.
- *White-labeled product*—Bank partners can serve customers with a white-labeled Upstart application on their own website or mobile application.
- *Configurations*—Because banks have complete authority and control over their lending programs, our bank partners pre-determine many aspects of their loan offering, including interest rate and loan size ranges, maximum target loss rate, minimum credit score, maximum debt-to-income ratio, target returns for various risk profiles, fee structures and disclosures. Banks accepting referrals from Upstart.com sets maximum volume targets for each month, expressed in the form of monthly dollar originations. These attributes can be adjusted by bank partners as necessary.
- *Servicing*—While most bank partners choose to have us service their loans (through a white-labeled servicing portal), each has the option of directly servicing loans itself. Our servicing platform manages all communication with borrowers, credit reporting agencies, and when necessary, collections agencies.

Evolution of Upstart's AI Model

The AI models underpinning the Upstart platform are central to its efficacy and the high-quality experience we provide to borrowers. Our models have evolved rapidly since our founding, as illustrated below.[107]

107 Dates for variables and training data correspond to: March 24, 2014, May 28, 2015, September 6, 2016, January 1, 2018 and December 31, 2019, respectively.

The key aspects of our AI models include:

Variables

Variables in our AI models have increased from 23 in 2014 to more than 1,600 as of September 30, 2020. These include factors related to credit experience, employment, educational history, bank account transactions, cost of living and loan application interactions.

Training Data

As of September 30, 2020, our models have been trained by more than 9 million repayment events such as a successful repayment or a delinquency. Upstart's models learn from repayment data even while loan principal remains outstanding, allowing the models to improve in real time.

Modeling Techniques

Growth in training data has enabled the development of increasingly sophisticated modeling techniques. For example, while earlier versions of our AI models were centered on logistic regression, our more recent models incorporate stochastic gradient boosting. We expect that our data science investments and continued growth of training data will unlock even more powerful techniques over time.

Model Applications

While our first model focused on predicting the likelihood of loan default, we have since applied models throughout the process of credit origination. These models quantify and reduce risk in various ways, while also increasing automation and funnel conversion.

The currently active AI models within the Upstart platform—shared by and available to all Upstart's bank partners—include:

- *Fee optimization*—optimizes assignment of origination fees;
- *Income fraud*—quantifies potential misrepresentation of borrower income;
- *Acquisition targeting*—identifies consumers likely to qualify for and have need for a loan;
- *Loan stacking*—identifies consumers likely to take out multiple loans in a short period of time;
- *Prepayment prediction*—quantifies the likelihood that a consumer will make payments on a loan earlier than originally scheduled;
- *Identity fraud*—quantifies the risk that an applicant is misrepresenting their identity; and
- *Time-delimited default prediction*—quantifies the likelihood of default for each period of the loan term.

Our Technology Infrastructure

Our cloud-based software platform incorporates modern technologies and software development approaches to allow for rapid development of new features.

Cloud-Native Technologies

We run our technology platform as containerized services on the AWS cloud. Our architecture is designed for high availability and horizontal scalability. Our primary development platforms are Ruby on Rails and Python, but our Kubernetes-based compute environment gives us the flexibility to run heterogeneous workloads with minimal operational overhead. We deploy new software regularly without platform downtime, allowing borrowers and banks to immediately benefit from the latest updates to our platform.

Data Integrity and Security

Our information security program governs how we safeguard the confidentiality, integrity, and availability of our consumer data. Our environment is continuously monitored with a suite of tools designed to detect security events in both internal and user-facing systems. We engage with third parties to audit our security program and to perform regular penetration tests of our Web application and cloud environment.

Configurable Multi-Tenant Architecture

Our multi-tenant architecture enables multiple lending partners to use the same version of our application while securely segmenting their data. Though all tenants are using the same version of our platform, our software is designed to be highly configurable to meet the needs of our diverse bank partners, allowing customizations to everything from the applicant user interface to the core rules governing credit decisioning.

Machine Learning Platform

In order to support innovation in our underwriting, fraud detection and acquisition models, we have developed proprietary technologies to enable data scientists to develop, train, test and deploy new model updates with minimal engineering support. Our backend systems are designed to flexibly integrate with multiple third-party data sources to feed these models and support real-time decisioning.

Responsive Web Design

Our user interface is responsive to ensure applicants and borrowers have a smooth experience regardless of whether they are accessing our website from a desktop, mobile device or tablet.

Robust Reporting and Integration Capabilities

Our reporting APIs provide investors and bank partners the ability to access data through a programmatic interface. Our integration capabilities with bank partners include an ability to pre-fill applicant information via API and provide loan details in real-time to facilitate a seamless process from application to origination.

Consumer Marketing

Our growth and marketing approach is driven by the strength of our product and the interest rates we offer. While many lenders see consumer choice as a detractor from sales volume, we benefit when consumers compare our offers to other lenders' offers. Over time, our ability to offer lower rates than our competitors has improved significantly.[108] Because our model changes in real time, we are able to extend new offer loans to applicants who were previously not eligible or were previously quoted a higher rate.

Our growth and marketing initiatives are primarily focused on bringing potential borrowers to Upstart.com, where they can learn if they qualify for a loan from one of our bank partners and on what terms in only a few minutes. Our consumer acquisition channels combine a mix of online and offline, as well as paid and unpaid, channels. While we constantly experiment to expand and optimize our acquisition strategies, our largest channels include:

- *Marketing affiliates*—A variety of online media partners, such as loan aggregators, send us traffic on a cost per origination basis. Many loan aggregators also incorporate credit data to provide online prescreened offers, which leads to highly targeted and interested referrals. We currently have relationships with approximately 30 online media partners.
- *Direct mail*—We apply our strengths in data science to target individuals who both qualify for and may have a need for an Upstart-powered loan. The ability to analyze an individual's credit data to target and mail prescreened offers of credit gives this channel a meaningful data advantage over other channels.
- *Organic traffic*—As our brand recognition and reputation grow, an increasing number of potential borrowers come directly to Upstart.com simply by word of mouth.
- *Email marketing*—We have an automated email program that sends customized messages and reminders to potential borrowers once they have created accounts to encourage them to complete their loan application.
- *Online advertising*—Search engines and social channels enable targeted outreach to potential borrowers with specific messages.
- *Podcast advertising*—We purchase 30 or 60-second advertising placements on podcasts with a listener base that we believe overlaps with Upstart's target consumer base. These advertisements are designed by the Upstart team but are delivered to listeners by the podcast hosts.

A significant number of consumers that apply for a loan on Upstart.com learn about and access Upstart.com through the website of a loan aggregator, Credit Karma. The percentage of loan originations that were derived from traffic from Credit Karma was 28%, 38%, 38% and 52% in 2017, 2018, 2019 and the nine months ended September 30, 2020, respectively, and the percentage of loan originations that were derived from direct mail was 36%, 28%, 23% and 12%, in 2017, 2018, 2019 and the nine months

[108] Since 2017, Upstart has used a third-party service to perform quarterly comparative studies of the interest rates offered for Upstart-powered loans versus the interest rates offered by six other companies offering personal loans online.

ended September 30, 2020, respectively. No other marketing channel contributed significantly compared to Credit Karma and direct mail. We have entered into a promotion agreement with Credit Karma that governs the terms and conditions between us and Credit Karma with respect to advertising the loans offered on our platform. Either party may terminate our arrangement immediately upon a material breach of any provision of the agreement or at any time, with or without cause, by providing no less than 30 days' notice. Our agreement does not require Credit Karma to display offers from lenders on Upstart.com or prohibit them from working with our competitors or from offering competing services.

Bank Partnerships

Outside of the four largest U.S. banks, there are approximately 5,200 FDIC insured institutions holding over $8 trillion in deposits.[109] We predominantly target small to medium-sized banks with an appetite to invest in improved underwriting, digital originations and unsecured lending. As of September 30, 2020, we had 10 bank partners, including Cross River Bank, Customers Bank, FinWise Bank, First Federal Bank of Kansas City, First National Bank of Omaha, KEMBA Financial Credit Union, TCF Bank, Apple Bank for Savings and Ridgewood Savings Bank.

For the years ended December 31, 2017, 2018 and 2019, fees received from Cross River Bank, or CRB, accounted for 83%, 81% and 80% of our total revenue, respectively. For the nine months ended September 30, 2019 and 2020, fees received from CRB accounted for 81% and 65% of our total revenue, respectively. We have entered into a loan program agreement that governs the terms and conditions between us and CRB with respect to loans facilitated through our platform and issued by CRB. The most recent loan program agreement with CRB began on January 1, 2019 and has a term of four years with an automatic renewal provision for an additional two years following the initial four year term. Either party may choose not to renew by providing the other party 120 days' notice prior to the end of the initial term or any renewal term. In addition, during the term of our arrangement, CRB may reduce the volume of Upstart-powered loans that it chooses to fund and retain on its balance sheet or not to originate at all. We or CRB may terminate our arrangement immediately upon a material breach and failure to cure such breach within a cure period, if any representations or warranties are found to be false and such error is not cured within a cure period, bankruptcy or insolvency of either party, receipt of an order or judgement by a governmental entity, a material adverse effect, or a change of control whereby such party involved in such change of control provides 90 days' notice to the other and pays a termination fee of $450,000.

We have also entered into separate agreements with each of our other bank partners. Our agreements with our bank partners are non-exclusive, generally have 12-month terms that automatically renew, subject to certain early termination provisions and minimum fee amounts, and do not include any minimum origination obligations or origination limits. Our typical sales and onboarding process can be long and typically takes between six to 15 months. For three to six months, our sales team will work with a prospective bank partner to develop the business case for launching an Upstart-powered loan program and securing a line of business commitment. After this process is complete, the bank will typically spend three to six months conducting diligence, which includes sign-off from internal and external stakeholders, including regulators. Lastly, the bank will work with our solutions architecture and engineering team to integrate with our systems, which typically takes one to three months.

After launch, our account managers and customer success team provide ongoing support to the bank. This includes operational communications, quality assurance, assistance with regulatory requests and quarterly business reviews. Our focus on providing exceptional ongoing support has resulted in minimal bank partner attrition to date. Instead, our partners have expanded credit limits and increased originations. Additionally, many of our bank partners have expressed interest in new Upstart products.

109 The dollar amount of deposits held by banks, other than the largest four banks, was aggregated by Upstart using data provided by the FDIC; see the section titled "Industry, Market and Other Data."

Our platform includes a cloud-based web application for all user interactions, including rate inquiry, loan offer presentation, adverse action notification, bank account verification and connectivity, borrower identity and credential verification, disclosure presentation and loan servicing. The software includes a variety of embedded AI models supporting and automating fraud prevention, credit decisioning and borrower verification. Bank partners also have access to an administrative interface for reporting and program management. We also perform regulatory fairness tests on bank partners' behalf.

Institutional Investors

Our platform allows bank partners to originate and retain loans that meet their business objectives. Because banks vary with respect to program objectives, risk tolerance and funding capacity, each bank's program parameters can vary significantly. In the third quarter of 2020, approximately 22% of Upstart-powered loans originated by bank partners were retained by those bank partners.

Upstart-powered loans originated by bank partners can be sold to institutional investors through a variety of funding structures developed and supported by Upstart. As of September 30, 2020, loans from our bank partners were purchased or funded by our broad base of approximately 100 institutional investors and buyers. By leveraging our institutional investors' broad and diverse capacity to absorb and distribute credit risk, we can develop our business and our AI models faster than if we relied only on the funding capacity of our bank partners. Accordingly, our growth is not limited by bank funding capacity or risk tolerance.

We began working with six institutional investors in 2015 and have relationships with approximately 100 institutional investors today, which include Goldman Sachs, PIMCO and funds managed by Morgan Stanley Investment Management. The institutional investors that participate in our loan funding programs include banks, insurance companies, '40 Act funds, hedge funds, private equity funds and other sources of institutional capital. These relationships have allowed us to expand our model beyond the risk profile of a typical bank. The combination of bank and institutional investor funding provides our platform with competitive and diverse capital, without Upstart having to retain risk in its capital markets programs.

Our network of institutional investors includes purchasers of whole loans originated via Upstart's platform, as well as capital markets investors that buy securities, such as pass-through certificates.

In the case of whole loan purchasers, we typically enter into loan purchase agreements and loan servicing agreements with such purchasers. The loan purchase agreements provide for the purchaser to place requests (ordinarily on a monthly basis) to purchase pools of whole loans originated via Upstart's platform by certain bank partners, which Upstart may attempt to fulfill on an uncommitted basis. Both the loan purchase and loan servicing agreements are typically terminable (i) for convenience after a notice period, (ii) following the passage of a term or (iii) after certain events of default. Loan purchasers may also cease to place requests to purchase loans at any time.

Investors may also purchase interests in loans originated via Upstart's platform in the form of pass-through certificates rather than whole loans. We have pass-through certificate programs sponsored by certain financial institutions under which investors can purchase securities collateralized by Upstart-powered loans from an issuer trust. Under each program, an affiliate of the sponsor (depositor) purchases loans from Upstart on an ongoing basis. Periodically, each of the master trusts form a new series trust that acquires loans originated in the prior month from the depositor and issues certificates, evidencing beneficial ownership in the series trust, to purchasers of such pass-through certificates. These institutional investors then receive a monthly distribution from the series trust.

From Upstart's perspective, there is little difference between whole loan sales and sales of pass-through certificates. Both programs are offered to provide flexibility to investors in our loan funding programs. Institutional investors may prefer pass-through certificates, which are more liquid, while other institutional investors may prefer whole loan purchases, which are generally more cost effective. The below table provides a breakdown of Upstart-powered loans purchased through whole loan sales and pass-through certificates.

	Year Ended December 31,			Nine Months Ended September 30,	
	2017	2018	2019	2019	2020
Pass-Through Certificates	—	19,702	41,623	22,793	30,266
Whole Loan Sales	53,190	76,720	132,597	86,912	123,205

The whole loans or pass-through certificates purchased after origination may later be included in our asset-backed securitization transactions whereby interests in these Upstart-powered loans are sold to other institutional investors. The number of whole loans and pass-through certificates sold that were later included in an asset-backed securitization transaction were 15,971, 27,189 and 85,032 in 2017, 2018 and 2019, respectively. The number of whole loans and pass-through certificates sold that were later included in an asset-backed securitization transaction were 50,389 and 42,954 in the nine months ended September 30, 2019 and 2020, respectively.

For our asset-backed securitization transactions, we collaborate with investment banks to structure investments under which we and/or certain of the purchasers of whole loans or pass-through certificates described in the preceding paragraphs sell pools of whole loans to a bankruptcy-remote securitization special purpose entity. The special purpose entities, through one or more intermediate transfers and entities, create and sell tranched asset-backed notes and subordinated certificates, in each case, backed by the collective pools of Upstart-powered loans sold into the investment structure. We are typically retained by participating institutional investors to service the loans, and act in such servicing capacity for the life of the investment transaction.

Operations

We have developed sophisticated tools that our internal operations team uses to support the origination and servicing of credit. While verification is primarily and increasingly handled by our software and AI models, we also offer Upstart-designed tools to guide credit analysts and fraud specialists in cases where our software is not yet able to sufficiently verify borrower information. By providing a prescriptive and unique path for each applicant, our system helps our operations team provide a streamlined experience for as many borrowers as possible.

Our operations teams, including credit analysts, fraud specialists, customer support and payments specialists, work to deliver a seamless user experience to consumers on behalf of our bank partners.

Customer operations is divided functionally by teams that focus on pre-origination experience (verification and customer support) and post-origination experience (loan servicing). Team members are distributed between our headquarters in San Mateo, California and our second headquarters in Columbus, Ohio.

Verification and Customer Support Operations

This team focuses on the minority of borrowers whose applications are not entirely automated (currently approximately 31% of Upstart-powered loans) or any applicant who has questions or issues throughout the application process. While approximately 31% of Upstart-powered loans involve human intervention, the vast majority of these loans are not fraudulent. Thus, our team focuses on expediting applicants through the process to the extent possible, while identifying and rejecting fraudulent applications. Our operations team works closely with our engineering and data science teams to further increase our levels of automation.

Most prospective borrowers and applicants interact with Upstart via our online platform and help center, but we also make agent-based support readily available to all borrowers. For phone support, we partner with an external call center vendor and have a team of dedicated Upstart agents with specialized training.

Servicing Operations

Upstart-powered loans are serviced via our homegrown platform. For borrowers who miss payments, we focus on early intervention and attempt to reach them via emails, calls, texts and skip-trace to help bring their account current or offer hardship options. Borrowers on our platform are supported via a combination of internal payments specialists and a third-party service provider.

We do not conduct collections activities in house. Accounts that are more than 30 days past due are referred to third-party collection agencies for collections. Debt collection calls and collection performance are reviewed regularly by our vendor management and quality assurance teams. Our operations and compliance teams each also perform onsite audits annually.

The average NPS for our bank partners' lending programs reached 79 in the third quarter of 2020, we believe due to our continued focus on streamlining borrower interactions through automation.[110]

Competition

Consumer lending is a vast and competitive market, and we compete in varying degrees with all other sources of unsecured consumer credit, including banks, non-bank lenders (including retail-based lenders) and other financial technology lending platforms. Because personal loans often serve as a replacement for credit cards, we also compete with the convenience and ubiquity that credit cards represent.

On the bank partnership side, we compete with a variety of technology companies that aim to help banks with the digital transformation of their business, particularly with respect to all-digital lending. This includes new products from legacy bank technology providers as well as newer companies focused entirely on lending software infrastructure for banks. We may also face competition from banks or companies that have not previously competed in the consumer lending market, including companies with large and experienced data science teams and access to vast amounts of consumer-related information that could be used in the development of their own credit risk models.

We believe we compete favorably based on the following competitive factors:

- Constantly improving AI models;
- Compelling loan offers to consumers that improve regularly;
- Automated and user-friendly loan application process;

- Consistent and predictable loan performance;

110 Upstart used a third-party service to administer surveys to loan applicants immediately following an applicant's acceptance of a loan on Upstart's platform. For further information, see the section titled "Industry, Market and Other Data."

- Cloud-native, multi-tenant architecture;

- Combination of technology and customer acquisition for bank partners;

- Robust and diverse loan funding program; and

- Brand recognition and trust.

Government Regulation

We and the loans made through our platform by our bank partners are subject to extensive and complex rules and regulations and examination by various federal, state and local government authorities. Failure to comply with any of the applicable rules and regulations may result in, among other things, revocation of required licenses or registration, loss of approved status, effective voiding or rescission of the loan contracts, class action lawsuits, administrative enforcement actions and civil and criminal liability. While compliance with such requirements is at times complicated by our novel business model, we believe we are, at a minimum, in substantial compliance with these rules and regulations.

We are currently, and expect in the future, to be regulated by the CFPB. In addition to the CFPB, other state and federal agencies have the ability to regulate aspects of our business. For example, the Dodd-Frank Act, as well as many state statutes, provide a mechanism for state attorneys general to investigate us. In addition, as a result of our relationships with bank partners, we are subject to oversight by federal banking agencies, including the FDIC and the Federal Trade Commission has jurisdiction to investigate aspects of our business, including with respect to marketing practices. Further, we are subject to inspections, examinations, supervision and regulation by applicable agencies in each state in which we are licensed. Regulatory oversight of our business may change over time. By way of example, California's governor has proposed within the 2020-2021 state budget a California Consumer Financial Protection Law, which seeks to emulate the CFPB with respect to its enforcement and supervisory capabilities as well as require additional state registration for certain covered persons. We expect that regulatory examinations by both federal and state agencies will continue, and there can be no assurance that the results of such examinations will not have a material adverse effect on us.

Below, we summarize several of the material federal lending, servicing and related laws applicable to our business. Many states have laws and regulations that are similar to the federal consumer protection laws referred to below, but the degree and nature of such laws and regulations vary from state to state.

Federal Lending and Related Laws

Truth in Lending Act

The Truth in Lending Act, or TILA, and Regulation Z, which implements it, require creditors to provide consumers with uniform, understandable information concerning certain terms and conditions of their loan and credit transactions, and to comply with certain lending practice requirements and restrictions. These rules apply to loans facilitated through our platform, and we assist with compliance as part of the services we provide to our bank partners. For closed-end credit transactions, required disclosures include, among others, providing the annual percentage rate, the finance charge, the amount financed, the number of payments, the amount of the monthly payment, the presence and amount of certain fees, and the presence of certain contractual terms. TILA also regulates the advertising of credit and gives borrowers, among other things, certain rights regarding updated disclosures and the treatment of credit balances. We, on behalf of the applicable bank partner, provide applicants with a TILA disclosure when applicants complete their loan applications on our platform. If the applicant's request is not fully funded and the applicant chooses to accept a lesser amount offered, we provide an updated TILA disclosure on behalf of the applicable bank partner. We also seek to comply with TILA's disclosure requirements related to credit advertising and, to the extent that we hold or service loans, TILA's requirements related to treatment of credit balances for closed-end loans. We also can facilitate the origination of a limited number of credit card accounts through our platform. In connection with such accounts, TILA requires the provision of certain solicitation and account-opening disclosures. TILA also imposes requirements on the terms of credit card accounts, and the process of originating and servicing such accounts. Though our platform may facilitate the origination of credit card accounts by a bank partner, we do not originate or service such accounts at this time.

Equal Credit Opportunity Act

The Equal Credit Opportunity Act, or ECOA, prohibits creditors from discriminating against credit applicants on the basis of race, color, sex, age (provided that the applicant has the capacity to enter into a binding contract), religion, national origin, marital status, the fact that all or part of the applicant's income derives from any public assistance program, or the fact that the applicant has in good faith exercised any right under the federal Consumer Credit Protection Act or certain state laws. Regulation B, which implements ECOA, restricts creditors from requesting certain types of information from loan applicants or engaging in certain loan-related practices, and from using advertising or making statements that would discourage on a prohibited basis a reasonable person from making or pursuing an application. These requirements apply to bank partners for loans facilitated through our platform as well as to us as a service provider that assists in the process. We abide by policies and procedures implemented by our bank partners to comply with ECOA's provisions prohibiting discouragement and discrimination. ECOA also requires creditors to provide applicants with timely notices of adverse action taken on credit applications, including disclosing to applicants who have been declined their rights and the reason for their having been declined. On behalf of our bank partners, we provide prospective borrowers who apply for a loan through our platform but are denied credit with an adverse action notice in compliance with applicable requirements.

On February 5, 2020, a consumer advocacy group released a report alleging that lenders may charge higher rates to certain borrowers who attend community colleges or historically Black or Hispanic colleges or universities. To support this conclusion, the consumer advocacy group selectively compared the results from only a small number of consumer interest rate inquiries made to, among others, lenders using Upstart's platform. In addition, on February 13, 2020, we received an inquiry from five members of the U.S. Senate seeking information regarding our compliance with ECOA, and in July 2020, three of these Senators recommended to the CFPB as part of their inquiry findings, that the CFPB further review Upstart's use of educational variables in its model and requested that the CFPB stop issuing no-action letters related to ECOA. Upstart strongly disputes the underlying conclusions of the consumer advocacy group's report as it pertained to Upstart's practices, given that Upstart's model considers over 1,600 variables, all of which contribute to the quoted rate. Notwithstanding that we believe our model and our bank partners' lending facilitated by our model comply with ECOA, reports from consumer advocacy groups and associated legislative and/or regulatory inquiries could create negative publicity and increase the risk of private litigation or government enforcement.

Fair Credit Reporting Act

The federal Fair Credit Reporting Act, or FCRA, as amended by the Fair and Accurate Credit Transactions Act, and administered by the CFPB, promotes the accuracy, fairness, and privacy of information in the files of consumer reporting agencies. FCRA requires a permissible purpose to obtain a consumer credit report and requires that persons who report loan payment information to credit bureaus do so accurately and to resolve disputes regarding reported information timely. FCRA also imposes disclosure requirements on creditors who take adverse action on credit applications based on information contained in a credit report.

Under FCRA, certain information must be provided to applicants whose credit applications are not approved on the basis of a report obtained from a consumer reporting agency, promptly update any credit information reported to a credit reporting agency about a customer and have a process by which customers may inquire about credit information furnished by us to a consumer reporting agency. We and our bank partners have a permissible purpose for obtaining credit reports on potential borrowers, and we also obtain explicit consent from borrowers to obtain such reports. As part of our loan servicing activities, we accurately report loan payment and delinquency information to appropriate consumer reporting agencies. We provide an adverse action notice to a rejected applicants on behalf of each bank partner on our platform at the time the applicant is rejected that includes all the required disclosures. We also have processes in place to ensure that consumers are given "opt-out" opportunities, as required by the FCRA, regarding the sharing of their personal information. We have also implemented an identity theft prevention program, as required by FCRA and its implementing regulations.

Fair Debt Collection Practices Act

The federal Fair Debt Collection Practices Act, or FDCPA, provides guidelines and limitations on the conduct of certain debt collectors in connection with the collection of consumer debts. The FDCPA limits certain communications with third parties, imposes notice and debt validation requirements, and prohibits threatening, harassing or abusive conduct in the course of debt collection. While the FDCPA primarily applies to third-party debt collectors, debt collection laws of certain states impose similar requirements more broadly on creditors who collect their own debts. In addition, the CFPB prohibits unfair, deceptive or abusive acts or practices, or UDAAPs in debt collection, including first-party debt collection. We use our internal collection team and professional third-party debt collection agents to collect delinquent accounts. Any third-party debt collection agents we use are required to comply with the FDCPA and all other applicable laws in collecting delinquent accounts of borrowers. While our internal servicing team is not subject to the formal requirements of the FDCPA in most cases, we have established policies intended to substantially comply with the collection practice requirements under the FDCPA as a means of complying with more general UDAAP standards.

Privacy and Data Security Laws

The federal Gramm-Leach-Bliley Act, or GLBA, includes limitations on financial institutions' disclosure of nonpublic personal information about a consumer to nonaffiliated third parties, in certain circumstances requires financial institutions to limit the use and further disclosure of nonpublic personal information by nonaffiliated third parties to whom they disclose such information and requires financial institutions to disclose certain privacy policies and practices with respect to information sharing with affiliated and nonaffiliated entities as well as to safeguard personal customer information. We collect and use a wide variety of information to help ensure the integrity of our services and to provide features and functionality to our customers. This aspect of our business, including the collection, use, and protection of the information we acquire from our own services as well as from third-party sources, is subject to laws and regulations in the United States. Accordingly, we publish our privacy policies and terms of service, which describe our practices concerning the use, transmission, and disclosure of information. We have a detailed privacy policy, which complies with GLBA and is accessible from every page of our website. We maintain consumers' personal information securely, and we do not sell, rent or share such information with third parties for marketing purposes unless previously agreed to by the consumer. In addition, we take measures to safeguard the personal information of borrowers and investors and protect against unauthorized access to this information. As our business continues to expand, and as state and federal laws and regulations continue to be passed and their interpretations continue to evolve, additional laws and regulations may become relevant to us.

Dodd-Frank Wall Street Reform and Consumer Protection Act

In July 2010, the Dodd-Frank Act was signed into law. The Dodd-Frank Act is extensive and significant legislation that includes consumer protection provisions. Among other things, the Dodd-Frank Act created the CFPB, which commenced operations in July 2011 and has significant authority to implement and enforce federal consumer financial laws, such as the TILA and ECOA. The CFPB is authorized to prevent "unfair, deceptive or abusive acts or practices" through its regulatory, supervisory and enforcement authority. The CFPB also engages in consumer financial education, requests data and promotes the availability of financial services to underserved customers and communities. The CFPB has regulatory and enforcement powers over most providers of consumer financial products and services, including us. It also has supervisory and examination powers over certain providers of consumer financial products and services, including large banks, payday lenders, "larger participants" in certain financial services markets defined by CFPB regulation, and non-bank entities determined to present a risk to consumers after notice and an opportunity to respond.

The CFPB has imposed, and will continue to impose, restrictions on lending practices, including with respect to the terms of certain loans. We and our bank partners are subject to the CFPB's enforcement authority and, although the number of public enforcement actions has decreased under the new CFPB leadership, it has not fully ceased, and could increase under different leadership. The CFPB may request reports concerning our organization, business conduct, markets and activities. In addition, the CFPB may, in connection with its supervisory authority, also conduct on-site examinations of our and our bank partners' businesses on a periodic basis, subject to whether the applicable bank partner satisfies the assets threshold for CFPB supervision. If the CFPB were to conclude that our loan origination assistance or servicing activities, or any loans originated by our bank partners on our platform, violate applicable laws or regulations, we could be subject to a formal or informal inquiry, investigation and/or enforcement action. Formal enforcement actions are generally made public, which carries reputational risk. In addition, the market price of our common stock could decline as a result of the initiation of a CFPB investigation of Upstart or even the perception that such an investigation could occur, even in the absence of any finding by the CFPB that we have violated any state or federal law. We are not currently subject to any enforcement actions by the CFPB.

For more information regarding the CFPB and the CFPB rules to which we are subject or may become subject, see "Risk Factors" included elsewhere in this prospectus.

Federal Trade Commission Act

Under Section 5 of the Federal Trade Commission Act, we and our bank partners are prohibited from engaging in unfair and deceptive acts and practices. For nonbank financial institutions, the FTC is the primary regulator enforcing this prohibition, and in recent years the FTC has been focused on practices of financial technology companies. Based on publicly available actions, the FTC's primary focus has been with respect to financial technology company marketing and disclosure practices. For instance, in October 2018 the FTC took action against student loan refinance lender SoFi, claiming that the company made prominent false statements regarding the average savings a consumer would realize over the lifetime of the loan if they refinanced with SoFi. In addition, SoFi allegedly exaggerated claims of anticipated borrower savings by excluding certain customer populations from the analysis. The FTC also is currently engaged in litigation with LendingClub regarding, among other things, the adequacy of its disclosures of an origination fee associated with the product. Based upon recent statements by FTC officials, we believe this scrutiny will continue in the near future.

Electronic Fund Transfer Act and NACHA Rules

The federal Electronic Fund Transfer Act, or EFTA, provides guidelines and restrictions on the electronic transfer of funds from consumers' bank accounts. Under EFTA, and Regulation E that implements it, we must obtain consumer consents prior to receiving electronic transfer of funds from consumers' bank accounts, and our bank partners may not condition an extension of credit on the borrower's agreement to repay the loan through preauthorized (recurring) electronic fund transfers. In addition to compliance with federal laws, transfers performed by ACH electronic transfers are subject to detailed timing and notification rules and guidelines administered by the National Automated Clearinghouse Association, or NACHA. While NACHA guidelines are not laws, failure to comply with them may nevertheless result in commercial harm to our business. All transfers of funds related to our operations conform to the EFTA, its regulations and NACHA guidelines. As part of our servicing activities, we obtain necessary electronic authorization from borrowers and investors for such transfers in compliance with such rules. The loans offered on our platform by our bank partners must also comply with the requirement that a loan cannot be conditioned on the borrower's agreement to repay the loan through recurring electronic fund transfers.

Electronic Signatures in Global and National Commerce Act

The federal Electronic Signatures in Global and National Commerce Act, or ESIGN, and similar state laws, particularly the Uniform Electronic Transactions Act, or UETA, authorize the creation of legally binding and enforceable agreements utilizing electronic records and signatures. ESIGN and UETA require businesses that want to use electronic records or signatures in consumer transactions and provide disclosures to consumers (otherwise required to be "in writing" in electronic form), to obtain the consumer's consent to receive information electronically. When a consumer registers on our platform, we obtain his or her consent to transact business electronically, receive electronic disclosures and maintain electronic records in compliance with ESIGN and UETA requirements, and we maintain electronic signatures and records in a manner intended to support enforceability of relevant consumer agreements and consents.

Federal Marketing Regulations

The Telephone Consumer Protection Act, or TCPA, generally prohibits robocalls, including those calls made using an auto-dialer or prerecorded or artificial voice calls made to a wireless telephone without the prior express consent of the called party (or prior express written consent, if messages constitute telemarketing). In addition, the FTC Telemarketing Sales Rule implements the FTC's Do-Not-Call Registry and imposes numerous other requirements and limitations in connection with telemarketing. Upstart's policies address the requirements of the TCPA as well as FTC Telemarketing Sales Rule and other laws limiting telephone outreach. Furthermore, Upstart does not engage in certain activities covered by the TCPA, such as using an automated dialer.

The Federal Controlling the Assault of Non-Solicited Pornography and Marketing, or CAN-SPAM, Act makes it unlawful to send certain electronic mail messages that contain false or deceptive information and provide other protections for email users. CAN-SPAM also requires the need to provide a functioning mechanism that allows the recipient to opt-out of receiving future commercial e-mail messages from the sender of such messages. Upstart's email communications with all consumers are formulated to comply with the CAN-SPAM Act.

Servicemembers Civil Relief Act

Under the Servicemembers Civil Relief Act, or SCRA, there are limits on interest rates chargeable to military personnel and civil judicial proceedings against them, and there are limitations on our ability to collect on a loan to servicemembers on active duty originated prior to the servicemember entering active duty status and, in certain cases, for a period of time thereafter. The SCRA allows military members to suspend or postpone certain civil obligations so that the military member can devote his or her full attention to military duties. The SCRA requires us to adjust the interest rate charged on loans to borrowers who qualify for and request relief. If a borrower with an outstanding loan qualifies for SCRA protection the interest rate on their loan (including certain fees) will be reduced to 6% for the duration of the borrower's active duty. During this period, any interest holder in the loan will not receive the difference

between 6% and the loan's original interest rate. As part of the services we provide, we require the borrower to send us a written request and a copy of the borrower's mobilization orders to obtain an interest rate reduction on a loan due to military service. Other protections offered to servicemembers under the SCRA, including protections related to the collection of loans, do not require the servicemember to take any particular action, such as submitting military orders, to claim benefits.

Military Lending Act

Under the Military Lending Act, certain members of the armed forces serving on active duty and their dependents must be identified and be provided with certain protections when becoming obligated on a consumer credit transaction. These protections include: a limit on the Military Annual Percentage Rate (an all-in cost-of-credit measure which is the same as the APR for loans facilitated on our platform) of 36%, certain required disclosures before origination, a prohibition on charging prepayment penalties and a prohibition on arbitration agreements and certain other loan agreement terms. As part of the services we provide, we ensure compliance with the requirements of the Military Lending Act.

Bank Secrecy Act, USA PATRIOT Act, and U.S. Sanctions Laws

Under the Bank Secrecy Act, the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act, or USA PATRIOT ACT, and certain U.S. sanctions laws, our bank partners are required to maintain anti-money laundering, customer due diligence and record-keeping policies and procedures, which we perform on behalf of our bank partners, and to avoid doing business with certain sanctioned persons or entities or certain types of sanctioned activity in certain countries. We have implemented an AML program designed to prevent our platform from being used to facilitate money laundering, terrorist financing, and other illicit activity. Our AML program is designed to prevent our platform from being used to facilitate business in countries, or with persons or entities, included on designated lists promulgated by the U.S. Department of the Treasury's Office of Foreign Assets Controls and equivalent foreign authorities. Our AML compliance program includes policies, procedures, reporting protocols, and internal controls, including the designation of an AML compliance officer, and is designed to address these legal and regulatory requirements and to assist in managing risk associated with money laundering and terrorist financing. With respect to new borrowers, we apply the customer identification and verification program rules and screen names against the list of specially designated nationals maintained by the U.S. Department of the Treasury and OFAC pursuant to the USA PATRIOT Act amendments to the Bank Secrecy Act and its implementing regulation.

Bankruptcy Code

Under the Bankruptcy Code, we are regulated and in certain circumstances prohibited by the automatic stay, reorganization plan and discharge provisions, among others, in seeking enforcement of debts against parties who have filed for bankruptcy protection. Our policies are designed to support compliance with the Bankruptcy Code as we service and collect loans.

State Lending Regulations

State Usury Limitations

With respect to bank partners that are subject to Section 521 of the Depository Institution Deregulation and Monetary Control Act of 1980, or DIDMCA, (for FDIC-insured, state banks originating loans on our platform, which represent the vast majority of loans originated) or Section 85 of the National Bank Act, or NBA, (for national banks originating loans on our platform), federal case law interpreting such provisions (including interpretations of the NBA under *Tiffany v. National Bank of Missouri* and *Marquette National Bank of Minneapolis v. First Omaha Service Corporation*), and relevant regulatory guidance (including FDIC advisory opinion 92-47) permit certain depository institutions to "export" requirements regarding interest rates and certain fees considered to be "interest" under federal law from the state or U.S. territory where the bank is located for all loans originated from such state, regardless of the usury limitations imposed by the state law of the borrower's residence or other states with which the loan may have a geographic nexus, unless the state has chosen to opt out of the exportation regime. We believe, however, if a state or U.S. territory in which we operate opted out of rate exportation, judicial interpretations support the view that such opt outs would apply only to loans "made" in those states. We believe that the "opt-out" of any state would not affect the ability of our platform to benefit from the exportation of rates. If a loan made through our platform by a bank partner were deemed to be subject to the usury laws of a state or U.S. territory that had opted-out of the exportation regime, if the loan were not originated in a manner that permitted exportation of interest rate requirements from the state we and our bank partners believed applied at the time of origination, if the loan bore interest or certain fees in excess of the amounts permitted by the state in which the loan was "made" for exportation purposes (or was otherwise in violation of such state's relevant usury and fee laws) or if the interest exportation authority were determined not to apply to a loan under any particular circumstances, we, our bank partners, or subsequent holders of such loans could become subject to fines, penalties and possible forfeiture of amounts charged to borrowers, and we could decide not to permit bank partners to originate loans in that jurisdiction through our platform or our bank partners or loan investors could choose not to continue doing business with us in such jurisdiction or more broadly, which could adversely impact our growth.

There have also been recent judicial decisions that could affect the collectability of loans sold by our bank partners after origination and the exposure of loan purchasers to potential fines or other penalties for usury violations. See the section titled "Risk Factors" for more information about recent case law developments.

State Disclosure and Lending Practice Requirements

The loans originated on our platform by our bank partners may be subject to state laws and regulations that impose requirements related to loan disclosures and terms, credit discrimination, credit reporting, debt collection, and unfair or deceptive business practices. Our ongoing compliance program seeks to comply with these requirements.

State Licensing/Registration

We hold licenses, registrations, and similar filings so that we can conduct business, including providing referral services and origination assistance to lenders on our platform and servicing and collecting loans, in all states and the District of Columbia where our activities require such licensure, registration or filing. With respect to our securitization trusts, we have a national bank that serves as our owner trustee and is itself exempt from licensure. Although we are not aware of a state taking the position that the trust itself needs licensure, it is possible that a state or states could take such position in the future. Licenses granted by the regulatory agencies in various states are subject to periodic renewal and may be revoked or suspended for failure to comply with applicable state and federal laws and regulations. In addition, as the product offerings of Upstart or our bank partners change, as states enact new licensing requirements or amend existing licensing laws or regulations, or as states regulators or courts adjust their interpretations of licensing statutes and regulations, we may be required to obtain additional licenses. To that end, we have a small number of applications submitted and pending to obtain additional licenses, particularly with respect to obtaining additional authorization to engage in student loan servicing and collection activities. We are also typically required to complete an annual report (or its equivalent) to each state's regulator. The statutes also typically subject us to the supervisory and examination authority of state regulators.

State licensing statutes impose a variety of requirements and restrictions, including:

- record-keeping requirements;
- collection and servicing practices;
- requirements governing electronic payments, transactions, signatures and disclosures;
- examination requirements;
- surety bond and minimum net worth requirements;
- financial reporting requirements;
- notification requirements for changes in principal officers, stock ownership or corporate control; and
- restrictions on advertising and other loan solicitation activity, as well as restrictions on loan referral or similar practices.

Federal Securities Regulations

Securities Act

We have relied upon the availability of Rule 506 of Regulation D to exempt our prior offerings of equity securities from registration under the Securities Act. Upstart and certain of our subsidiaries have also relied on Section 4(a)(2) of the Securities Act for placement of asset-backed securities, or ABS directly to investors or to investment bank initial purchasers, which have relied on Rule 144A and Regulation S exemptions from registration to place such ABS to qualified institutional buyers and non-U.S. investors, respectively.

Investment Company Act

The Investment Company Act contains substantive legal requirements that regulate the manner in which "investment companies" are permitted to conduct their business activities. In general, an "investment company" is a company that holds itself out as an investment company or holds more than 40% of the total value of its assets (minus cash and government securities) in "investment securities." We believe we are not an investment company. We do not hold ourselves out as an investment company. We understand, however, that the loans held on our balance sheet could be viewed by the SEC or its staff as "securities," which could in turn cause the SEC or its staff to view Upstart Holdings, Inc., Upstart Network, Inc., or an affiliate as an "investment company" subject to regulation under the Investment Company Act. To provide clarity on this issue, we have applied for an exemptive order from the SEC exempting us from regulation under the Investment Company Act, subject to certain conditions. We anticipate, but cannot guarantee, that an exemptive order under the Investment Company Act will be approved. While we applied for, and expect to receive, the anticipated order, we believe that have never been an investment company, because, among other reasons, we are primarily engaged in the business of providing an AI-based lending platform to banks.

Exemptive orders provided by the SEC under the Investment Company Act may cease to be effective if the facts and analysis upon which they are based materially change or the recipient of the order fails to comply with conditions outlined in the order. Although not currently anticipated, it is possible that our business will change in the future in a way that causes the exemptive order to no longer apply to our business, either because the facts of how we conduct our business change or because we no longer meet the conditions outlined in the order. If the exemptive order ceases to apply to our business, we could be deemed an investment company.

Investment Advisers Act

The Investment Advisers Act of 1940, as amended, or IAA, contains substantive legal requirements that regulate the manner in which "investment advisers" are permitted to conduct their business activities. We believe that our business consists of providing a platform for consumer lending for which investment adviser registration and regulation does not apply under applicable federal or state law, and do not believe that we or any of our subsidiaries are required to register as an investment adviser with either the SEC or any of the various states.

Broker-Dealer Regulations under the Exchange Act

We are not currently registered with the SEC as a broker-dealer under the Exchange Act or any comparable state law. The SEC heavily regulates the manner in which broker-dealers are permitted to conduct their business activities. We believe we have conducted, and we intend to continue to conduct, our business in a manner that does not result in Upstart being characterized as a broker-dealer, based on guidance published by the SEC and its staff.

ABS Risk Retention Rules

Regulation RR was jointly issued by a group of federal agencies under section 15G of the Exchange Act, as well as under the Federal Reserve Act, section 8 of the Federal Deposit Insurance Act, the Bank Holding Company Act of 1956, the Home Owners' Loan Act of 1933; section 165 of the Dodd-Frank Wall Street Reform and Consumer Protection Act; and the International Banking Act of 1978. Its purpose is to require securitizers to retain an economic interest in a portion of the credit risk of assets that the securitizer transfers or sells to an issuing entity and that collateralize asset-backed securities that are sold to a third party. We believe we have structured our organization such that we are in compliance with Regulation RR and will continue to conduct our business in a manner that allows us to remain in compliance with this regulation.

Compliance

We review our policies and procedures to ensure compliance with applicable regulatory laws and regulations applicable to us and our bank partners. We have built our systems and processes with controls in place in order to permit our policies and procedures to be followed on a consistent basis. For example, to ensure proper controls are in place to maintain compliance with the consumer protection related laws and regulations, we have developed a compliance management system consistent with the regulatory expectations published by governmental agencies. While no compliance program can assure that there will not be violations, or alleged violations, of applicable laws, we believe that our compliance management system is reasonably designed and managed to minimize compliance-related risks.

Intellectual Property

We protect our intellectual property through a combination of trademarks, domain names, copyrights and trade secrets, as well as through contractual provisions, our information security infrastructure and restrictions on access to or use of our proprietary technology. As of September 30, 2020, we had 2 patent applications in the United States related to our proprietary risk model. We may file additional patent applications or pursue additional patent protection in the future to the extent we believe it will be beneficial.

We have trademark rights in our name, our logo and other brand indicia, and have trademark registrations for select marks in the United States. We will pursue additional trademark registrations to the extent we believe it will be beneficial. We also have registered domain names for websites that we use in our business. We may be subject to third party claims from time to time with respect to our intellectual property.

Additionally, we rely upon unpatented trade secrets and confidential know-how and continuing technological innovation to develop and maintain our competitive position. We also enter into confidentiality and intellectual property rights agreements with our employees, consultants, contractors and business partners. Under such agreements, our employees, consultants and contractors are subject to invention assignment provisions designed to protect our proprietary information and ensure our ownership in intellectual property developed pursuant to such agreements.

For additional information about our intellectual property and associated risks, see the section titled "Risk Factors—Risks Related to Our Business and Industry."

Employees

As of September 30, 2020, we had 429 full-time employees. We also engage temporary employees, contractors and consultants as needed to support our operations. None of our employees are either represented by a labor union or subject to a collective bargaining agreement. We have not experienced any work stoppages, and we consider our relations with our employees to be good.

Facilities

Our corporate headquarters are located in San Mateo, California and Columbus, Ohio and consist of approximately 48,000 square feet and 13,000 square feet of space, respectively, under leases that expire in March 2024 and December 2026, respectively. We also lease and license facilities in New York, New York. We believe that our facilities are adequate for our current needs and that, if necessary, additional facilities will be available to accommodate the expansion of our business.

Legal Proceedings

From time to time, we and certain of our subsidiaries may be subject to legal proceedings and claims that arise in the ordinary course of business, as well as governmental and other regulatory investigations and proceedings. In addition, third parties may from time to time assert claims against us in the form of letters and other communications. We are not currently subject to any legal proceedings that, if determined adversely to us, would, in our opinion, have a material adverse effect on our business, results of operations or financial condition. Future litigation may be necessary to defend ourselves or our partners by determining the scope, enforceability and validity of third-party proprietary rights, or to establish our proprietary rights. The results of any current or future litigation cannot be predicted with certainty, and regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

Management

MANAGEMENT

Executive Officers and Directors

The following table provides information regarding our executive officers and directors as of September 30, 2020:

Name	Age	Position(s)
Executive Officers:		
Dave Girouard	54	Co-Founder, Chief Executive Officer, Chairperson of the Board
Sanjay Datta	46	Chief Financial Officer
Anna M. Counselman	39	Co-Founder, SVP, People and Operations
Paul Gu	29	Co-Founder, SVP, Product and Data Science, Director
Alison Nicoll	48	General Counsel
Non-Employee Directors:		
Mary Hentges	61	Director
Oskar Mielczarek de la Miel	47	Director
Ciaran O'Kelly	52	Director
Robert Schwartz	58	Director
Sukhinder Singh Cassidy	50	Director
Hilliard C. Terry III	50	Director

Executive Officers

Dave Girouard. Mr. Girouard is one of our co-founders and has served as our Chief Executive Officer and a member of our board of directors since our incorporation. From February 2004 to April 2012, Mr. Girouard served in various roles at Google, a technology company, most recently as President of Google Enterprise, where he helped build Google's cloud applications business worldwide, including product development, sales, marketing, and customer support. He started his career in Silicon Valley as a Product Manager at Apple, a technology company, and previously served as an associate in the consulting firm Booz Allen's Information Technology practice. Mr. Girouard's career began in software development with the Boston office of Accenture, a consulting firm. He graduated from Dartmouth College with a B.A. in Engineering Sciences and a B.E. in Computer Engineering. Mr. Girouard also holds an M.B.A. from the University of Michigan with High Distinction.

Mr. Girouard was selected to serve on our board of directors because of the perspective and experience he brings as our Chief Executive Officer and as one of our co-founders, as well as his extensive experience with technology companies.

Sanjay Datta. Mr. Datta has served as our Chief Financial Officer since December 2016. From June 2005 to December 2016, he served in various roles at Google, including as Vice President of Finance for Global Advertising, Finance Director of Corporate Revenue and Product Profitability, and in various international finance leadership positions based in Asia and Europe. Prior to Google, Mr. Datta worked at Artisan Capital, a private investment group, from November 2002 to May 2005, sourcing and reviewing equity investments, and worked at Deloitte Consulting, a consulting firm, from December 1998 to July 2000. Mr. Datta has a joint honors degree in Economics and Finance from McGill University in Montreal and an M.B.A. from Stanford University.

Anna M. Counselman. Ms. Counselman is one of our co-founders and has served in various roles since May 2012, including most recently as Senior Vice President, People and Operations. From February 2007 to May 2012, she served in various roles at Google, including most recently as Head of Premium Services & Customer Programs. Ms. Counselman began her career in industrial operations at a management development program at McMaster-Carr, a supplier of hardware, tools, raw materials, and maintenance equipment industrial materials. Ms. Counselman graduated Summa Cum Laude from Boston University with a B.A. in Finance and Entrepreneurship.

Paul Gu. Mr. Gu is one of our co-founders and has served in various roles since April 2012, including most recently as our Senior Vice President, Product and Data Science. He has also served as a member of our board of directors since April 2015. Mr. Gu has a background in quantitative finance, built his first algorithmic trading strategies on the Interactive Brokers API at the age of 20 and previously worked in risk analysis at the D.E. Shaw Group, a hedge fund, in 2011. During college, Mr. Gu led underwriting for two non-profit microlenders in the United States. Mr. Gu studied economics and computer science at Yale University and then joined the Thiel Fellowship.

Mr. Gu was selected to serve on our board of directors because of the perspective and experience he brings as our Senior Vice President, Product and Data Science and as one of our co-founders, as well as his expertise in data science.

Alison Nicoll. Ms. Nicoll has served as our General Counsel since May 2012. From July 2006 to May 2012, Ms. Nicoll served as an associate General Counsel at PayPal, Inc., a financial services technology company, where she managed the North America legal team responsible for supporting multiple business units on issues ranging from corporate strategy, general commercial matters, regulatory developments and compliance, consumer protection, online and mobile payments and merchant payment acceptance. From 2003 to 2006, she also served as the General Counsel of TSYS Prepaid, a prepaid payments processing company. Ms. Nicoll holds a law degree from the University of Glasgow in Scotland and a Masters of Law from Columbia Law School.

Non-Employee Directors

Mary Hentges. Ms. Hentges has served as a member of our board of directors since December 2019. Ms. Hentges currently serves as the Interim Chief Financial Officer for ShotSpotter, a precision-policing solutions company. Ms. Hentges previously served as the Chief Financial Officer of Yapstone, Inc., a financial services company, from 2012 to 2014, the Chief Financial Officer of CBS Interactive, a media company, from 2010 to 2012, and the Chief Financial Officer of PayPal, Inc. from 2003 to 2010. She is also a Certified Public Accountant (inactive). Ms. Hentges holds a B.S. in Accounting from Arizona State University.

Ms. Hentges was selected to serve on our board of directors because of her financial expertise and extensive experience as an executive in the technology industry.

Oskar Mielczarek de la Miel. Mr. Mielczarek de la Miel has served as a member of our board of directors since November 2016. Mr. Mielczarek de la Miel is an executive officer of Rakuten, Inc. a technology company, and is Managing Partner at Rakuten Capital, the corporate venture capital arm of Rakuten, Inc., where he manages fintech, mobility, digital media and other investments. He also serves on the board of directors for Rakuten Europe S.a.r.l., Azimo, Ltd, 1XL PremFina, Ltd, Cyndx Holdco, Inc., Glovapp23, S.L., FeverLabs, Inc. and Contenidos y Marcas, S.L. Prior to joining Rakuten, Mr. Mielczarek de la Miel served in various roles in the financial industry, including in investment banking at J.P. Morgan and Merrill Lynch, financial services firms. Mr. Mielczarek de la Miel holds a B.A. from ICADE in Spain and an M.B.A. from Harvard Business School.

Mr. Mielczarek de la Miel was selected to serve on our board of directors because of his experience in the venture capital industry and his international market knowledge and experience serving as a director of various private companies.

Ciaran O'Kelly. Ciaran O'Kelly has served as a member of our board of directors since April 2018. From 2009 to 2013, Mr. O'Kelly served in various roles at Nomura Securities, a financial services firm, most recently as Senior Managing Director and Head of Equities, Americas. Prior to 2009, Mr. O'Kelly served in various roles at Bank of America and Salomon Smith Barney, financial services firms. He previously served on the board of Square Financial Services, Inc., a technology company, Bank of America Securities and Nomura Securities International. Mr. O'Kelly holds a B.A. in Business Studies from Dublin City University.

Mr. O'Kelly was selected to serve on our board of directors because of the perspective and extensive experience he brings from his background in financial services.

Robert Schwartz. Mr. Schwartz has served as a member of our board of directors since June 2015. Since June 2000, Mr. Schwartz has been Managing Partner of Third Point Ventures, the Menlo Park, California based venture capital arm of Third Point LLC, which is a registered investment adviser based in New York and the investment manager of the Third Point Funds. He previously served on the board of Apigee and the board of Enphase Energy until 2016. Previously, for 23 years, Mr. Schwartz was the President of RF Associates North, a privately held communications semiconductor manufacturer's representative firm. Mr. Schwartz holds a multi-discipline engineering degree from the University of California, Berkeley.

Mr. Schwartz was selected to serve on our board of directors because of his experience in the venture capital industry and his market knowledge and experience serving as a director of various private and public companies.

Sukhinder Singh Cassidy. Ms. Singh Cassidy has served as a member of our board of directors since February 2020. Since July 2015, Ms. Singh Cassidy has served as the founder and chairman of theBoardlist, and most recently served as the President of StubHub Inc., a technology company, from May 2018 to May 2020. From 2011 to September 2017, Ms. Singh Cassidy served in various roles at Joyus, Inc., an internet video shopping network, most recently as Founder and Chairman. From 2003 to 2009, she served in various senior executive roles at Google, Inc., a technology company, most recently as President of Asia Pacific and Latin America Operations. She is currently a director of Urban Outfitters, Inc. Ms. Singh Cassidy previously served on the board of Tripadvisor, Inc and the board of Ericsson until 2018. Ms. Singh Cassidy holds a B.A. in Business Administration from the Ivey Business School at Western University.

Ms. Singh Cassidy was selected to serve on our board of directors because of her extensive experience as an executive in the technology industry and her experience serving as a director of a publicly traded company.

Hilliard C. Terry, III. Mr. Terry has served as a member of our board of directors since February 2019. From January 2012 to October 2018, he served as Executive Vice President and Chief Financial Officer of Textainer Group Holdings Limited, an intermodal marine container management and leasing company. Before joining Textainer, Mr. Terry was Vice President and Treasurer of Agilent Technologies, Inc., which he joined in 1999, prior to the company's initial public offering and spinoff from Hewlett-Packard Company. He previously held positions in investor relations and/or investment banking with Kenetech Corporation, an alternative energy company, VeriFone, Inc., a payments company, and Goldman Sachs & Co., a financial services firm. He is currently a director of Umpqua Holdings Corporation, a bank holding company. Mr. Terry holds a B.A. in Economics from the University of California, Berkeley and an M.B.A. from Golden Gate University.

Mr. Terry was selected to serve on our board of directors because of his financial expertise and experience in the banking industry.

Family Relationships

There are no family relationships among any of our executive officers or directors.

Code of Ethics

Our board of directors has adopted a code of ethics that applies to all of our employees, officers and directors, including our Chief Executive Officer, Chief Financial Officer, and other executive and senior financial officers. The full text of our code of business conduct and ethics will be posted on the investor relations page on our website. We intend to disclose any amendments to our code of business conduct and ethics, or waivers of its requirements, on our website or in filings under the Exchange Act.

Board of Directors

Our business and affairs are managed under the direction of our board of directors. Our board of directors currently consists of eight directors. Pursuant to our current certificate of incorporation and amended and restated voting agreement, our current directors were elected as follows:

- Messrs. Girouard, Gu and O'Kelly and Ms. Hentges were elected as the designees nominated by holders of our common stock;
- Mr. Terry was elected as the designee nominated by holders of our preferred stock and common stock;
- Ms. Singh Cassidy was elected as the designee nominated by holders of our Series Seed preferred stock, Series A preferred stock and Series B preferred stock;
- Mr. Schwartz was elected as the designee nominated by holders of our Series C preferred stock; and
- Mr. Mielczarek de la Miel was elected as the designee nominated by holders of our Series C-1 preferred stock; and
- the holders of our Series D preferred stock have the right to elect a member of our board of directors, but such position is currently vacant.

Our amended and restated voting agreement will terminate and the provisions of our current certificate of incorporation by which our directors were elected will be amended and restated in connection with this offering. After this offering, the number of directors will be fixed by our board of directors, subject to the terms of our amended and restated certificate of incorporation and amended and restated bylaws that will become effective immediately prior to the completion of this offering. Each of our current directors will continue to serve as a director until the election and qualification of his or her successor, or until his or her earlier death, resignation or removal.

Classified Board of Directors

We intend to adopt an amended and restated certificate of incorporation that will become effective immediately prior to the completion of this offering. Our amended and restated certificate of incorporation will provide that, immediately after the completion of this offering, our board of directors will be divided into three classes with staggered three-year terms. Only one class of directors will be elected at each annual meeting of stockholders, with the other classes continuing for the remainder of their respective three-year terms. Our current directors will be divided among the three classes as follows:

- the Class I directors will be Dave Girouard, Oskar Mielczarek de la Miel and Hilliard C. Terry III, and their terms will expire at the annual meeting of stockholders to be held in 2021;
- the Class II directors will be Paul Gu, Sukhinder Singh Cassidy and Robert Schwartz, and their terms will expire at the annual meeting of stockholders to be held in 2022; and
- the Class III directors will be Ciaran O'Kelly and Mary Hentges, and their terms will expire at the annual meeting of stockholders to be held in 2023.

Each director's term will continue until the election and qualification of his or her successor, or his or her earlier death, resignation, or removal. Any increase or decrease in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of our directors.

This classification of our board of directors may have the effect of delaying or preventing changes in control of our company.

Director Independence

Our board of directors has undertaken a review of the independence of each director. Based on information provided by each director concerning his or her background, employment, and affiliations, our board of directors has determined that Mary Hentges, Oskar Mielczarek de la Miel, Ciaran O'Kelly, Robert Schwartz, Sukhinder Singh Cassidy and Hilliard C. Terry III do not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under the listing standards of the Nasdaq Global Select Market. In making these determinations, our board of directors considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director, and the transactions involving them described in the section titled "Certain Relationships and Related Party Transactions."

Lead Independent Director

Our board of directors intends to adopt corporate governance guidelines that will provide that one of our independent directors should serve as our Lead Independent Director at any time when our Chief Executive Officer serves as the Chairperson of our board of directors or if the Chairperson is not otherwise independent. Because Mr. Girouard is our Chairperson and is not an "independent" director as defined in the listing standards of the Nasdaq Global Select Market, our board of directors has appointed Sukhinder Singh Cassidy to serve as our Lead Independent Director. As Lead Independent Director, Ms. Singh Cassidy will preside over periodic meetings of our independent directors, serve as a liaison between our Chairperson and our independent directors, and perform such additional duties as our board of directors may otherwise determine and delegate.

Committees of the Board of Directors

Our board of directors has established an audit committee, a compensation committee, and a nominating and corporate governance committee. The composition and responsibilities of each of the committees of our board of directors is described below. Members will serve on these committees until their resignation or until as otherwise determined by our board of directors.

Audit Committee

Our audit committee consists of Hilliard C. Terry III, Mary Hentges, and Ciaran O'Kelly with Mr. Terry serving as Chairperson, each of whom meets the requirements for independence under the listing standards of the Nasdaq Global Select Market and SEC rules and regulations. Each member of our audit committee also meets the financial literacy and sophistication requirements of the listing standards of the Nasdaq Global Select Market. In addition, our board of directors has determined that Ms. Hentges and Mr. Terry are both audit committee financial experts within the meaning of Item 407(d) of Regulation S-K under the Securities Act. Following the completion of this offering, our audit committee will, among other things:

- select a qualified firm to serve as the independent registered public accounting firm to audit our financial statements;
- help to ensure the independence and performance of the independent registered public accounting firm;
- discuss the scope and results of the audit with the independent registered public accounting firm, and review, with management and the independent registered public accounting firm, our interim and year-end results of operation;
- develop procedures for employees to submit concerns anonymously about questionable accounting or audit matters;
- review our policies on risk assessment and risk management;
- review related party transactions; and
- approve or, as required, pre-approve, all audit and all permissible non-audit services, other than de minimis non-audit services, to be performed by the independent registered public accounting firm.

Our audit committee will operate under a written charter, to be effective prior to the completion of this offering, that satisfies the applicable rules and regulations of the SEC and the listing standards of the Nasdaq Global Select Market.

Compensation Committee

Our compensation committee consists of Sukhinder Singh Cassidy, and Robert Schwartz, with Ms. Singh Cassidy serving as Chairperson, each of whom meets the requirements for independence under the listing standards of the Nasdaq Global Select Market and SEC rules and regulations. Each member of our compensation committee is also a non-employee director, as defined pursuant to Rule 16b-3 promulgated under the Exchange Act, or Rule 16b-3. Following the completion of this offering, our compensation committee will, among other things:

- review, approve, and determine, or make recommendations to our board of directors regarding, the compensation of our executive officers;
- administer our equity compensation plans;
- review and approve and make recommendations to our board of directors regarding incentive compensation and equity compensation plans; and
- establish and periodically review policies and programs relating to compensation and benefits of our employees and executives.

Our compensation committee will operate under a written charter, to be effective prior to the completion of this offering, that satisfies the applicable rules and regulations of the SEC and the listing standards of the Nasdaq Global Select Market.

Nominating and Corporate Governance Committee

Our nominating and corporate governance committee consists of Ciaran O'Kelly, Oskar Mielczarek de la Miel and Robert Schwartz, with Mr. O'Kelly serving as Chairperson, each of whom meets the requirements for independence under the listing standards of the Nasdaq Global Select Market and SEC rules and regulations. Following the completion of this offering, our nominating and corporate governance committee will, among other things:

- identify, evaluate, and select, or make recommendations to our board of directors regarding, nominees for election to our board of directors and its committees;
- evaluate the performance of our board of directors and of individual directors;
- consider and make recommendations to our board of directors regarding the composition of our board of directors and its committees;
- review developments in corporate governance practices;
- evaluate the adequacy of our corporate governance practices and reporting; and

- develop and make recommendations to our board of directors regarding corporate governance guidelines and matters.

Our nominating and corporate governance committee will operate under a written charter, to be effective prior to the completion of this offering, that satisfies the applicable listing standards of the Nasdaq Global Select Market.

Compensation Committee Interlocks and Insider Participation

None of the members of our compensation committee is or has been an executive officer or employee of our company. None of our executive officers currently serves, or in the past year has served, as a member of the board of directors or compensation committee (or other board committee performing equivalent functions) of any entity that has one or more of its executive officers serving on our board of directors or on our compensation committee.

Non-Employee Director Compensation

The table set forth below provides information regarding the compensation of our non-executive officer directors for service as directors during the year ended December 31, 2019. In 2019, we did not pay any compensation to any person who served as a non-employee member of our Board of Directors. Our employee directors, Messrs. Girouard and Gu, did not receive any compensation for their services as directors and therefore are not included in the table below. The compensation received by Messrs. Girouard and Gu as employees is set forth in the section titled "Executive Compensation—Summary Compensation Table."

Name	Option Awards[1][2] ($)	Total ($)
Mary Hentges[3]	771,091	771,091
Oskar Mielczarek de la Miel	—	—
Ciaran O'Kelly	—	—
Andrew Palmer[4]	—	—
Andrew Quigg[5]	—	—
Robert Schwartz	—	—
Sukhinder Singh Cassidy[6]	—	—
Hilliard C. Terry, III[7]	328,871	328,871

(1) The amount reported represents the aggregate grant-date fair value of the stock options awarded to the director in 2019, calculated in accordance with Topic 718, "Compensation—Stock Compensation." Such grant-date fair value does not take into account any estimated forfeitures related to vesting conditions. The assumptions used in calculating the grant-date fair value of the stock options reported in this column are set forth in Note 11 to our Consolidated Financial Statements. These amounts do not reflect the actual economic value that may be realized by the non-employee director.

(2) The following table lists all outstanding equity awards held by non-executive officer directors as of December 31, 2019:

Name	Grant Date	Number of Shares UnderlyingOption Awards[a]		Option Exercise Price	Option Expiration Date
Mary Hentges	December 6, 2019	128,295	[b]	$3.89	December 6, 2029
Oskar Mielczarek de la Miel	—	—		—	—
Ciaran O'Kelly	March 31, 2018	128,295	[c]	$2.15	March 31, 2028
Andrew Palmer	—	—		—	—
Andrew Quigg	—	—		—	—
Robert Schwartz	—	—		—	—
Sukhinder Singh Cassidy		—			
Hilliard C. Terry, III	March 29, 2019	128,295	[d]	$3.80	March 29, 2029

(a) Each of the outstanding equity awards listed in the table above was granted pursuant to our 2012 Plan.

(b) The shares underlying this option vest, subject to Ms. Hentges' continued role as a service provider to us, in 24 equal monthly installments beginning on January 1, 2020.

(c) The shares underlying this option vest, subject to Mr. O'Kelly's continued role as a service provider, in 24 equal monthly installments beginning on April 1, 2018.

(d) The shares underlying this option vest, subject to Mr. Terry's continued role as a service provider to us, in 24 equal monthly installments beginning on March 1, 2019.

(3) Ms. Hentges became a member of our board of directors in December 2019.

(4) Mr. Palmer resigned from our board of directors in December 2019.

(5) Mr. Quigg resigned from our board of directors in February 2020.

(6) Ms. Singh Cassidy became a member of our board of directors in February 2020.

(7) Mr. Terry became a member of our board of directors in February 2019.

April 2020 Option Grants

In April 2020, our board of directors approved option grants under our 2012 Plan to each of Ms. Singh Cassidy and Mr. O'Kelly. In connection with Ms. Singh Cassidy's appointment as a member of the board of directors in February 2020, Ms. Singh Cassidy received an option to purchase 128,295 shares of our common stock, which vests in 24 equal monthly installments beginning on March 1, 2020, subject to Ms. Singh Cassidy's continued role as a service provider to us. Mr. O'Kelly received an option to purchase 64,148 shares of our common stock, which vests in 12 equal monthly installments beginning on May 1, 2020, subject to Mr. O'Kelly's continued role as a service provider to us.

Outside Director Compensation Policy

Prior to this offering, we did not have a formal policy with respect to compensation payable to our non-employee directors for service as directors. From time to time, we have granted equity awards to certain non-employee directors to entice them to join our board of directors and for their continued service on our board of directors. We reimburse our directors for necessary and reasonable expenses associated with attending meetings of our board of directors or its committees.

In October 2020, our board of directors adopted, and we expect our stockholders will approve, a new compensation policy for our non-employee directors that will be effective as of the date of the effectiveness of the registration statement of which this prospectus forms a part. This policy was developed with input from our independent compensation consultant regarding practices and compensation levels at comparable companies. It is designed to attract, retain, and reward non-employee directors.

Under this compensation policy, each non-employee director will receive the cash and equity compensation for board services described below. We also will continue to reimburse our non-employee directors for reasonable, customary and documented travel expenses to board of directors or committee meetings.

The compensation policy includes a maximum annual limit of $1,000,000 of cash compensation and equity awards that may be paid, issued, or granted to a non-employee director in any fiscal year, increased to $2,000,000 in an individual's first year of service as a non-employee director. For purposes of this limitation, the value of equity awards is based on the grant date fair value (determined in accordance with GAAP). Any cash compensation paid or equity awards granted to a person for their services as an employee, or for their services as a consultant (other than as a non-employee director), will not count for purposes of the limitation. The maximum limit does not reflect the intended size of any potential compensation or equity awards to our non-employee directors.

Cash Compensation

Following the completion of this offering, non-employee directors will be entitled to receive the following cash compensation for their services under the outside director compensation policy:

- $30,000 per year for service as a board member;
- $40,000 per year for service as non-employee chair of the board;
- $25,000 per year for service as a lead independent director;
- $20,000 per year for service as chair of the audit committee;
- $10,000 per year for service as a member of the audit committee;
- $14,000 per year for service as chair of the compensation committee;
- $7,000 per year for service as a member of the compensation committee;
- $8,000 per year for service as chair of the nominating and corporate governance committee; and
- $4,000 per year for service as a member of the nominating and corporate governance committee.

Each non-employee director who serves as the chair of a committee will receive only the additional annual cash fee as the chair of the committee, and not the annual fee as a member of the committee, provided that each non-employee director who serves as the non-employee chair or the lead independent director will receive the annual fee for service as a board member and an additional annual fee as the non-employee chair or lead independent director. All cash payments to non-employee directors are paid quarterly in arrears on a pro-rated basis.

Equity Compensation

Initial Award: Each person who first becomes a non-employee director after the date of the effective date of the policy will receive, on the first trading date on or after the date on which the person first becomes a non-employee director, an initial award of restricted stock units, or the Initial Award, covering a number of shares of our common stock having a grant date fair value (determined in accordance with GAAP) equal to $165,000; provided that any resulting fraction will be rounded down to the nearest whole share. The Initial Award will vest in its entirety on the one (1) year anniversary of the non-employee director's initial start date, subject to the non-employee director continuing to be a non-employee director through the applicable vesting date. If the person was a member of our board of directors and also an employee, becoming a non-employee director due to termination of employment will not entitle them to an Initial Award.

Annual Award: Each non-employee director automatically will receive, on the date of each annual meeting of our stockholders following the effective date of the policy, an annual award of restricted stock units, or an Annual Award, covering a number of shares of our common stock having a grant date fair value (determined in accordance with GAAP) of $165,000; provided that the first annual award granted to an individual who first becomes a non-employee director following the effective date of the policy will have a grant date fair value equal to the product of (A) $165,000 multiplied by (B) a fraction, (i) the numerator of which is equal to the number of fully completed days between the non-employee director's initial start date and the date of the first annual meeting of our stockholders to occur after such individual first becomes a non-employee director, and (ii) the denominator of which is 365; and provided further that any resulting fraction will be rounded down to the nearest whole share. Each Annual Award will vest in its entirety on the earlier of (x) the 1-year anniversary of the Annual Award's grant date, or (y) the day immediately before the date of the next annual meeting of our stockholders that follows the grant date of the Annual Award, subject to the non-employee director's continued service through the applicable vesting date.

In the event of a "change in control" (as defined in our 2020 Plan), each non-employee director will fully vest in their outstanding company equity awards issued under the director compensation policy, including any Initial Award or Annual Award, immediately prior to the consummation of the change in control provided that the non-employee director continues to be a non-employee director through such date.

Executive Compensation

EXECUTIVE COMPENSATION Our named executive officers, consisting of our principal executive officer and the next two most highly compensated executive officers, as of December 31, 2019, were:

- Dave Girouard, our Chief Executive Officer and member of our board of directors;
- Sanjay Datta, our Chief Financial Officer; and
- Paul Gu, our Senior Vice President of Product and Data Science and member of our board of directors.

Summary Compensation Table

The amounts below represent the compensation awarded to or earned by or paid to our named executive officers for the year ended December 31, 2019:

Name and Principal Position	Fiscal Year	Salary ($)	Bonus ($)	Option Awards($)[1]	Non-Equity Incentive PlanCompensation($)[2]	All Other Compensation($)	Total ($)
Dave Girouard[3] *Chief Executive Officer*	2019	360,000		—	—	—	360,000
Sanjay Datta *Chief Financial Officer*	2019	375,000		384,525	189,000	—	948,525
Paul Gu[3] *SVP, Product and Data Science*	2019	269,773		384,525	145,677	—	799,975

(1) The amount reported represents the aggregate grant-date fair value of the stock options awarded to the named executive officer in 2019, calculated in accordance with Topic 718, "Compensation—Stock Compensation." Such grant-date fair value does not take into account any estimated forfeitures related to vesting conditions. The assumptions used in calculating the grant-date fair value of the stock options reported in this column are set forth in Note 11 to our Consolidated Financial Statements. These amounts do not reflect the actual economic value that may be realized by the named executive officer.

(2) The amounts reported represent the amounts earned by the named executive officers in calendar year 2019 under Upstart's 2019 Bonus Plan, as described in more detail below under "Employee Benefit and Stock Plans—2019 Bonus Plan." The amounts reported were paid out, less applicable withholdings, on February 14, 2020.

(3) Mr. Girouard and Mr. Gu serve on our board of directors but are not paid additional compensation for such service.

Outstanding Equity Awards at Year-End

The following table sets forth information regarding outstanding equity awards held by our named executive officers as of December 31, 2019:

	Option Awards				
Name	Grant Date[1]	Number of SecuritiesUnderlyingUnexercisedOptions (#)Exercisable	Number of SecuritiesUnderlyingUnexercisedOptions (#)Unexercisable	Option ExercisePrice ($)[2]	Option ExpirationDate
Dave Girouard	September 20, 2016[3]	1,017,042	234,703	$0.83	September 20, 2026

Sanjay Datta	December 28, 2016[4]	474,619	176,288	$1.35	December 28, 2026
	December 28, 2016[5]	60,500	39,639	$1.35	December 28, 2026
	December 18, 2017[6]	47,916	52,084	$2.15	December 18, 2027
	March 29, 2019[7]	—	150,000	$3.80	March 29, 2029
Paul Gu	May 11, 2012[8]	210,000	—	$0.15	May 11, 2022
	August 21, 2012[9]	120,000	—	$0.15	August 21, 2022
	May 23, 2013[10]	300,000	—	$0.23	May 23, 2023
	June 19, 2014[11]	270,000	—	$0.43	June 19, 2024
	January 14, 2015[12]	200,000	—	$0.60	January 14, 2025
	December 18, 2015[13]	244,791	5,209	$1.17	December 18, 2025
	June 24, 2016[14]	256,249	43,751	$1.17	June 24, 2026
	January 9, 2017[15]	182,291	67,709	$1.35	January 9, 2027
	December 18, 2017[16]	95,833	104,167	$2.15	December 18, 2027
	March 29, 2019[17]	—	150,000	$3.80	March 29, 2029

(1) Each of the outstanding equity awards listed in the table above was granted pursuant to our 2012 Plan.

(2) This column represents the fair value of a share of our common stock on the grant date, as determined by our board of directors.

(3) The shares underlying this option vest, subject to Mr. Girouard's continued role as a service provider to us, in 48 equal monthly installments beginning on October 1, 2016.

(4) The shares underlying this option vest, subject to Mr. Datta's continued role as a service provider to us, as to 1/4th of the total shares on January 1, 2018 with 1/48th of the total shares vesting monthly thereafter.

(5) The shares underlying this option vest, subject to Mr. Datta's continued role as a service provider to us, as to 1/4th of the total shares on July 1, 2018 with 1/48th of the total shares vesting monthly thereafter.

(6) The shares underlying this option vest, subject to Mr. Datta's continued role as a service provider to us, in 48 equal monthly installments beginning on February 1, 2018.

(7) The shares underlying this option vest, subject to Mr. Datta's continued role as a service provider to us, in 12 equal monthly installments beginning on February 1, 2021.

(8) The shares underlying this option vest, subject to Mr. Gu's continued role as a service provider to us, as to 1/4th of the total shares on May 1, 2013 with 1/48th of the total shares vesting monthly thereafter.

(9) The shares underlying this option vest, subject to Mr. Gu's continued role as a service provider to us, as to 1/4th of the total shares on September 1, 2013 with 1/48th of the total shares vesting monthly thereafter.

(10) The shares underlying this option vest, subject to Mr. Gu's continued role as a service provider to us, as to 1/4th of the total shares on May 1, 2014 with 1/48th of the total shares vesting monthly thereafter.

(11) The shares underlying this option vest, subject to Mr. Gu's continued role as a service provider to us, as to 1/4th of the total shares on April 1, 2015 with 1/48th of the total shares vesting monthly thereafter.

(12) The shares underlying this option vest, subject to Mr. Gu's continued role as a service provider to us, in 48 equal monthly installments beginning on February 1, 2015.

(13) The shares underlying this option vest, subject to Mr. Gu's continued role as a service provider to us, in 48 equal monthly installments beginning on February 1, 2016.

(14) The shares underlying this option vest, subject to Mr. Gu's continued role as a service provider to us, in 48 equal monthly installments beginning on August 1, 2016.

(15) The shares underlying this option vest, subject to Mr. Gu's continued role as a service provider to us, in 48 equal monthly installments beginning on February 1, 2017.

(16) The shares underlying this option vest, subject to Mr. Gu's continued role as a service provider to us, in 48 equal monthly installments beginning on February 1, 2018.

(17) The shares underlying this option vest, subject to Mr. Gu's continued role as a service provider to us, in 12 equal monthly installments beginning on February 1, 2021.

Fiscal Year 2020 Option Grants

In January 2020, our board of directors approved option grants under our 2012 Plan to each of Mr. Datta and Mr. Gu. Mr. Datta received an option to purchase 200,000 shares of our common stock, which vests in 12 equal monthly installments beginning on January 1, 2022, subject to Mr. Datta's continued role as a service provider to us. Mr. Gu received an option to purchase 200,000 shares of our common stock, which vests in 12 equal monthly installments beginning on January 1, 2022, subject to Mr. Gu's continued role as a service provider to us.

Potential Payments upon Termination or Change in Control

In October 2020, our board of directors approved our Executive Change in Control and Severance Policy, or the Severance Policy, which will become effective as of the date of the effectiveness of the registration statement of which this prospectus forms a part. Each of our named executive officers participates in the Severance Policy. Pursuant to our Severance Policy, if, within the 3 month period prior to or the 12 month period following a "change in control" (as defined in the Severance Policy), we terminate the employment of an executive without "cause" (excluding death or disability) or the executive resigns for "good reason" (as such terms are defined in the applicable agreement), and within 60 days following such termination, the executive executes a waiver and release of claims in our favor that becomes effective and irrevocable, the executive will be entitled to receive (i) a lump sum payment equal to 12 months of the executive's then current annual base salary, (ii) a lump sum payment equal to 100% of the executive's target annual bonus amount for the year of termination (provided such amount will be prorated based on days of service during the applicable bonus period with respect to Messrs. Datta and Gu), (iii) reimbursement of premiums to maintain group health insurance continuation benefits pursuant to "CORBA" for the executive and the executive's respective eligible dependents for up to 12 months, and (iv) vesting acceleration as to 100% of the then-unvested shares subject to each of the executive's then outstanding equity awards (and in the case of awards with performance vesting, unless the applicable award agreement governing such award provides otherwise, all performance goals and other vesting criteria will be deemed achieved at target or as earned (determined on a pro rata basis) if greater.

Pursuant to the Severance Policy, in the event any payment to an executive would be subject to the excise tax imposed by Section 4999 of the Internal Revenue Code, as amended, or the Code (as a result of a payment being classified as a parachute payment under Section 280G of the Code), the executive will receive such payment as would entitle the executive to receive the greatest after-tax benefit, even if it means that we pay the executive a lower aggregate payment so as to minimize or eliminate the potential excise tax imposed by Section 4999 of the Code.

Employee Benefit and Stock Plans

2020 Equity Incentive Plan

In October 2020, our board of directors adopted, and we expect our stockholders to approve, our 2020 Plan. We expect that our 2020 Plan will become effective on the business day immediately prior to the effective date of the registration statement of which this prospectus forms a part. Our 2020 Plan will provide for the grant of incentive stock options, within the meaning of Section 422 of the Code, to our employees and any parent and subsidiary corporations' employees, and for the grant of nonstatutory stock options, stock appreciation rights, restricted stock, restricted stock units, or RSUs, and performance awards to our employees, directors, and consultants and our parent and subsidiary corporations' employees and consultants. Our 2012 Plan will terminate immediately prior to effectiveness of the 2020 Plan with respect to the grant of future awards.

Authorized Shares

Subject to the adjustment provisions of and the automatic increase described in our 2020 Plan, a total of 5,520,000 shares of our common stock will be reserved for issuance pursuant to our 2020 Plan. In addition, subject to the adjustment provisions of our 2020 Plan, the shares reserved for issuance under our 2020 Plan also will include any shares subject to awards granted under our 2012 Plan that, on or after the effective date of the registration statement of which this prospectus forms a part, expire or otherwise terminate without having been exercised or issued in full, are tendered to or withheld by us for payment of an exercise price or for satisfying tax withholding obligations, or are forfeited to or repurchased by us due to failure to vest (provided that the maximum number of shares that may be added to our 2020 Plan pursuant to outstanding awards under the 2012 Plan is shares). Subject to the adjustment provisions of our 2020 Plan, the number of shares available for issuance under our 2020 Plan will also include an annual increase on the first day of each fiscal year beginning with the 2021 fiscal year and ending on the ten year anniversary of the date our board of directors approved the 2020 Plan, in an amount equal to the least of:

- 15,000,000 shares of our common stock;
- 5% of the outstanding shares of our common stock on the last day of our immediately preceding fiscal year; or
- such number of shares of our common stock as the administrator may determine.

If a stock option or stock appreciation right granted under the 2020 Plan expires or becomes unexercisable without having been exercised in full or is surrendered pursuant to an exchange program or, with respect to restricted stock, RSUs or stock settled performance awards, is forfeited to, or repurchased by, us due to failure to vest, then the unpurchased shares (or for awards other than stock options or stock appreciation rights, the forfeited or repurchased

shares) which were subject thereto will become available for future grant or sale under the 2020 Plan (unless the 2020 Plan has terminated). With respect to stock appreciation rights, only the net shares actually issued will cease to be available under the 2020 Plan and all remaining shares under stock appreciation rights will remain available for future grant or sale under the 2020 Plan (unless the 2020 Plan has terminated). Shares that have actually been issued under the 2020 Plan under any award will not be returned to the 2020 Plan; provided, however, that if shares issued pursuant to awards of restricted stock, RSUs or performance awards are repurchased or forfeited to us due to failure to vest, such shares will become available for future grant under the 2020 Plan. Shares used to pay the exercise price of an award or to satisfy the tax withholding obligations related to an award will become available for future grant or sale under the 2020 Plan. To the extent an award is paid out in cash rather than shares, the cash payment will not result in a reduction in the number of shares available for issuance under the 2020 Plan.

Plan Administration

Our compensation committee administers our 2020 Plan and may further delegate authority to one or more subcommittees or officers to the extent such delegation complies with applicable laws. Subject to the provisions of our 2020 Plan, the administrator will have the power to administer our 2020 Plan and make all determinations deemed necessary or advisable for administering our 2020 Plan, including but not limited to: the power to determine the fair market value of our common stock; select the service providers to whom awards may be granted; determine the number of shares covered by each award; approve forms of award agreements for use under our 2020 Plan; determine the terms and conditions of awards (including, but not limited to, the exercise price, the times or times at which the awards may be exercised, any vesting acceleration or waiver or forfeiture restrictions, and any restriction or limitation regarding any award or the shares relating thereto); construe and interpret the terms of our 2020 Plan and awards granted under it, including but not limited to determining whether and when a change in control has occurred; establish, amend, and rescind rules and regulations relating to our 2020 Plan, and adopt sub-plans relating to the 2020 Plan; interpret, modify or amend each award, including but not limited to the discretionary authority to extend the post-termination exercisability period of awards; allow participants to satisfy tax withholding obligations in any manner permitted by the 2020 Plan; delegate ministerial duties to any of our employees; authorize any person to take any steps and execute, on our behalf, any documents required for an award previously granted by the administrator to be effective; temporarily suspend the exercisability of an award if the administrator deems such suspension to be necessary or appropriate for administrative purposes, provided that, unless prohibited by applicable laws, such suspension shall be lifted in all cases not less than ten trading days before the last date that the award may be exercised; allow a participant to defer the receipt of payment of cash or the delivery of shares that would otherwise be due to such participant under an award; and make any determinations necessary or appropriate under the adjustment provisions of the 2020 Plan. The administrator also has the authority to allow participants the opportunity to transfer outstanding awards to a financial institution or other person or entity selected by the administrator and to institute an exchange program by which outstanding awards may be surrendered or canceled in exchange for awards of the same type which may have a higher or lower exercise price and/or different terms, awards of a different type and/or cash, or by which the exercise price of an outstanding award is increased or reduced. The administrator's decisions, interpretations, and other actions will be final and binding on all participants to the full extent permitted by law.

Stock Options

Our 2020 Plan permits the grant of options. The exercise price of options granted under our 2020 Plan must be at least equal to the fair market value of our common stock on the date of grant, except that options may be granted with a lower exercise price to a service provider who is not a U.S. taxpayer, or pursuant to certain transactions. The term of an option is determined by the administrator, provided that the term of an incentive stock option may not exceed ten years. With respect to any participant who owns more than 10% of the voting power of all classes of our outstanding stock, the term of an incentive stock option granted to such participant must not exceed five years and the exercise price must equal at least 110% of the fair market value on the grant date. The administrator determines the methods of payment of the exercise price of an option, which may include cash, check or wire transfer, cashless exercise, net exercise, promissory note, shares, or other consideration or method of payment acceptable to the administrator, to the extent permitted by applicable law. After the termination of service of an employee, director, or consultant, he or she may exercise his or her option for the period of time stated in his or her option agreement. In the absence of a specified time in an award agreement, if termination is due to death or disability, the option will remain exercisable for six months. In all other cases, in the absence of a specified time in an award, the option will remain exercisable for thirty days. These exercise periods may be tolled in certain circumstances, for example if exercise prior to the end of the applicable period is not permitted because of applicable laws. However, in no event may an option be exercised later than the expiration of its term.

Stock Appreciation Rights

Our 2020 Plan permits the grant of stock appreciation rights. Stock appreciation rights allow the recipient to receive the appreciation in the fair market value of our common stock between the exercise date and the date of grant. The term of stock appreciation rights is determined by the administrator. After the termination of service of an employee, director, or consultant, he or she may exercise his or her stock appreciation right for the period of time stated in his or her stock appreciation rights agreement. In the absence of a specified time in an award agreement, if termination is due to death or disability, the stock appreciation rights will remain exercisable for six months. In all other cases, in the absence of a specified time in an award agreement, the stock appreciation rights will remain exercisable for thirty days following the termination of service. These exercise periods may be tolled in certain circumstances, for example if exercise prior to the end of the applicable period is not permitted because of applicable laws. However, in no event may a stock appreciation right be exercised later than the expiration of its term. Subject to the provisions of our 2020 Plan, the administrator determines the other terms of stock appreciation rights, including when such rights become exercisable and whether to pay any increased appreciation in cash or with shares of our common stock, or a combination thereof, except that the per share exercise price for the shares to be issued pursuant to the exercise of a stock appreciation right must be no less than 100% of the fair market value per share on the date of grant.

Restricted Stock

Our 2020 Plan permits the grant of restricted stock. Restricted stock awards are grants of shares of our common stock that vest in accordance with terms and conditions established by the administrator. The administrator determines the number of shares of restricted stock granted to any employee, director, or consultant and, subject to the provisions of our 2020 Plan, determines the terms and conditions of such awards. The administrator has the authority to

impose whatever conditions to vesting it determines to be appropriate (for example, the administrator will be able to set restrictions based on the achievement of specific performance goals or continued service to us); provided, however, that the administrator, in its sole discretion, may accelerate the time at which any restrictions will lapse or be removed. Recipients of restricted stock awards generally have voting and dividend rights with respect to such shares upon grant without regard to vesting, unless the administrator provides otherwise. Shares of restricted stock that do not vest will be subject to our right of repurchase or forfeiture.

Restricted Stock Units

Our 2020 Plan permits the grant of RSUs. Each RSU will represent an amount equal to the fair market value of one share of our common stock. Subject to the provisions of our 2020 Plan, the administrator determines the terms and conditions of RSUs, including the vesting criteria and the form and timing of payment. The administrator has the authority to set vesting criteria based upon the achievement of company-wide, divisional, business unit, or individual goals (including, but not limited to, continued employment or service), or any other basis determined by the administrator in its discretion. The administrator, in its sole discretion, may pay earned RSUs in the form of cash, in shares, or in some combination of both. Notwithstanding the foregoing, the administrator, in its sole discretion, may accelerate the vesting, or reduce or waive the criteria that must be met for vesting, of the RSUs or the time at which any restrictions will lapse or be removed.

Performance Awards

Our 2020 Plan permits the grant of performance awards. Performance awards are awards that will result in a payment to a participant only if performance goals established by the administrator are achieved or the awards otherwise vest. The administrator may establish performance objectives or other vesting criteria in its discretion, which, depending on the extent to which they are met, will determine the number and/or the value of performance awards to be paid out to participants. The administrator has the authority to set performance objectives based on the achievement of company-wide, divisional, business unit, or individual goals (including, but not limited to, continued employment or service), or any other basis determined by the administrator in its discretion. Each performance award's threshold, target, and maximum payout values are established by the administrator on or before the grant date. After the grant of a performance award, the administrator, in its sole discretion, may reduce or waive any performance criteria or other vesting provisions for such performance award. The administrator, in its sole discretion, may pay earned performance awards in the form of cash, in shares, or in some combination thereof.

Non-Employee Directors

Our 2020 Plan provides that all outside (non-employee) directors will be eligible to receive all types of awards (except for incentive stock options) under our 2020 Plan. In order to provide a maximum limit on the awards that can be made to our non-employee directors, our 2020 Plan provides that in any given fiscal year, a non-employee director will not be granted awards having a grant-date fair value greater than $1,000,000, but this limit is increased to $2,000,000 in connection with his or her initially joining our board of directors (in each case, excluding awards granted to him or her as a consultant or employee). The grant-date fair values will be determined according to GAAP. The maximum limits do not reflect the intended size of any potential grants or a commitment to make grants to our outside directors under our 2020 Plan in the future.

Non-Transferability of Awards

Unless the administrator provides otherwise, our 2020 Plan generally does not allow for the transfer of awards and only the recipient of an award may exercise an award during his or her lifetime. If the administrator makes an award transferrable, such award will contain such additional terms and conditions as the administrator deems appropriate.

Certain Adjustments

If any extraordinary dividend or other extraordinary distribution (whether in cash, shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, reclassification, repurchase, or exchange of shares of our common stock or other of our securities, other change in our corporate structure affecting the shares, or any similar equity restructuring transaction affecting our shares occurs (including a change in control), the administrator, to prevent diminution or enlargement of the benefits or potential benefits intended to be provided under the 2020 Plan, will adjust the number and class of shares that may be delivered under the 2020 Plan and/or the number, class, and price of shares covered by each outstanding award, and the numerical share limits set forth in our 2020 Plan. The conversion of any of our convertible securities and ordinary course repurchases of our shares or other securities will not be treated as an event that will require adjustment under the 2020 Plan.

Dissolution or Liquidation

In the event of our proposed dissolution or liquidation, the administrator will notify participants as soon as practicable prior to the effective date of such proposed transaction and all awards will terminate immediately prior to the consummation of such proposed transaction.

Merger or Change in Control

Our 2020 Plan provides that in the event of a merger or change in control, as defined under our 2020 Plan, each outstanding award will be treated as the administrator determines, without a requirement to obtain a participant's consent, including, without limitation, that such award will be continued by the successor corporation or a parent or subsidiary of the successor corporation. An award generally will be considered continued if, following the transaction, (i) the award gives the right to purchase or receive the consideration received in the transaction by holders of our shares or (ii) the award is terminated in exchange for an amount of cash and/or property, if any, equal to the amount that would have been received upon the exercise or realization of the award at the closing of the transaction, which payment may be subject to any escrow applicable to holders of our common stock in connection with the transaction or subjected to the award's original vesting schedule. The administrator will not be required to treat all awards or portions thereof the vested and unvested portions of an award, or all participants similarly.

In the event that a successor corporation or its parent or subsidiary does not continue an outstanding award, then such award will fully vest, all restrictions on such award will lapse, all performance goals or other vesting criteria applicable to such award will be deemed achieved at 100% of target levels, and such award will become fully exercisable, if applicable, for a specified period prior to the transaction, unless specifically provided for otherwise under the applicable award agreement or other written agreement with the participant. The award will then terminate upon the expiration of the specified period of time. If an option or stock appreciation right is not continued, the administrator will notify the participant in writing or electronically that such option or stock appreciation right will be exercisable for a period of time determined by the administrator in its sole discretion and the option or stock appreciation right will terminate upon the expiration of such period.

With respect to awards granted to an outside director, in the event of a change in control, all of his or her options and stock appreciation rights, if any, will vest fully and become immediately exercisable, all restrictions on his or her restricted stock and RSUs will lapse, and all performance goals or other vesting requirements for his or her performance awards will be deemed achieved at 100% of target levels, and all other terms and conditions met.

Clawback

Awards will be subject to any clawback policy that we are required to adopt pursuant to the listing standards of any national securities exchange or association on which our stock is listed or as otherwise required by applicable laws, and the administrator will also be able to specify in an award agreement that the participant's rights, payments, and/or benefits with respect to an award will be subject to reduction, cancellation, forfeiture, and/or recoupment upon the occurrence of certain specified events.

Amendment and Termination

The administrator will have the authority to amend, alter, suspend, or terminate our 2020 Plan, provided we will obtain stockholder approval of any amendment to the extent necessary or desirable to comply with applicable laws. However, no amendment, alteration, suspension or termination of our 2020 Plan or an Award under it may, taken as a whole, materially impair the existing rights of any participant without the participant's consent. Our 2020 Plan will continue in effect until it is terminated, provided that incentive stock options may not be granted after the ten year anniversary of the date our board of directors approved the 2020 Plan, and the automatic annual share increase will end on the ten year anniversary of the date our board of directors approved the 2020 Plan.

2012 Stock Plan

Our 2012 Plan was originally adopted by the board of directors of Upstart Network, Inc. in April 2012 and was assumed by Upstart Holdings, Inc. in December 2013 pursuant to a restructuring.

Our 2012 Plan provides for the grant of incentive stock options (within the meaning of Section 422 of the Code), or ISOs, to our employees and any of our parent and subsidiary corporations' employees, and for the grant of nonstatutory stock options, or NSOs and restricted stock to our employees and consultants, and our parent, subsidiary, and affiliate corporations' employees and consultants. It is expected that as of one business day prior to the effectiveness of the registration statement of which this prospectus forms a part, our 2012 Plan will be terminated, and we will not grant any additional awards under our 2012 Plan thereafter. However, our 2012 Plan will continue to govern the terms and conditions of the outstanding awards previously granted under our 2012 Plan.

As of December 31, 2019, options to purchase 16,502,206 shares of our common stock were outstanding under our 2012 Plan.

Plan Administration

Our 2012 Plan is administered by our board of directors or one or more committees appointed by our board of directors. Each committee will consist of two or more members of our board of directors and will have such authority and be responsible for such functions as our board of directors has assigned to it (the board of directors, or its designated committee, the "administrator"). Our board of directors may also authorize one or more of our officers to administer the 2012 Plan within the parameters specified by the board of directors. All decisions, interpretations, and other actions of the administrator are final and binding on all participants and all persons deriving their rights from a participant.

Subject to the provisions of our 2012 Plan, the administrator has the power to determine the fair market value of shares of stock, to select the participants to whom awards may be granted, to determine the number of shares covered by an award, to approve the form(s) of agreement(s) and other related documents used under our 2012 Plan, to determine the term and conditions of awards, to amend awards or related agreements, to determine under what circumstances an option may be settled in cash, to institute an exchange program by which outstanding awards may be surrendered in exchange for awards with a higher or lower exercise price, to grant awards to foreign nationals or participants employed outside of the United States, and to construe and interpret the terms of the 2012 Plan and agreements related to awards.

Eligibility

Employees, consultants and directors of ours and employees, consultants or directors or our parent, subsidiary, and affiliate companies are eligible to receive awards. Only our employees or employees of our parent or subsidiary companies are eligible to receive incentive stock options.

Stock Options

Stock options have been granted under our 2012 Plan. Subject to the provisions of our 2012 Plan, the administrator determines the term of an option, the number of shares subject to an option and the time period in which an option may be exercised.

The term of an option is stated in the applicable award agreement, but the term of an option may not exceed 10 years from the grant date. The administrator determines the exercise price of options, which generally may not be less than 100% of the fair market value of our common stock on the grant date. However, an incentive stock option granted to a person who owns more than 10% of the total combined voting power of all classes of our outstanding stock or of our parent or any subsidiary may have a term of no longer than five years from the grant date and must have an exercise price of at least 110% of the

fair market value of our common stock on the grant date. In addition, to the extent that the aggregate fair market value of the shares with respect to which incentive stock options are exercisable for the first time by an employee during any calendar year (under all our plans and those of any parent or subsidiary) exceeds $100,000, such options will be treated as nonstatutory stock options.

The administrator determines how a participant may pay the exercise price of an option, and the permissible methods are generally set forth in the applicable award agreement. If a participant's "continuous service status" (as defined in our 2012 Plan) terminates, that participant may exercise the vested portion of his or her option for the period of time stated in the applicable award agreement. If the award agreement does not specify the terms and conditions upon which an option shall terminate upon termination of a participant's continuous service status, the 2012 Plan provides that the vested portion of such option will (i) be exercisable for three months following the participant's termination for reasons other than death, disability or cause, (ii) be exercisable for twelve months following the participant's termination for reasons of death or disability, and (iii) terminate immediately upon the participant's termination for "cause," as defined in the 2012 Plan. In no event will an option remain exercisable beyond its original term. If a participant does not exercise his or her option within the time specified in the award agreement, the option will terminate. Except as described above, the administrator has the discretion to determine the post-termination exercisability periods for an option.

Restricted Stock

Restricted stock may be granted under our 2012 Plan. Restricted stock awards are grants of shares of our common stock that vest in accordance with terms and conditions established by the administrator (if any). The administrator will determine the number of shares of restricted stock granted to any employee, consultant or director and, subject to the provisions of our 2012 Plan, will determine any terms and conditions of such awards. The restricted stock will vest at such rate as the administrator may determine. Once the restricted stock is purchased or issued, the participant will have the rights equivalent to those of a holder of capital stock. No adjustment will be made for a dividend or other right for which the record date is prior to the date the restricted stock is purchased or received, except as otherwise provided in the 2012 Plan.

Non-Transferability of Awards

Except as set forth in the 2012 Plan, awards may not be sold, pledged, assigned, hypothecated, transferred or disposed of in any manner other than by will or by the laws of descent or distribution. The designation of a beneficiary by a participant will not constitute a transfer. An option may be exercised during the lifetime of the holder of the option, only by such holder or a transferee permitted by the 2012 Plan.

The administrator may in its sole discretion grant nonstatutory stock options that may be transferred by instrument to an inter vivos or testamentary trust in which the options are to be passed to beneficiaries upon the death of the trustor or by gift to family members.

Certain Adjustments

In the event of a stock split, reverse stock split, stock dividend, combination, consolidation, reclassification of the shares or subdivision of the shares, proportionate adjustments will automatically be made in each of (i) the numbers and class of shares or other stock or securities: (x) available for future awards under the 2012 Plan and (y) covered by each outstanding award, (ii) the exercise price per share of each such outstanding option, and (iii) any repurchase price per share applicable to shares issued pursuant to any award. In the event of any increase or decrease in the number of issued shares effected without receipt of consideration by us, a declaration of an extraordinary dividend with respect to the shares payable in a form other than shares in an amount that has a material effect on the fair market value, a recapitalization (including a recapitalization through a large nonrecurring cash dividend), a rights offering, a reorganization, merger, a spin-off, split-up, change in corporate structure or a similar occurrence, the administrator at its sole discretion may make appropriate adjustments in one or more of the items listed in (i) through (iii) above.

Mergers and Consolidations

In the event of (i) a transfer of all or substantially all of our assets, (ii) a merger, consolidation or other capital reorganization or business combination transaction of us with or into another corporation, entity or person, or (iii) the consummation of a transaction, or series of related transactions, in which any person becomes the beneficial owner, directly or indirectly, of more than 50% of our outstanding capital stock (each a "corporate transaction"), each outstanding award will be treated as the administrator determines. The administrator's determination may be made without the consent of any participant and need not treat all outstanding awards in an identical manner. The administrator's determination may provide for one or more of the following without limitation with respect to each outstanding award: (i) the continuation of outstanding awards by us; (ii) the assumption of outstanding awards by the surviving corporation or its parent; (iii) the substitution by the surviving corporation or its parent of new options or equity awards for such awards; (iv) the cancellation of awards and a payment to the participants equal to the excess of (x) the fair market value of the shares subject to awards as of the closing date of the corporate transaction over (y) the exercise price or purchase price for the shares to be issued pursuant to the exercise of awards; or (v) the cancellation of awards for no consideration.

With respect to awards providing for accelerated vesting in connection with any termination of service that occurs on or after a corporate transaction, if the successor does not agree to assume the award, or to substitute an equivalent award or right for the award, then any acceleration of vesting that would otherwise occur upon such termination of service will occur immediately prior to, and contingent upon, the consummation of the corporate transaction.

Amendment and Termination

Our board of directors may amend or terminate our 2012 Plan at any time; provided, however no amendment or termination will be made that would materially and adversely affect the rights of any participant under any outstanding award, without his or her consent. To the extent necessary and desirable to comply with applicable laws, we will obtain the approval of holders of capital stock with respect to any amendments to our 2012 Plan as required. As noted above, it is expected that as of one business day prior to the effectiveness of the registration statement of which this prospectus forms a part, our 2012 Plan will be terminated, and we will not grant any additional awards under our 2012 Plan thereafter.

2020 Employee Stock Purchase Plan

In October 2020, our board of directors adopted, and we expect our stockholders to approve, our ESPP. Our ESPP will be effective on the business day immediately prior to the effective date of the registration statement of which this prospectus forms a part.

Authorized Shares

Subject to the adjustment provisions of our ESPP, a total of 1,380,000 shares of our common stock will be reserved for issuance pursuant to our ESPP. The number of shares available for issuance under our ESPP will also include an annual increase on the first day of each fiscal year beginning with the 2021 fiscal year in an amount equal to the least of:

- 2,000,000 shares of our common stock;
- 1% of the outstanding shares of our common stock on the last day of our immediately preceding fiscal year; or
- such number of shares of our common stock as the administrator may determine.

ESPP Administration

The compensation committee of our board of directors will administer our ESPP and will have full and exclusive discretionary authority to construe, interpret, and apply the terms of the ESPP, delegate ministerial duties to any of our employees, designate separate offerings under the ESPP, designate our subsidiaries and affiliates as participating in the ESPP, determine eligibility, adjudicate all disputed claims filed under the ESPP, and establish procedures that it deems necessary for the administration of the ESPP, including, but not limited to, adopting such procedures and sub-plans as are necessary or appropriate to permit participation in the ESPP by employees who are foreign nationals or employed outside the United States. The administrator's findings, decisions and determinations are final and binding on all participants to the full extent permitted by law.

Eligibility

Generally, all of our employees will be eligible to participate if they are customarily employed by us, or any participating subsidiary or affiliate, for at least 20 hours per week and more than five months in any calendar year. The administrator, in its discretion, may, prior to an enrollment date, for all options to be granted on such enrollment date in an offering, determine that an employee who (i) has not completed at least two years of service (or a lesser period of time determined by the administrator) since his or her last hire date, (ii) customarily works not more than 20 hours per week (or a lesser period of time determined by the administrator), (iii) customarily works not more than five months per calendar year (or a lesser period of time determined by the administrator), (iv) is a highly compensated employee within the meaning of Section 414(q) of the Code, or (v) is a highly compensated employee within the meaning of Section 414(q) of the Code with compensation above a certain level or is an officer or subject to disclosure requirements under Section 16(a) of the Exchange Act, is or is not eligible to participate in such offering period.

However, an employee may not be granted rights to purchase shares of our common stock under our ESPP if such employee:

- immediately after the grant would own capital stock and/or hold outstanding options to purchase such shares possessing 5% or more of the total combined voting power or value of all classes of capital stock of ours or of any parent or subsidiary of ours; or
- holds rights to purchase shares of our common stock under all employee share purchase plans of ours or any parent or subsidiary of ours that accrue at a rate that exceeds $25,000 worth of our shares of common stock for each calendar year in which such rights are outstanding at any time.

Offering Periods

Our ESPP will include a component that allows us to make offerings intended to qualify under Section 423 of the Code and a component that allows us to make offerings not intended to qualify under Section 423 of the Code to designated companies, as described in our ESPP. Our ESPP will provide for consecutive six-month offering periods. The offering periods will be scheduled to start on the first trading day on or after February 15 and August 15 of each year, except the first offering period will commence on the first trading day on or after the effective date of the registration statement of which this prospectus forms a part and will end on the first trading day on or before August 15, 2021, and the second offering period will commence on the last trading day on or after August 15, 2021.

Contributions

Our ESPP will permit participants to purchase our shares of common stock through contributions (in the form of payroll deductions or otherwise to the extent permitted by the administrator) of up to 15% of their eligible compensation, which includes a participant's gross payments of base salary but excludes payments for incentive compensation, bonuses, payments for overtime and shift premium, equity compensation income and other similar compensation. Unless otherwise determined by the administrator, a participant may make a one-time decrease (but not increase) to the rate of his or her contributions during an offering period, provided that during the first offering period under the ESPP a participant may decrease the rate of his or her contributions two times.

Exercise of Purchase Right

Amounts contributed and accumulated by the participant will be used to purchase our shares of common stock at the end of each offering. A participant may purchase a maximum of 2,000 shares of our common stock during an offering period. The purchase price of the shares will be 85% of the lower of the fair market value of our shares of common stock on the first trading day of the offering period or on the exercise date. Participants may end their participation at any time during an offering period and will be paid their accrued contributions that have not yet been used to purchase shares of our common stock. Participation ends automatically upon termination of employment with us.

Non-Transferability

A participant may not transfer contributions credited to his or her account nor any rights granted under our ESPP other than by will, the laws of descent and distribution or as otherwise provided under our ESPP.

Merger or Change in Control

Our ESPP provides that in the event of a merger or change in control, as defined under our ESPP, a successor corporation (or a parent or subsidiary of the successor corporation) will assume or substitute each outstanding purchase right. If the successor corporation refuses to assume or substitute for the outstanding purchase right, the offering period with respect to which the purchase right relates will be shortened, and a new exercise date will be set that will be before the date of the proposed merger or change in control. The administrator will notify each participant that the exercise date has been changed and that the participant's option will be exercised automatically on the new exercise date unless prior to such date the participant has withdrawn from the offering period.

Amendment; Termination

The administrator will have the authority to amend, suspend or terminate our ESPP. Our ESPP automatically will terminate in 2040, unless we terminate it sooner.

2019 Bonus Plan

In May 2019, our board of directors adopted an annual bonus plan for calendar year 2019, which we refer to as the 2019 Bonus Plan. Mr. Datta and Mr. Gu were participants in the 2019 Bonus Plan. The 2019 Bonus Plan provided for non-equity incentive compensation based upon the combined achievement of individual and corporate performance goals over calendar year 2019. The corporate performance goals under the 2019 Bonus Plan consisted of revenue attainment and operating profit over calendar year 2019.

Under the 2019 Bonus Plan, bonus payments were determined by multiplying each participant's target bonus by (i) a factor determined by individual performance, capped at 150%, and (ii) a factor determined by the achievement of the corporate performance goals, capped at 200%. We refer to the attainment of such factors as individual and corporate multipliers, respectively.

The individual multiplier was based on achievement of individual goals over calendar year 2019. The individual multiplier scaled from 0% to 150% depending on our assessment of individual performance.

The corporate multiplier was based on the product of (i) the revenue multiplier derived from the achievement of revenue attainment goals and (ii) the profitability multiplier derived from the achievement of operating profit goals over calendar year 2019. With respect to revenue attainment goals, the revenue multiplier scaled linearly from zero to 100% between 66% of the target revenue attainment goal and 100% of the target revenue attainment goal, and scaled linearly from 100% to 200% between 100% of the target revenue attainment goal and 166% of the target revenue attainment goal. With respect to operating profit goals, the profitability multiplier scaled linearly from zero to 100% between 0% of the target operating profit goal and 100% of the target operating profit goal, and scaled linearly from 100% to 200% between 100% of the target operating profit goal and 200% of the target operating profit goal.

In January 2020, our compensation committee reviewed achievement of the corporate performance goals for calendar year 2019, and approved a corporate multiplier of 120%.

The 2019 Bonus Plan required a participant's continued employment through the bonus payment date in order to receive a bonus for the applicable performance period.

401(k) Plan

We maintain a 401(k) plan for employees. The 401(k) is intended to qualify under Section 401(k) of the Code, so that contributions to the 401(k) plan by employees or by us, and the investment earnings thereon, are not taxable to the employees until withdrawn, and so that contributions made by us, if any, will be deductible by us when made. Employees may elect to reduce their current compensation by up to the statutorily prescribed annual limits and to have the amount of such reduction contributed to their 401(k) plans. The 401(k) plan permits us to make contributions up to the limits allowed by law on behalf of all eligible employees.

Employee Incentive Compensation Plan

In October 2020, our board of directors approved our Employee Incentive Compensation Plan, or Master Bonus Plan which became effective on the date it was approved. Messrs. Girouard, Datta and Gu are participants in the Master Bonus Plan, and 2020 annual bonuses, if any will be paid pursuant to the Master Bonus Plan.

Our board of directors or a committee appointed by our board of directors administers the Master Bonus Plan, provided that unless and until our board of directors determines otherwise, our compensation committee will administer the Master Bonus Plan. The Master Bonus Plan allows the administrator to provide awards to employees selected for participation, who may include our named executive officers, which awards may be based upon performance goals established by the administrator. The administrator, in its sole discretion, may establish a target award for each participant under the Master Bonus Plan, which may be expressed as a percentage of the participant's average annual base salary for the applicable performance period, a fixed dollar amount, or such other amount or based on such other formula as the administrator determines to be appropriate.

Under the Master Bonus Plan, the administrator determines the performance goals, if any, applicable to any target award (or portion thereof) for a performance period, which may include, without limitation, goals related to: attainment of research and development milestones; sales bookings; business divestitures and acquisitions; capital raising; cash flow; cash position; contract awards or backlog; corporate transactions; customer renewals; customer

retention rates from an acquired company, subsidiary, business unit or division; earnings (which may include any calculation of earnings, including but not limited to earnings before interest and taxes, earnings before taxes, earnings before interest, taxes, depreciation and amortization and net taxes); earnings per share;

expenses; financial milestones; gross margin; growth in stockholder value relative to the moving average of the S&P 500 Index or another index; internal rate of return; leadership development or succession planning; license or research collaboration arrangements; market share; net income; net profit; net sales; new product or business development; new product invention or innovation; number of customers; operating cash flow; operating expenses; operating income; operating margin; overhead or other expense reduction; patents; procurement; product defect measures; product release timelines; productivity; profit; regulatory milestones or regulatory-related goals; retained earnings; return on assets; return on capital; return on equity; return on investment; return on sales; revenue; revenue growth; sales results; sales growth; savings; stock price; time to market; total stockholder return; working capital; unadjusted or adjusted actual contract value; unadjusted or adjusted total contract value; loans and loan originations; and individual objectives such as peer reviews or other subjective or objective criteria. As determined by the administrator, the performance goals may be based on GAAP or non GAAP results and any actual results may be adjusted by the administrator for one-time items or unbudgeted or unexpected items and/or payments of awards under the Master Bonus Plan when determining whether the performance goals have been met. The performance goals may be based on any factors the administrator determines relevant, including without limitation on an individual, divisional, portfolio, project, business unit, segment or company-wide basis. Any criteria used may be measured on such basis as the administrator determines, including without limitation: (a) in absolute terms, (b) in combination with another performance goal or goals (for example, but not by way of limitation, as a ratio or matrix), (c) in relative terms (including, but not limited to, results for other periods, passage of time and/or against another company or companies or an index or indices), (d) on a per-share basis, (e) against our performance as a whole or a segment and/or (f) on a pre-tax or after-tax basis. The performance goals may differ from participant to participant and from award to award. Failure to meet the applicable performance goals will result in a failure to earn the target award, subject to the administrator's discretion to modify an award. The administrator also may determine that a target award (or portion thereof) will not have a performance goal associated with it but instead will be granted (if at all) as determined by the administrator.

The administrator may, in its sole discretion and at any time, increase, reduce or eliminate a participant's actual award, and/or increase, reduce or eliminate the amount allocated to the bonus pool for a particular performance period. The actual award may be below, at or above a participant's target award, in the administrator's discretion. The administrator may determine the amount of any increase, reduction, or elimination on the basis of such factors as it deems relevant, and it is not required to establish any allocation or weighting with respect to the factors it considers.

Actual awards under the Master Bonus Plan generally will be paid in cash (or its equivalent) in a single lump sum only after they are earned and approved by the administrator, provided that the administrator reserves the right, in its sole discretion, to settle an actual award with a grant of an equity award with such terms and conditions, including vesting requirements, as determined by the administrator in its sole discretion. Unless otherwise determined by administrator, to earn an actual award, a participant must be employed by us (or an affiliate of us, as applicable) through the date the bonus is paid. Payment of bonuses occurs as soon as administratively practicable after the end of the applicable performance period, but in no case after the later of (i) the 15th day of the third month of the fiscal year immediately following the fiscal year in which the bonuses vest and (ii) March 15 of the calendar year immediately following the calendar year in which the bonuses vest.

Awards under our Master Bonus Plan will be subject to reduction, cancellation, forfeiture, or recoupment in accordance with any clawback policy that we adopt pursuant to the listing standards of any national securities exchange or association on which our securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other applicable laws. In addition, the administrator may impose such other clawback, recovery or recoupment provisions with respect to an award under the Master Bonus Plan as the administrator determines necessary or appropriate, including without limitation a reacquisition right in respect of previously acquired cash, stock, or other property provided with respect to an award.

The administrator will have the authority to amend or terminate the Master Bonus Plan. However, such action may not materially alter or materially impair the existing rights of any participant with respect to any earned bonus without the participant's consent. The Master Bonus Plan will remain in effect until terminated in accordance with the terms of the Master Bonus Plan.

Certain Relationships and Related Party Transactions

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS In addition to the compensation arrangements, including employment, termination of employment and change in control arrangements, discussed in the sections titled "Management" and "Executive Compensation," the following is a description of each transaction since January 1, 2017 and each currently proposed transaction in which:

- we have been or are to be a participant;
- the amount involved exceeded or exceeds $120,000; and
- any of our directors, executive officers or holders of more than 5% of our outstanding capital stock, or any immediate family member of, or person sharing the household with, any of these individuals or entities, had or will have a direct or indirect material interest.

Equity Financings

Series D Convertible Preferred Stock Financing

From December 2018 to April 2019, we sold an aggregate of 6,010,911 shares of our Series D convertible preferred stock at a purchase price of $9.000295 per share, for an aggregate purchase price of $54.1 million. The following table summarizes purchases of our Series D convertible preferred stock by related persons:

Stockholder	Shares of Series DConvertiblePreferredStock	Total Purchase Price
Entities affiliated with Andrew Quigg[1]	3,011,011	$27,099,987.26

(1) Shares purchased by Progressive Investment Company, Inc. Andrew Quigg, a former member of our board of directors, is the Chief Strategy Officer of Progressive Insurance, an affiliate of Progressive Investment Company, Inc.

Investors' Rights Agreement

We are party to the IRA, which provides, among other things, that certain holders of our capital stock, including entities affiliated with Third Point Ventures LLC, or Third Point, Stone Ridge Trust V, Khosla Ventures, Rakuten, First Round Capital and Progressive have the right to demand that we file a registration statement or request that their shares of our capital stock be covered by a registration statement that we are otherwise filing. Entities affiliated with Dave Girouard, our co-founder, chief executive officer and a member of our board of directors, are party to the IRA. Robert Schwartz, a member of our board of directors, is affiliated with Third Point. Oskar Mielczarek de la Miel, a member of our board of directors, is affiliated with Rakuten. Andrew Quigg, a former member of our board of directors, is affiliated with Progressive. See the section titled "Description of Capital Stock—Registration Rights" for additional information regarding these registration rights.

Right of First Refusal

Pursuant to certain of our equity compensation plans and certain agreements with our stockholders, including an amended and restated right of first refusal and co-sale agreement, dated as of December 31, 2018, we or our assignees have a right to purchase shares of our capital stock which stockholders propose to sell to other parties. This right will terminate upon completion of this offering. Dave Girouard, our co-founder, chief executive officer and a member of our board of directors, and entities affiliated with Third Point, Stone Ridge Trust V, Khosla Ventures, Rakuten, First Round Capital and Progressive are party to the right of first refusal and co-sale agreement. Robert Schwartz, a member of our board of directors, is affiliated with Third Point. Oskar Mielczarek de la Miel, a member of our board of directors, is affiliated with Rakuten. Andrew Quigg, a former member of our board of directors, is affiliated with Progressive.

Voting Agreement

We are party to an amended and restated voting agreement, dated as of December 31, 2018, under which certain holders of our capital stock, including entities affiliated with Third Point, Stone Ridge Trust V, Khosla Ventures, Rakuten, First Round Capital and Progressive, have agreed to vote their shares of our capital stock on certain matters, including with respect to the election of directors. Upon completion of this offering, the voting agreement will terminate and none of our stockholders will have any special rights regarding the election or designation of members of our board of directors. Dave Girouard, our co-founder, chief executive officer and a member of our board of directors, and entities affiliated with Third Point, Stone Ridge Trust V, Khosla Ventures, Rakuten, First Round Capital and Progressive are party to the voting agreement. Robert Schwartz, a member of our board of directors, is affiliated with Third Point. Oskar Mielczarek de la Miel, a member of our board of directors, is affiliated with Rakuten. Andrew Quigg, a former member of our board of directors, is affiliated with Progressive.

Transactions with Stone Ridge and Affiliated Entities

Convertible Promissory Notes

In September and October 2017, we issued two subordinated convertible promissory notes to Stone Ridge Trust V. Each of the notes had an aggregate principal amount of $5.0 million, an interest rate of 8% per annum and a maturity date of June 30, 2018. On June 30, 2018, the outstanding principal and accrued and unpaid interest of $10.6 million on the notes were converted into 2,932,657 shares of Series C-1 convertible preferred stock at a per share price of $3.612, equal to the issue price in the Series C-1 financing round.

Warrants

In September and October 2017, we issued two preferred stock purchase warrants to Stone Ridge Trust V in connection with the convertible promissory notes described above. These warrants entitled Stone Ridge Trust V to purchase up to 415,234 shares of Series C-1 convertible preferred stock for a total of $1.5 million. On June 30, 2018, each of the warrants were cancelled when the convertible promissory notes converted into shares of Series C-1 convertible preferred stock.

Whole Loan Purchases

Stone Ridge Trust V and certain affiliated entities purchased whole loans through our platform in the aggregate amount of $509.5 million, $411.9 million, $173.2 million and $226.4 million in 2017, 2018, 2019 and the nine months ended September 30, 2020, respectively.

Securitization Transactions

As the sponsor of securitization transactions, we create several legal entities for the roles of depositors, issuers, and grantor trusts and majority-owned affiliates, or MOAs, for each securitization transaction. Concurrently with the closing of the 2017-1, 2017-2, and 2018-1 securitization transactions, we sold 80% of our ownership interests in the related MOAs to Stone Ridge Trust V in exchange for approximately $8.0 million, $7.8 million, and $8.0 million, respectively. For more information about these transactions, see Note 3 to our consolidated financial statements.

In addition, Stone Ridge Trust V and certain affiliated entities also contributed approximately $262.3 million, $100.1 million, and $137.3 million and $45.3 million in loans as collateral in private offering securitization transactions that we sponsored and serviced in 2017, 2018, and 2019 and the nine months ended September 30, 2020, respectively. In connection with these contributions, Stone Ridge Trust V and certain affiliated entities received approximately

$62.8 million in asset-backed securities in 2017 and cash payments of $202.5 million, $100.1 million, and $138.5 million and $45.6 million in 2017, 2018 and 2019, and the nine months ended September 30, 2020, respectively.

As of December 31, 2018, and 2019, and September 30, 2020, the balance of payable to securitization note holders and residual certificate holders due to Stone Ridge Trust V and certain affiliated entities was $22.4 million, $0 and $0, respectively.

Servicing Fees

We are the servicer of certain loans purchased and held by Stone Ridge Trust V and certain affiliated entities. In 2017, 2018, and 2019 and the nine months ended September 30, 2020, we received servicing fees in the amount of $1.4 million, $2.1 million, and $2.3 million and $1.1 million, respectively, from Stone Ridge Trust V and certain affiliated entities.

Transactions with Third Point and Affiliated Entities

Convertible Promissory Note

In September 2017, we issued a subordinated convertible promissory note to Third Point Ventures LLC. The note had an aggregate principal amount of $10.0 million, an interest rate of 8% per annum and a maturity date of June 30, 2018. On June 30, 2018, the outstanding principal and accrued and unpaid interest of $10.6 million on the note was converted into 2,938,725 shares of Series C-1 convertible preferred stock at a per share price of $3.612, equal to the issue price in the Series C-1 financing round.

Warrants

In September 2017, we issued a preferred stock purchase warrant to Third Point Ventures LLC in connection with the convertible promissory notes described above. The warrant entitled Third Point Ventures LLC to purchase up to 415,234 shares of Series C-1 preferred stock for a total of $1.5 million. On June 30, 2018, the warrant was cancelled when the convertible promissory note converted into shares of Series C-1 convertible preferred stock.

Pass-Through Certificates

Certain entities affiliated with Third Point purchased approximately $219.4 million, and $454.0 million and $199.9 million in pass-through certificates backed by Upstart-powered loans in 2018, and 2019 and the nine months ended September 30, 2020, respectively, from a series trust affiliated with Jefferies LLC.

Securitization Transactions

In 2017 and 2018, certain entities affiliated with Third Point purchased approximately $9.8 million and $66.1 million of asset-backed securities, respectively, in private offering securitization transactions that we sponsored and serviced.

In 2019 and the nine months ended September 30, 2020, certain entities affiliated with Third Point contributed approximately $340.6 million and $150.3 million, respectively, in loans as collateral in private offering securitization transactions that we sponsored and serviced through a series trust affiliated with Jefferies LLC and related entities. In connection with these contributions, certain entities affiliated with Third Point received approximately $53.5 million and $0 in asset-backed securities and cash payments of $306.9 million and $151.8 million.

As of December 31, 2018, and 2019 and the period ending September 30, 2020, the balance of payable to securitization note holders and residual certificate holders due to certain entities affiliated with Third Point was $61.4 million, and $41.3 million and $0, respectively.

Other Transactions

In 2017, 2018, and 2019 and the nine months ended September 30, 2020, certain of our executive officers and directors participated in Upstart's platform by purchasing fractional interests in Upstart-powered loans from a sponsored trust entity. For more information about our fractional loan program, see Note 3 to our consolidated financial statements. The aggregate amount of the notes purchased and distributions received by such participating executive officers and directors are set forth below (*in thousands*):

For the year ended December 31,	Executive Officers	Directors
2017		
Aggregate amount of loan-related securities purchased	$2,277	$50
Distributions received	2,525	39
2018		
Aggregate amount of loan-related securities purchased	$654	$71
Distributions received	2,148	58
2019		
Aggregate amount of loan-related securities purchased	$—	$63
Distributions received	1,364	66

Nine months ended September 30, 2020		
Aggregate amount of loan-related securities purchased	$—	$—
Distributions received	623	46

We have granted stock options to our executive officers and certain of our directors. See the sections titled “Executive Compensation—Outstanding Equity Awards at Year-End” and “Management—Non-Employee Director Compensation” for a description of these stock options.

We have entered into employment agreement and offer letters with certain of our executive officers that provide for, among other things, certain severance and change in control benefits. See the section titled “Executive Compensation—Executive Employment Agreements” for additional information.

Other than as described above under this section titled “Certain Relationships and Related Party Transactions,” since January 1, 2017, we have not entered into any transactions, nor are there any currently proposed transactions, between us and a related party where the amount involved exceeds, or would exceed, $120,000, and in which any related person had or will have a direct or indirect material interest. We believe the terms of the transactions described above were comparable to terms we could have obtained in arm’s-length dealings with unrelated third parties.

Limitation of Liability and Indemnification of Officers and Directors

We expect to adopt an amended and restated certificate of incorporation, which will become effective immediately prior to the completion of this offering, and which will contain provisions that limit the liability of our directors for monetary damages to the fullest extent permitted by the Delaware General Corporation Law. Consequently, our directors will not be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duties as directors, except for liability for any:

- breach of their duty of loyalty to our company or our stockholders;
- act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; or
- transaction from which they derived an improper personal benefit.

Any amendment to, or repeal of, these provisions will not eliminate or reduce the effect of these provisions in respect of any act, omission or claim that occurred or arose prior to that amendment or repeal. If the Delaware General Corporation Law is amended to provide for further limitations on the personal liability of directors of corporations, then the personal liability of our directors will be further limited to the greatest extent permitted by the Delaware General Corporation Law.

In addition, we expect to adopt amended and restated bylaws, which will become effective immediately prior to the completion of this offering, and which will provide that we will indemnify, to the fullest extent permitted by law, any person who is or was a party or is threatened to be made a party to any action, suit or proceeding by reason of the fact that he or she is or was one of our directors or officers or is or was serving at our request as a director or officer of another corporation, partnership, joint venture, trust or other enterprise. Our amended and restated bylaws are expected to provide that we may indemnify to the fullest extent permitted by law any person who is or was a party or is threatened to be made a party to any action, suit or proceeding by reason of the fact that he or she is or was one of our employees or agents or is or was serving at our request as an employee or agent of another corporation, partnership, joint venture, trust or other enterprise. Our amended and restated bylaws will also provide that we must advance expenses incurred by or on behalf of a director or officer in advance of the final disposition of any action or proceeding, subject to limited exceptions.

Further, we have entered into or will enter into indemnification agreements with each of our directors and executive officers that may be broader than the specific indemnification provisions contained in the Delaware General Corporation Law. These indemnification agreements require us, among other things, to indemnify our directors and executive officers against liabilities that may arise by reason of their status or service. These indemnification agreements also require us to advance all expenses incurred by the directors and executive officers in investigating or defending any such action, suit or proceeding. We believe that these agreements are necessary to attract and retain qualified individuals to serve as directors and executive officers.

The limitation of liability and indemnification provisions that are expected to be included in our amended and restated certificate of incorporation, amended and restated bylaws and in indemnification agreements that we have entered into or will enter into with our directors and executive officers may discourage stockholders from bringing a lawsuit against our directors and executive officers for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against our directors and executive officers, even though an action, if successful, might benefit us and other stockholders. Further, a stockholder’s investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and executive officers as required by these indemnification provisions. At present, we are not aware of any pending litigation or proceeding involving any person who is or was one of our directors, officers, employees or other agents or is or was serving at our request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, for which indemnification is sought, and we are not aware of any threatened litigation that may result in claims for indemnification.

We have obtained insurance policies under which, subject to the limitations of the policies, coverage is provided to our directors and executive officers against loss arising from claims made by reason of breach of fiduciary duty or other wrongful acts as a director or executive officer, including claims relating to public securities matters, and to us with respect to payments that may be made by us to these directors and executive officers pursuant to our indemnification obligations or otherwise as a matter of law.

Certain of our non-employee directors may, through their relationships with their employers, be insured or indemnified against certain liabilities incurred in their capacity as members of our board of directors.

The underwriting agreement related to this offering will provide for indemnification by the underwriters of us and our officers and directors for certain liabilities arising under the Securities Act or otherwise.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling our company pursuant to the foregoing provisions, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Policies and Procedures for Related Party Transactions

Following the completion of this offering, our audit committee will have the primary responsibility for reviewing and approving or disapproving "related party transactions," which are transactions between us and related persons in which the aggregate amount involved exceeds or may be expected to exceed $120,000 and in which a related person has or will have a direct or indirect material interest. Upon completion of this offering, our written policy regarding transactions between us and related persons will provide that a related person is defined as a director, executive officer, nominee for director, or greater than 5% beneficial owner of our common stock, in each case since the beginning of the most recently completed year, and any of their immediate family members. Our audit committee charter provides that our audit committee shall review and approve or disapprove any related party transactions.

Principal and Selling Stockholders

PRINCIPAL AND SELLING STOCKHOLDERS The following table sets forth certain information with respect to the beneficial ownership of our capital stock as of September 30, 2020, and as adjusted to reflect the sale of our common stock in this offering assuming no exercise of the underwriters' option to purchase additional shares of our common stock, for:

- each of our named executive officers;
- each of our directors;
- all of our current directors and executive officers as a group;
- each of the selling stockholders; and
- each person or group of affiliated persons, known by us to be the beneficial owner of more than 5% of the outstanding shares of our common stock.

We have determined beneficial ownership in accordance with the rules of the SEC, and thus it represents sole or shared voting or investment power with respect to our securities. Unless otherwise indicated below, to our knowledge, the persons and entities named in the table have sole voting and sole investment power with respect to all shares that they beneficially owned, subject to community property laws where applicable. The information does not necessarily indicate beneficial ownership for any other purpose, including for purposes of Sections 13(d) and 13(g) of the Securities Act.

We have based our calculation of the percentage of beneficial ownership prior to this offering on shares of our common stock (including the preferred stock issuable upon the exercise of a certain warrant and the Capital Stock Conversion) outstanding as of September 30, 2020. We have based our calculation of the percentage of beneficial ownership after this offering on shares of our common stock issued by us in our initial public offering and shares of common stock outstanding immediately after the completion of this offering, assuming that the underwriters will not exercise their option to purchase up to an additional shares of our common stock from us. We have deemed shares of our common stock subject to stock options that are currently exercisable or exercisable within 60 days of September 30, 2020 to be outstanding and to be beneficially owned by the person holding the stock option for the purpose of computing the percentage ownership of that person. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person.

Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o Upstart Holdings, Inc., 2950 S. Delaware Street, Suite 300, San Mateo, California 94403.

				Percentage of Shares Beneficially Owned	
Name of Beneficial Owner	Total Number of Shares BeneficiallyOwned Beforethe Offering[1]	Total Number of SharesBeing Offered	Total Number of SharesBeneficiallyOwned Afterthe Offering	Before the Offering	After the Offering
Named Executive Officers and Directors:					
Dave Girouard[2]	14,044,585			22.1%	
Sanjay Datta[3]	778,067			1.2	
Paul Gu[4]	2,131,249			3.3	
Mary Hentges[5]	53,456			*	
Oskar Mielczarek de la Miel	—			—	

Ciaran O'Kelly[6]	160,369	*
Robert Schwartz	—	—
Sukhinder Singh Cassidy[7]	42,765	*
Hilliard C. Terry, III[8]	106,912	*
All executive officers and directors as a group (11 persons)[9]	19,470,317	28.3
5% Stockholders:		
Entities affiliated with Third Point Ventures[10]	12,181,222	19.5
Entities affiliated with Stone Ridge Trust V[11]	5,700,889	9.1
Entities affiliated with Khosla Ventures[12]	5,248,588	8.4
Entities affiliated with Rakuten[13]	3,321,879	5.3
Entities affiliated with First Round Capital[14]	3,220,682	5.2
Selling Stockholders:		

* Represents beneficial ownership of less than 1% of the outstanding shares of our common stock.

(1) Represents shares beneficially owned by such individual or entity, and includes shares held in the beneficial owner's name or jointly with others, or in the name of a bank, nominee or trustee for the beneficial owner's account.

(2) Consists of (i) 12,792,840 shares held of record by the 2008 D&T Girouard Revocable Trust for which Mr. Girouard serves as trustee and (ii) 1,251,745 shares subject to options exercisable within 60 days of September 30, 2020 held by Mr. Girouard.

(3) Consists of 778,067 shares subject to options exercisable within 60 days of September 30, 2020 held by Mr. Datta.

(4) Consists of (i) 160,000 shares held of record by Mr. Gu and (ii) 1,971,249 shares subject to options exercisable within 60 days of September 30, 2020 held by Mr. Gu.

(5) Consists of 53,456 shares subject to options exercisable within 60 days of September 30, 2020 held by Ms. Hentges.

(6) Consists of 160,369 shares subject to options exercisable within 60 days of September 30, 2020 held by Mr. O'Kelly.

(7) Consists of 42,765 shares subject to options exercisable within 60 days of September 30, 2020 held by Ms. Singh Cassidy.

(8) Consists of 106,912 shares subject to options exercisable within 60 days of September 30, 2020 held by Mr. Terry.

(9) Consists of (i) 12,997,340 shares beneficially owned by our executive officers and directors and (ii) 6,472,977 shares subject to options exercisable within 60 days of September 30, 2020.

(10) Consists of 12,181,222 shares held of record by Third Point Ventures LLC, as nominee for funds managed and/or advised by Third Point LLC. Third Point LLC and Daniel S. Loeb, managing member of Third Point LLC, may be deemed to have voting and investment power over such shares. The address for each of these entities is 55 Hudson Yards, New York, New York 10001.

(11) Consists of 5,700,889 shares held of record by Millennium Trust Company LLC for the benefit of Stone Ridge Trust V, on behalf of its series Stone Ridge Alternative Lending Risk Premium Fund, or LENDX. Stone Ridge Asset Management LLC, or Stone Ridge, acts as the investment adviser to LENDX, and Stone Ridge is controlled by Ross Stevens. Each of Stone Ridge and Ross Stevens may be deemed to have voting and dispositive power of such shares held by LENDX. The address for each of these entities is 510 Madison Avenue, 21st Floor, New York, New York 10022.

(12) Consists of 50,508 shares held of record by Khosla Ventures Seed B (CF), LP, or Seed B CF, 889,783 shares held of record by Khosla Ventures Seed B, LP, or Seed B, and 4,308,297 shares held of record by Khosla Ventures V, LP, or KV V, The general partner of Seed B CF and Seed B is Khosla Ventures Seed Associates B, LLC, or B Associates. VK Services, LLC, or VK Services, is the sole manager of B Associates. Vinod Khosla is the managing member of VK Services. Each of Mr. Khosla, VK Services and B Associates may be deemed to share voting and dispositive power of

such securities held by Seed B CF and Seed B. Mr. Khosla, VK Services and B Associates disclaim beneficial ownership of such securities held by Seed B CF and Seed B, except to the extent of their respective pecuniary interests therein. The general partner of KV V is Khosla Ventures Associates V, LLC, or KVA V. VK Services, LLC, or VK Services, is the sole manager of KVA V. Vinod Khosla is the managing member of VK Services. Each of Mr. Khosla, VK Services and KVA V may be deemed to share voting and dispositive power of such securities held by KV V. Mr. Khosla, VK Services and KVA V disclaim beneficial ownership of such securities held by KV V, except to the extent of their respective pecuniary interests therein. The address for each of these entities is 2128 Sand Hill Road, Menlo Park, California 94025.

(13) Consists of 3,321,879 shares held of record by Rakuten Capital SCSp, or Rakuten Capital. Rakuten Capital is controlled by Rakuten Capital Holdings S.a.r.l., or Holdings. Holdings is a wholly-owned subsidiary of Rakuten Europe S.a.r.l., or Rakuten Europe. Rakuten Europe is a wholly-owned subsidiary of Rakuten, Inc. Hiroshi Mikitani is the Chairman and Chief Executive Officer of Rakuten, Inc. Each of Rakuten Capital, Holdings, Rakuten Europe, Rakuten, Inc. and Mr. Mikitani may be deemed to hold voting and dispositive power with respect to these shares. The address for these entities is 2 Rue du Fossé, Luxembourg L-1536, Grand Duchy of Luxembourg. Subsequent to September 30, 2020, the shares held by Sparrowhawk SCSp were transferred to another entity affiliated with Rakuten, Inc.

(14) Consists of 3,220,682 shares held of record by First Round Capital III, L.P., as nominee, a Delaware limited partnership, on behalf of First Round Capital III, LP, a Delaware limited partnership or, FRC III, First Round Capital III Partners Fund, LP, or FRC III Partners Fund, and First Round Capital III-A, LP, or FRC III-A, and together with FRC III and FRC III Partners Fund, the FRC III Funds. First Round Capital Management III, LP, a Delaware limited partnership, or FRC III GP, is the General Partner of the FRC III Funds. First Round Capital Management III, LLC, a Delaware limited liability company, is the General Partner of FRC III GP and has sole voting and investment power over the shares. A committee of three members controls First Round Capital Management III, LLC. The address for each of these entities is 2400 Market Street, Suite 237, Philadelphia, Pennsylvania 19103.

Description of Capital Stock

DESCRIPTION OF CAPITAL STOCK

General

The following description summarizes certain important terms of our capital stock, as they are expected to be in effect immediately prior to the completion of this offering. We expect to adopt an amended and restated certificate of incorporation and amended and restated bylaws that will become effective immediately prior to the completion of this offering, and this description summarizes the provisions that are expected to be included in such documents. Because it is only a summary, it does not contain all the information that may be important to you. For a complete description of the matters set forth in this section titled "Description of Capital Stock," you should refer to our amended and restated certificate of incorporation, amended and restated bylaws, and amended and restated investors' rights agreement, which are included as exhibits to the registration statement of which this prospectus forms a part, and to the applicable provisions of Delaware law. Immediately following the completion of this offering, our authorized capital stock will consist of 770,000,000 shares of capital stock, $0.0001 par value per share, of which:

- 700,000,000 shares are designated as common stock; and
- 70,000,000 shares are designated as preferred stock.

Assuming the conversion of all outstanding shares of our convertible preferred stock into shares of our common stock, which will occur immediately prior to the completion of this offering, as of September 30, 2020, there were shares of our common stock outstanding, held by stockholders of record, assuming (i) the Capital Stock Conversion and (ii) the automatic net exercise of the outstanding warrant to purchase shares of preferred stock resulting in the issuance of shares of our common stock. Pursuant to our amended and restated certificate of incorporation, our board of directors will have the authority, without stockholder approval except as required by the listing standards of the Nasdaq Global Select Market, to issue additional shares of our capital stock.

Common Stock

Dividend Rights

Subject to preferences that may apply to any shares of preferred stock outstanding at the time, the holders of our common stock are entitled to receive dividends out of funds legally available if our board of directors, in its discretion, determines to issue dividends and then only at the times and in the amounts that our board of directors may determine. See the section titled "Dividend Policy" for additional information.

Voting Rights

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders. We have not provided for cumulative voting for the election of directors in our amended and restated certificate of incorporation. Our amended and restated certificate of incorporation establishes a classified board of directors that is divided into three classes with staggered three-year terms. Only the directors in one class will be subject to election by a plurality of the votes cast at each annual meeting of stockholders, with the directors in the other classes continuing for the remainder of their respective three-year terms.

No Preemptive or Similar Rights

Our common stock is not entitled to preemptive rights, and is not subject to conversion, redemption or sinking fund provisions.

Right to Receive Liquidation Distributions

If we become subject to a liquidation, dissolution or winding-up, the assets legally available for distribution to our stockholders would be distributable ratably among the holders of our common stock and any participating preferred stock outstanding at that time, subject to prior satisfaction of all outstanding debt and liabilities and the preferential rights of and the payment of liquidation preferences, if any, on any outstanding shares of preferred stock.

Fully Paid and Non-Assessable

In connection with this offering, our legal counsel will opine that the shares of our common stock to be issued in this offering will be fully paid and non-assessable.

Preferred Stock

After the completion of this offering, no shares of our preferred stock will be outstanding. Pursuant to our amended and restated certificate of incorporation that will become effective immediately prior to the completion of this offering, our board of directors will have the authority, subject to limitations prescribed by Delaware law, to issue preferred stock in one or more series, to establish from time to time the number of shares to be included in each series and to fix the designation, powers, preferences, and rights of the shares of each series and any of its qualifications, limitations, or restrictions, in each case without further vote or action by our stockholders. Our board of directors can also increase or decrease the number of shares of any series of preferred stock, but not below the number of shares of that series then outstanding, without any further vote or action by our stockholders. Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in control of our company and might adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock. We have no current plan to issue any shares of preferred stock.

Options

As of September 30, 2020, we had outstanding options to purchase an aggregate of 19,356,042 shares of our common stock, with a weighted-average exercise price of approximately $3.11 per share, under our equity compensation plans.

Warrants

As of September 30, 2020, we had the following outstanding warrants:

- warrants to purchase 319,669 shares of our common stock with a weighted-average exercise price of $1.77 per share; and
- a warrant to purchase 600,208 shares of our Series B preferred stock with an exercise price of $0.01 per share. Unless earlier exercised, upon the completion of this offering, this warrant will automatically net exercise and convert into shares of our Series B preferred stock, which will then convert into shares of our common stock in connection with the Capital Stock Conversion.

Registration Rights

After the completion of this offering, certain holders of our common stock will be entitled to rights with respect to the registration of their shares under the Securities Act pursuant to the IRA. We and certain holders of our preferred stock are parties to the IRA. The registration rights set forth in the IRA will expire four years following the completion of this offering, or, with respect to any particular stockholder, when such stockholder is able to sell all of its shares pursuant to Rule 144 of the Securities Act during any 90-day period. We will pay the registration expenses (other than underwriting discounts and commissions) of the holders of the shares registered pursuant to the demand registrations and piggyback registrations described below. Holders of our preferred stock participating in any S-3 registrations below will pay their own registration expenses. In an underwritten offering, the managing underwriter, if any, has the right, subject to specified conditions, to limit the number of shares such holders may include. We expect that our stockholders will waive their rights under the IRA (i) to receive notice of this offering and (ii) to include their registrable shares in this offering. In addition, in connection with this offering, we expect that each stockholder that has registration rights will agree not to sell or otherwise dispose of any securities without the prior written consent of us and the underwriters for a period of 180 days after the date of this prospectus, subject to certain terms and conditions. See the section titled “Shares Eligible for Future Sale—Lock-Up and Market Standoff Agreements” for additional information regarding such restrictions.

Demand Registration Rights

After the completion of this offering, the holders of up to shares of our common stock will be entitled to certain demand registration rights. At any time beginning six months after the effective date of this offering, the holders of at least 50% of these shares then outstanding can request that we register the offer and sale of their shares. Such request for registration must cover securities, the anticipated aggregate public offering price of which, after payment of underwriting discounts and commissions, is at least $5,000,000. We are obligated to effect only two such registrations. If we determine that it would be seriously detrimental to us and our stockholders to effect such a demand registration, we have the right to defer such registration, not more than once in any 12-month period, for a period of up to 120 days.

Piggyback Registration Rights

After the completion of this offering, if we propose to register the offer and sale of our common stock under the Securities Act, in connection with the public offering of such common stock the holders of up to shares of our common stock will be entitled to certain “piggyback” registration rights allowing the holders to include their shares in such registration, subject to certain marketing and other limitations. As a result, whenever we propose to file a registration statement under the Securities Act, other than with respect to (i) a registration in which the only common stock being registered is common stock issuable upon conversion of debt securities that are also being registered; (ii) a registration related to any employee benefit plan or a corporate reorganization or other transaction covered by Rule 145 promulgated under the Securities Act; or (iii) a registration on any registration form which does not include substantially the same information as would be required to be included in a registration statement covering the public offering of our common stock, the holders of these shares are entitled to notice of the registration and have the right, subject to certain limitations, to include their shares in the registration.

S-3 Registration Rights

After 180 days following the completion of this offering, the holders of up to shares of our common stock will be entitled to certain Form S-3 registration rights. The holders of at least 50% of these shares then outstanding may make a written request that we register the offer and sale of their shares on a registration statement on Form S-3 if we are eligible to file a registration statement on Form S-3 so long as the request covers securities the anticipated aggregate public offering price of which, after payment of underwriting discounts and commissions, is at least $1,000,000. These stockholders may make an unlimited number of requests for registration on Form S-3; however, we will not be required to effect a registration on Form S-3 if we have effected two

such registrations within the 12-month period preceding the date of the request or if we have already previously effected three such registrations. Additionally, if we determine that it would be seriously detrimental to us and our stockholders to effect such a registration, we have the right to defer such registration, not more than once in any 12-month period, for a period of up to 120 days.

Anti-Takeover Provisions

Certain provisions of Delaware law, our amended and restated certificate of incorporation and our amended and restated bylaws, which will become effective immediately prior to the completion of this offering, which are summarized below, may have the effect of delaying, deferring or discouraging another person from acquiring control of us. They are also designed, in part, to enhance the likelihood of continued stability in the composition of our board of directors and its policies and to encourage persons seeking to acquire control of us to negotiate first with our board of directors. We believe that the benefits of these provisions, including increased protection of our potential ability to negotiate with an unfriendly or unsolicited acquirer outweigh the disadvantages of discouraging a proposal to acquire us because negotiation of these proposals could result in an improvement of their terms.

Delaware Law

We will be governed by the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a public Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless:

- the business combination or transaction which resulted in the stockholder becoming an interested stockholder was approved by the board of directors prior to the time that the stockholder became an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding shares owned by (i) directors who are also officers of the corporation and (ii) by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- at or subsequent to the time the stockholder became an interested stockholder, the business combination was approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

In general, Section 203 defines a "business combination" to include mergers, asset sales, and other transactions resulting in financial benefit to a stockholder and an "interested stockholder" as a person who, together with affiliates and associates, owns, or within three years did own, 15% or more of the corporation's outstanding voting stock. These provisions may have the effect of delaying, deferring or preventing changes in control of our company.

Amended and Restated Certificate of Incorporation and Amended and Restated Bylaw Provisions

Our amended and restated certificate of incorporation and our amended and restated bylaws, which will become effective immediately prior to the completion of this offering, will include a number of provisions that could deter hostile takeovers or delay or prevent changes in control of our board of directors or management team, including the following:

Board of Directors Vacancies

Our amended and restated certificate of incorporation and amended and restated bylaws will authorize only our board of directors to fill vacant directorships, including newly created seats. In addition, the number of directors constituting our board of directors will be permitted to be set only by a resolution adopted by a majority vote of our entire board of directors. These provisions would prevent a stockholder from increasing the size of our board of directors and then gaining control of our board of directors by filling the resulting vacancies with its own nominees. This will make it more difficult to change the composition of our board of directors and will promote continuity of management.

Classified Board

Our amended and restated certificate of incorporation and amended and restated bylaws will provide that our board of directors is classified into three classes of directors. A third party may be discouraged from making a tender offer or otherwise attempting to obtain control of us as it is more difficult and time consuming for stockholders to replace a majority of the directors on a classified board of directors. See the section titled "Management—Classified Board of Directors."

Stockholder Action; Special Meeting of Stockholders

Our amended and restated certificate of incorporation will provide that our stockholders may not take action by written consent, but may only take action at annual or special meetings of our stockholders. As a result, a holder controlling a majority of our capital stock would not be able to amend our amended and restated bylaws or remove directors without holding a meeting of our stockholders called in accordance with our amended and restated bylaws. Our amended and restated bylaws will further provide that special meetings of our stockholders may be called only by a majority of our board of directors, the chairperson of our board of directors, our President or our Chief Executive Officer, thus prohibiting a stockholder from calling a special meeting. These provisions might delay the ability of our stockholders to force consideration of a proposal or for stockholders controlling a majority of our capital stock to take any action, including the removal of directors.

Advance Notice Requirements for Stockholder Proposals and Director Nominations

Our amended and restated bylaws will provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders or to nominate candidates for election as directors at our annual meeting of stockholders. Our amended and restated bylaws will also specify certain requirements regarding the form and content of a stockholder's notice. These provisions might preclude our stockholders from bringing matters

before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders if the proper procedures are not followed. We expect that these provisions may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company.

No Cumulative Voting

The Delaware General Corporation Law provides that stockholders are not entitled to cumulate votes in the election of directors unless a corporation's certificate of incorporation provides otherwise. Our amended and restated certificate of incorporation does not provide for cumulative voting.

Directors Removed Only for Cause

Our amended and restated certificate of incorporation will provide that stockholders may remove directors only for cause.

Amendment of Charter Provisions

Any amendment of the above provisions in our amended and restated certificate of incorporation would require approval by holders of at least 66 2/3% of our then outstanding capital stock.

Issuance of Undesignated Preferred Stock

Our board of directors will have the authority, without further action by our stockholders, to issue up to 70,000,000 shares of undesignated preferred stock with rights and preferences, including voting rights, designated from time to time by our board of directors. The existence of authorized but unissued shares of preferred stock would enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or other means.

Exclusive Forum

Our amended and restated bylaws will provide that, unless we consent in writing to the selection of an alternative forum, to the fullest extent permitted by law, the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf; (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, or other employees to us or our stockholders; (iii) any action arising pursuant to any provision of the Delaware General Corporation Law or our certificate of incorporation or bylaws; or (iv) any other action asserting a claim that is governed by the internal affairs doctrine shall be the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, the federal district court for the District of Delaware), in all cases subject to the court having jurisdiction over indispensable parties named as defendants. Our amended and restated bylaws further provide that the federal district courts of the United States will be the exclusive forum for resolving any complaints asserting a cause of action arising under the Securities Act. Any person or entity purchasing or otherwise acquiring any interest in our securities shall be deemed to have notice of and consented to this provision. Although we believe these provisions benefit us by providing increased consistency in the application of Delaware law for the specified types of actions and proceedings, the provisions may have the effect of discouraging lawsuits against us or our directors and officers.

Transfer Agent and Registrar

Upon the completion of this offering, the transfer agent and registrar for our common stock will be American Stock Transfer & Trust Company. The transfer agent and registrar's address is 6201 15th Avenue, Brooklyn, NY 11219.

Limitations of Liability and Indemnification

See the section titled "Certain Relationships and Related Party Transactions—Limitation of Liability and Indemnification of Officers and Directors."

Listing

We have applied to list our common stock on the Nasdaq Global Select Market under the symbol "UPST".

Shares Eligible for Future Sale

SHARES ELIGIBLE FOR FUTURE SALE Prior to this offering, there has been no public market for our common stock, and we cannot predict the effect, if any, that market sales of shares of our common stock or the availability of shares of our common stock for sale will have on the market price of our common stock prevailing from time to time. Future sales of our common stock in the public market, or the availability of such shares for sale in the public market, could adversely affect market prices prevailing from time to time. As described below, only a limited number of shares of our common stock will be available for sale shortly after this offering due to contractual and legal restrictions on resale. Nevertheless, sales of our common stock in the public market after such restrictions lapse, or the perception that those sales may occur, could adversely affect the prevailing market price at such time and our ability to raise equity capital in the future.

Following the completion of this offering, based on the number of shares of our capital stock outstanding as of September 30, 2020, we will have a total of shares of our common stock outstanding. Of these outstanding shares, all shares of our common stock sold in this offering will be freely tradable, except that any shares purchased in this offering by our affiliates, as that term is defined in Rule 144 under the Securities Act, would only be able to be sold in compliance with the Rule 144 limitations described below.

The remaining outstanding shares of our common stock will be, and shares subject to stock options will be upon issuance, deemed "restricted securities" as defined in Rule 144 under the Securities Act. Restricted securities may be sold in the public market only if they are registered under the Securities Act or if they qualify for an exemption from registration under Rule 144 or Rule 701 under the Securities Act, which rules are summarized below. As a result of the

lock-up and market standoff agreements described below and the provisions of our IRA described in the section titled "Description of Capital Stock—Registration Rights," and subject to the provisions of Rule 144 or Rule 701, shares of our common stock will be available for sale in the public market as follows:

- beginning on the date of this prospectus, all shares of our common stock sold in this offering will be immediately available for sale in the public market; and
- beginning 181 days after the date of this prospectus (subject to the terms of the lock-up and market standoff agreements described below) all remaining shares will become eligible for sale in the public market, of which shares will be held by affiliates and subject to the volume and other restrictions of Rule 144, as described below.

Lock-Up and Market Standoff Agreements

In connection with this offering, we and our officers and directors, the selling stockholders, and the other holders of our common stock, who collectively hold substantially all of our common stock and stock options, have agreed or will agree with the underwriters, subject to certain exceptions, not to offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale of or otherwise transfer or dispose of, or hedge, any shares of our common stock, or any options or warrants to purchase any shares of our common stock, or any securities convertible into, exchangeable for or that represent the right to receive, shares of our common stock during the period from the date of this prospectus continuing through the date 180 days after the date of this prospectus, except with the prior written consent of Goldman Sachs & Co. LLC, BofA Securities, Inc. and Citigroup Global Markets Inc. See the section titled "Underwriting."

Certain of our employees, including our executive officers, and directors may enter into written trading plans that are intended to comply with Rule 10b5-1 under the Exchange Act. Sales under these trading plans would not be permitted until the expiration of the lock-up agreements relating to our initial public offering described above.

In addition, our executive officers, directors, and holders of substantially all of our capital stock and securities convertible into or exchangeable for our capital stock have entered into market standoff agreements with us under which they have agreed that, subject to certain exceptions, for a period of 180 days after the date of this prospectus, they will not, without our prior written consent, dispose of or hedge any shares or any securities convertible into or exchangeable for shares of our common stock.

Rule 144

In general, Rule 144 provides that once we have been subject to the public company reporting requirements of Section 13 or Section 15(d) of the Exchange Act for at least 90 days, a person who is not deemed to have been one of our affiliates for purposes of the Securities Act at any time during the 90 days preceding a sale and who has beneficially owned the shares of our common stock proposed to be sold for at least six months is entitled to sell those shares without complying with the manner of sale, volume limitation or notice provisions of Rule 144, subject to compliance with the public information requirements of Rule 144. If such a person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than our affiliates, then that person would be entitled to sell those shares without complying with any of the requirements of Rule 144.

In general, Rule 144 provides that our affiliates or persons selling shares of our common stock on behalf of our affiliates are entitled to sell upon expiration of the market standoff agreements and lock-up agreements described above, within any three-month period, a number of shares of our common stock that does not exceed the greater of:

- 1% of the number of shares of our capital stock then outstanding, which will equal shares immediately after the completion of this offering; or
- the average weekly trading volume of our common stock during the four calendar weeks preceding the filing of a notice on Form 144 with respect to that sale.

Sales of our common stock made in reliance upon Rule 144 by our affiliates or persons selling shares of our common stock on behalf of our affiliates are also subject to certain manner of sale provisions and notice requirements and to the availability of current public information about us.

Rule 701

Rule 701 generally allows a stockholder who purchased shares of our capital stock pursuant to a written compensatory plan or contract and who is not deemed to have been an affiliate of our company during the immediately preceding 90 days to sell these shares in reliance upon Rule 144, but without being required to comply with the public information, holding period, volume limitation or notice provisions of Rule 144. Rule 701 also permits affiliates of our company to sell their Rule 701 shares under Rule 144 without complying with the holding period requirements of Rule 144. All holders of Rule 701 shares, however, are required to wait until 90 days after the date of this prospectus before selling those shares pursuant to Rule 701.

Registration Rights

Pursuant to the IRA, after the completion of this offering, the holders of up to shares of our common stock, or certain transferees, will be entitled to certain rights with respect to the registration of the offer and sale of those shares under the Securities Act. See the section titled "Description of Capital Stock—Registration Rights" for a description of these registration rights. If the offer and sale of these shares of our common stock are registered, the shares will be freely tradable without restriction under the Securities Act, subject to the Rule 144 limitations applicable to affiliates, and a large number of shares may be sold into the public market.

Registration Statement

We intend to file a registration statement on Form S-8 under the Securities Act promptly after the effectiveness of the registration statement of which this prospectus forms a part to register shares of our options outstanding, as well as reserved for future issuance, under our equity compensation plans. The registration statement on Form S-8 is expected to become effective immediately upon filing, and shares of our common stock covered by the registration statement will then become eligible for sale in the public market, subject to the Rule 144 limitations applicable to affiliates, vesting restrictions and any applicable market standoff agreements and lock-up agreements. See the section titled "Executive Compensation—Employee Benefit and Stock Plans" for a description of our equity compensation plans.

Material U.S. Federal Income Tax Consequences to Non-U.S. Holders of Our Common Stock

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS OF OUR COMMON STOCK The following is a summary of the material U.S. federal income tax consequences to certain non-U.S. holders (as defined below) of the ownership and disposition of our common stock, but does not purport to be a complete analysis of all the potential tax considerations relating thereto. This summary is based upon the provisions of the Code, Treasury regulations promulgated thereunder, administrative rulings, and judicial decisions, all as of the date hereof. These authorities may be changed, possibly retroactively, so as to result in U.S. federal income tax consequences different from those set forth below.

This summary does not address the tax considerations arising under the laws of any state, local or non-U.S. jurisdiction, or under U.S. federal gift and estate tax laws. In addition, this discussion does not address tax considerations applicable to a non-U.S. holder's particular circumstances or non-U.S. holders that may be subject to special tax rules, including, without limitation:

- banks, insurance companies or other financial institutions (except to the extent specifically set forth below), regulated investment companies or real estate investment trusts;
- persons subject to the alternative minimum tax or Medicare contribution tax on net investment income;
- tax-exempt organizations or governmental organizations;
- pension plans or tax-exempt retirement plans;
- controlled foreign corporations, passive foreign investment companies, and corporations that accumulate earnings to avoid U.S. federal income tax;
- brokers or dealers in securities or currencies;
- traders in securities or other persons that elect to use a mark-to-market method of accounting for their holdings in our stock;
- persons that own, or are deemed to own, more than 5% of our capital stock (except to the extent specifically set forth below);
- U.S. expatriates and certain former citizens or long-term residents of the United States;
- partnerships, entities or arrangements classified as partnerships for U.S. federal income tax purposes or other pass-through entities (and investors therein);
- persons who hold our common stock as a position in a hedging transaction, "straddle," "conversion transaction" or other risk reduction transaction or integrated investment;
- persons who hold or receive our common stock pursuant to the exercise of any employee stock option or otherwise as compensation;
- persons subject to special tax accounting rules as a result of any item of gross income with respect to our common stock being taken into account in an "applicable financial statement" (as defined in Section 451(b) of the Code);
- persons who do not hold our common stock as a capital asset within the meaning of Section 1221 of the Code; or
- persons deemed to sell our common stock under the constructive sale provisions of the Code.

In addition, if a partnership, including an entity or arrangement classified as a partnership for U.S. federal income tax purposes, holds our common stock, the tax treatment of a partner generally will depend on the status of the partner and upon the activities of the partnership. Accordingly, partnerships that hold our common stock, and partners in such partnerships, should consult their tax advisors regarding the tax consequences of the ownership and disposition of our common stock through a partnership.

You are urged to consult your tax advisor with respect to the application of the U.S. federal income tax laws to your particular situation, as well as any tax consequences of the purchase, ownership, and disposition of our common stock arising under the U.S. federal gift or estate tax rules or under the laws of any state, local, non-U.S., or other taxing jurisdiction or under any applicable tax

treaty.

Non-U.S. Holder Defined

For purposes of this discussion, you are a non-U.S. holder if you are any beneficial owner of our common stock that is not a partnership (including an entity or arrangement treated as a partnership for U.S. federal income tax purposes) and are not any of the following:

- an individual who is a citizen or resident of the United States (for U.S. federal income tax purposes);
- a corporation or other entity taxable as a corporation created or organized in the United States or under the laws of the United States, any state thereof or the District of Columbia or other entity treated as such for U.S. federal income tax purposes;
- an estate whose income is subject to U.S. federal income tax regardless of its source; or
- a trust (x) whose administration is subject to the primary supervision of a U.S. court and which has one or more "U.S. persons" (within the meaning of Section 7701(a)(30) of the Code) who have the authority to control all substantial decisions of the trust or (y) which has made a valid election to be treated as a U.S. person.

Distributions

As described in the section titled "Dividend Policy," we have never declared or paid cash dividends on our capital stock and do not anticipate paying any dividends on our capital stock in the foreseeable future. However, if we do make distributions on our common stock, those payments will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent those distributions exceed both our current and our accumulated earnings and profits, they will constitute a return of capital and will first reduce your basis in our common stock, but not below zero, and then will be treated as gain from the sale of stock as described below under "—Gain on Disposition of Our Common Stock."

Except as otherwise described below in the discussion on effectively connected income and the sections titled "–Backup Withholding and Information Reporting" and "–FATCA," any dividend paid to you generally will be subject to U.S. federal withholding tax either at a rate of 30% of the gross amount of the dividend or such lower rate as may be specified by an applicable income tax treaty. If you are eligible for exemption of U.S. federal withholding tax pursuant to an income tax treaty, you may be entitled to a refund or credit of any excess tax withheld by timely filing an appropriate claim with the IRS.

In order to be subject to withholding at a reduced treaty rate, you must provide us with an IRS Form W-8BEN, IRS Form W-8BEN-E or other appropriate version of IRS Form W-8, including any required attachments and your taxpayer identification number, certifying qualification for the exemption; additionally, you will be required to update such forms and certifications from time to time as required by law. If you hold our stock through a financial institution or other agent acting on your behalf, you will be required to provide appropriate documentation to the agent, which then will be required to provide certification to us or our paying agent, either directly or through other intermediaries. You should consult your tax advisor regarding entitlement to benefits under any applicable income tax treaties.

Dividends received by you that are effectively connected with your conduct of a U.S. trade or business (and, if required by an applicable income tax treaty, attributable to a permanent establishment or fixed base maintained by you in the United States) are generally exempt from such withholding tax. In order to obtain this exemption, you must provide us with an IRS Form W-8ECI, including any required attachments and your taxpayer identification number, certifying qualification for the exemption; additionally, you will be required to update such forms and certifications from time to time as required by law. Such effectively connected dividends, although not subject to withholding tax, are includable on your U.S. income tax return and taxed to you at the same graduated rates applicable to U.S. persons, net of certain deductions and credits. If you are a corporate non-U.S. holder, dividends you receive that are effectively connected with your conduct of a U.S. trade or business may also be subject to a branch profits tax at a rate of 30% or such lower rate as may be specified by an applicable income tax treaty. You should consult your tax advisor regarding any applicable tax treaties that may provide for different rules.

Gain on Disposition of Our Common Stock

Except as otherwise described below in the section titled "–Backup Withholding and Information Reporting" and "–FATCA," you generally will not be subject to U.S. federal income tax on any gain realized upon the sale or other disposition of our common stock unless:

- the gain is effectively connected with your conduct of a U.S. trade or business (and, if required by an applicable income tax treaty, is attributable to a permanent establishment or fixed base maintained by you in the United States);
- you are a non-resident alien individual who is present in the United States for a period or periods aggregating 183 days or more during the calendar year in which the sale or disposition occurs and other conditions are met; or
- our common stock constitutes a "United States real property interest" by reason of our status as a "United States real property holding corporation," or USRPHC, for U.S. federal income tax purposes at any time within the shorter of the five-year period preceding your disposition of, or your holding period for, our common stock, and, in the case where shares of our common stock are regularly traded on an established securities market, you own, or are treated as owning, more than 5% of our common stock at any time during the foregoing period.

We believe that we are not currently and will not become a USRPHC for U.S. federal income tax purposes, and the remainder of this discussion so assumes. However, because the determination of whether we are a USRPHC depends on the fair market value of our U.S. real property relative to the fair market value of our other business assets, there can be no assurance that we will not become a USRPHC in the future. Even if we become a USRPHC, however, as long as our common stock is regularly traded on an established securities market, such common stock will be treated as a United States real property interest only if you actually or constructively hold more than 5% of such regularly traded common stock at any time during the shorter of the five-year period preceding your disposition of, or your holding period for, our common stock.

If you are a non-U.S. holder described in the first bullet above, you will generally be required to pay tax on the net gain derived from the sale under regular graduated U.S. federal income tax rates (and a corporate non-U.S. holder described in the first bullet above also may be subject to the branch profits tax at a 30% rate), unless otherwise provided by an applicable income tax treaty. If you are a non-U.S. holder described in the second bullet above, you will generally be required to pay a flat 30% tax (or such lower rate specified by an applicable income tax treaty) on the gain derived from the sale, which may be offset by U.S. source capital losses for the year (provided you have timely filed U.S. federal income tax returns with respect to such losses). You should consult your tax advisor regarding any applicable income tax or other treaties that may provide for different rules.

Backup Withholding and Information Reporting

Generally, we must report annually to the IRS the amount of dividends paid to you, your name and address, and the amount of tax withheld, if any. A similar report will be sent to you. Pursuant to applicable income tax treaties or other agreements, the IRS may make these reports available to tax authorities in your country of residence.

Payments of dividends or of proceeds from the disposition of our common stock made to you may be subject to information reporting and backup withholding at a current rate of 24% unless you establish an exemption, for example, by properly certifying your non-U.S. status on an IRS Form W-8BEN, IRS Form W-8BEN-E or another appropriate version of IRS Form W-8. Any documentation provided to an applicable withholding agent may need to be updated in certain circumstances. Notwithstanding the foregoing, backup withholding and information reporting may apply if either we or our paying agent has actual knowledge, or reason to know, that you are a U.S. person.

Information reporting and backup withholding generally will apply to the proceeds of a disposition of our common stock by a non-U.S. holder effected by or through the U.S. office of any broker, U.S. or foreign, unless the holder certifies its status as a non-U.S. holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a non-U.S. holder where the transaction is effected outside the United States through a foreign broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Non-U.S. holders should consult their own tax advisors regarding the application of the information reporting and backup withholding rules to them.

Backup withholding is not an additional tax; rather, the U.S. federal income tax liability of persons subject to backup withholding will be reduced by the amount of tax withheld under the backup withholding rules. If backup withholding results in an overpayment of taxes, a refund or credit may generally be obtained from the IRS, provided that the required information is furnished to the IRS in a timely manner.

Fatca

The Foreign Account Tax Compliance Act and the rules and Treasury regulations promulgated thereunder, or collectively, FATCA, generally impose U.S. federal withholding tax at a rate of 30% on dividends on and (subject to the proposed Treasury regulations discussed below) the gross proceeds from a sale or other disposition of our common stock paid to a “foreign financial institution” (as specially defined under these rules), unless such institution enters into an agreement with the U.S. government to withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding the U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners) or otherwise establishes an exemption. FATCA also generally imposes a U.S. federal withholding tax of 30% on dividends on and (subject to the proposed Treasury regulations discussed below) the gross proceeds from a sale or other disposition of our common stock paid to a “non-financial foreign entity” (as specially defined for purposes of these rules) unless such entity provides the withholding agent with a certification identifying certain substantial direct and indirect U.S. owners of the entity, certifies that there are none, or otherwise establishes and certifies to an exemption. The withholding provisions under FATCA generally apply to dividends on our common stock. While withholding under FATCA would have applied also to payments of gross proceeds from the sale or other disposition of our common stock on or after January 1, 2019, proposed Treasury regulations provide that the withholding provisions under FATCA do not apply with respect to the payment of gross proceeds from a sale or other disposition of our common stock. These proposed Treasury regulations may be relied upon by taxpayers until final Treasury regulations are issued. An intergovernmental agreement between the United States and your country of tax residence may modify the requirements described in this paragraph. Non-U.S. holders should consult their own tax advisors regarding the possible implications of FATCA on their investment in our common stock.

Each prospective investor should consult its own tax advisor regarding the particular U.S. federal, state and local and non-U.S. tax consequences of purchasing, holding, and disposing of our common stock, including the consequences of any proposed change in applicable laws.

Underwriting

UNDERWRITING We, the selling stockholders and the underwriters named below have entered into an underwriting agreement with respect to the shares being offered. Subject to certain conditions, each underwriter will severally agree to purchase the number of shares indicated in the following table. Goldman Sachs & Co. LLC, BofA Securities, Inc. and Citigroup Global Markets Inc. are the representatives of the underwriters.

Underwriters	Number of Shares
Goldman Sachs & Co. LLC	
BofA Securities, Inc.	
Citigroup Global Markets Inc.	

Jefferies LLC
Barclays Capital Inc.
JMP Securities LLC
Blaylock Van, LLC
Total

The underwriters will be committed to take and pay for all of the shares being offered, if any are taken, other than the shares covered by the option described below unless and until this option is exercised.

The underwriters will have an option to buy up to an additional shares from us to cover sales by the underwriters of a greater number of shares than the total number set forth in the table above. They may exercise that option for 30 days. If any shares are purchased pursuant to this option, the underwriters will severally purchase shares in approximately the same proportion as set forth in the table above.

The following tables show the per share and total underwriting discounts and commissions to be paid to the underwriters by us and the selling stockholders in connection with this offering. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

Paid by us

	No Exercise	Full Exercise
Per Share		$$
Total		$$

Paid by the selling stockholders

	No Exercise	Full Exercise
Per Share		$$
Total		$$

Shares sold by the underwriters to the public will initially be offered at the initial public offering price set forth on the cover of this prospectus. Any shares sold by the underwriters to securities dealers may be sold at a discount of up to $ per share from the initial public offering price. After the initial offering of our common stock, the representatives may change the offering price and the other selling terms. The offering of our common stock by the underwriters is subject to receipt and acceptance and subject to the underwriters' right to reject any order in whole or in part.

We and our officers and directors, the selling stockholders, and the other holders of our common stock, who collectively hold substantially all of our common stock, have agreed with the underwriters, subject to certain exceptions, not to dispose of or hedge any common stock or securities convertible into or exchangeable for shares of common stock during the period from the date of such agreement continuing through the date 180 days after the date of this prospectus, except with the prior written consent of the representatives. This agreement does not apply to any existing employee benefit plans. See "Shares Available for Future Sale" for a discussion of certain transfer restrictions.

Prior to this offering, there has been no public market for our common stock. The initial public offering price will be negotiated among the representatives and us. Among the factors to be considered in determining the initial public offering price of our common stock, in addition to prevailing market conditions, will be our historical performance, estimates of our business potential and earnings prospects, an assessment of our management and the consideration of the above factors in relation to market valuation of companies in related businesses.

We have applied to list our common stock on the Nasdaq Global Select Market under the symbol "UPST".

In connection with the offering, the underwriters may purchase and sell shares of common stock in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering, and a short position represents the amount of such sales that have not been covered by subsequent purchases. A "covered short position" is a short position that is not greater than the amount of additional shares for which the underwriters' option described above may be exercised. The underwriters may cover any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to cover the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase additional shares pursuant to the option described above. "Naked" short sales are any short sales that create a short position greater than the amount of additional shares for which the option described above may be exercised. The underwriters must cover any such naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Purchases to cover a short position and stabilizing transactions, as well as other purchases by the underwriters for their own accounts, may have the effect of preventing or retarding a decline in the market price of our stock, and together with the imposition of the penalty bid, may stabilize, maintain or otherwise affect the market price of the common stock. As a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. The underwriters are not required to engage in these activities and may end any of these activities at any time. These transactions may be effected on the , in the over-the-counter market or otherwise.

We estimate that our share of the total expenses of the offering, excluding underwriting discounts and commissions, will be approximately $ million.

We agree to reimburse the underwriters for expenses related to any applicable state securities filings and to the Financial Industry Regulatory Authority, Inc. incurred by them in connection with this offering in an amount up to $. We and the selling stockholders will also agree to indemnify the several underwriters against certain liabilities, including liabilities under the Securities Act of 1933.

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Certain of the underwriters and their respective affiliates have provided, and may in the future provide, a variety of these services to the issuer and to persons and entities with relationships with the issuer, for which they received or will receive customary fees and expenses. An affiliate of Goldman Sachs & Co. LLC serves as a lender under a revolving credit facility entered into with one of our consolidated variable interest entities. Goldman Sachs & Co. LLC or other affiliates of the same serve or have served as securitizer for certain consumer loans originated by our bank partners, or co-sponsor for, initial purchaser with respect to, or an investor in, certain of such securitizations. Jefferies LLC or other affiliates of the same have also served as purchaser and securitizer for certain consumer loans originated by our bank partners, or initial purchaser with respect to those and certain other securitizations of consumer loans originated by our bank partners.

In the ordinary course of their various business activities, the underwriters and their respective affiliates, officers, directors and employees may purchase, sell or hold a broad array of investments and actively trade securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers, and such investment and trading activities may involve or relate to assets, securities and/or instruments of the issuer (directly, as collateral securing other obligations or otherwise) and/or persons and entities with relationships with the issuer. The underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

European Economic Area

In relation to each Member State of the European Economic Area (each a “Member State”), no common stock has been offered or will be offered pursuant to the offering to the public in that Member State prior to the publication of a prospectus in relation to our common stock which has been approved by the competent authority in that Member State or, where appropriate, approved in another Member State and notified to the competent authority in that Member State, all in accordance with the Prospectus Regulation, except that offers of shares may be made to the public in that Member State at any time under the following exemptions under the Prospectus Regulation:

(a) to any legal entity which is a qualified investor as defined in the Prospectus Regulation;

(b) by the underwriters to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Regulation), subject to obtaining the prior written consent of the representatives for any such offer; or (c) in any other circumstances falling within Article 1(4) of the Prospectus Regulation, provided that no such offer of common stock shall result in a requirement for us or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

Each person in a Member State who initially acquires any common stock or to whom any offer is made will be deemed to have represented, acknowledged and agreed with us and the representatives that it is a qualified investor within the meaning of the Prospectus Regulation.

In the case of any common stock being offered to a financial intermediary as that term is used in Article 5(1) of the Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the common stock acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer to the public other than their offer or resale in a Member State to qualified investors, in circumstances in which the prior written consent of the representatives has been obtained to each such proposed offer or resale.

We, the underwriters and their affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgments and agreements.

For the purposes of this provision, the expression an “offer to the public” in relation to any common stock in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any common stock to be offered so as to enable an investor to decide to purchase or subscribe for our common stock, and the expression “Prospectus Regulation” means Regulation (EU) 2017/1129.

United Kingdom

Each underwriter has represented and agreed that:

(a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000 (FSMA)) received by it in connection with the issue or sale of our common stock in circumstances in which Section 21(1) of the FSMA does not apply to the company; and (b) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to our common stock in, from or otherwise involving the United Kingdom.

Canada

The securities may be sold in Canada only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions, and Ongoing Registrant Obligations. Any resale of the securities must be made in accordance with an exemption form, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Hong Kong

Our common stock may not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32 of the Laws of Hong Kong) ("Companies (Winding Up and Miscellaneous Provisions) Ordinance") or which do not constitute an invitation to the public within the meaning of the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong) ("Securities and Futures Ordinance"), or (ii) to "professional investors" as defined in the Securities and Futures Ordinance and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance, and no advertisement, invitation or document relating to our common stock may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" in Hong Kong as defined in the Securities and Futures Ordinance and any rules made thereunder.

Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of our common stock may not be circulated or distributed, nor may our common stock be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor (as defined under Section 4A of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA")) under Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to conditions set forth in the SFA.

Where our common stock is subscribed or purchased under Section 275 of the SFA by a relevant person which is a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor, the securities (as defined in Section 239(1) of the SFA) of that corporation shall not be transferable for 6 months after that corporation has acquired our common stock under Section 275 of the SFA except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA), (2) where such transfer arises from an offer in that corporation's securities pursuant to Section 275(1A) of the SFA, (3) where no consideration is or will be given for the transfer, (4) where the transfer is by operation of law, (5) as specified in Section 276(7) of the SFA, or (6) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore ("Regulation 32").

Where our common stock is subscribed or purchased under Section 275 of the SFA by a relevant person which is a trust (where the trustee is not an accredited investor (as defined in Section 4A of the SFA)) whose sole purpose is to hold investments and each beneficiary of the trust is an accredited investor, the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferable for 6 months after that trust has acquired our common stock under Section 275 of the SFA except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA), (2) where such transfer arises from an offer that is made on terms that such rights or interest are acquired at a consideration of not less than $200,000 (or its equivalent in a foreign currency) for each transaction (whether such amount is to be paid for in cash or by exchange of securities or other assets), (3) where no consideration is or will be given for the transfer, (4) where the transfer is by operation of law, (5) as specified in Section 276(7) of the SFA, or (6) as specified in Regulation 32.

Japan

The securities have not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948, as amended), or the FIEA. The securities may not be offered or sold, directly or indirectly, in Japan or to or for the benefit of any resident of Japan (including any person resident in Japan or any corporation or other entity organized under the laws of Japan) or to others for reoffering or resale, directly or indirectly, in Japan or to or for the benefit of any resident of Japan, except pursuant to an exemption from the registration requirements of the FIEA and otherwise in compliance with any relevant laws and regulations of Japan.

Dubai International Financial Centre

This prospectus relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority, or DFSA. This prospectus is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not

approved this prospectus nor taken steps to verify the information set forth herein and has no responsibility for the prospectus. The shares of common stock to which this prospectus relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares of our common stock should conduct their own due diligence on such shares. If you do not understand the contents of this prospectus, you should consult an authorized financial advisor.

Switzerland

The common stock may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange ("SIX") or on any other stock exchange or regulated trading facility in Switzerland. This document does not constitute a prospectus within the meaning of and has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the common stock or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, our company or our common stock has been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of common stock will not be supervised by, the Swiss Financial Market Supervisory Authority and the offer of common stock has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes ("CISA"). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of common stock.

Validity of Common Stock

VALIDITY OF COMMON STOCK Wilson Sonsini Goodrich & Rosati, P.C., Palo Alto, California, which has acted as our counsel in connection with this offering, will pass upon the validity of the shares of our common stock being offered by this prospectus. The validity of the shares of common stock offered by this prospectus will be passed upon for the underwriters by Sullivan & Cromwell LLP, Palo Alto, California.

Experts

EXPERTS

The consolidated financial statements included in this prospectus have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report appearing herein. Such consolidated financial statements as of December 31, 2018 and 2019 and for each of the three years in the period ended December 31, 2019 are included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

Where You Can Find Additional Information

WHERE YOU CAN FIND ADDITIONAL INFORMATION We have submitted with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of our common stock offered by this prospectus. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement, some of which is contained in exhibits to the registration statement as permitted by the rules and regulations of the SEC. For further information with respect to us and our common stock, we refer you to the registration statement, including the exhibits filed as a part of the registration statement. Statements contained in this prospectus concerning the contents of any contract or any other document are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, please see the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit. The SEC maintains an Internet website that contains reports, proxy statements, and other information about issuers, like us, that file electronically with the SEC. The address of that website is www.sec.gov.

As a result of this offering, we will become subject to the information and reporting requirements of the Exchange Act and, in accordance with this law, will file periodic reports, proxy statements, and other information with the SEC. We also maintain a website at www.Upstart.com. Upon completion of this offering, you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on our website is not a part of this prospectus and the inclusion of our website address in this prospectus is an inactive textual reference only.

Upstart Holdings, Inc.

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Upstart Holdings, Inc.

Report of Independent Registered Public Accounting Firm

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM To the stockholders and the Board of Directors of Upstart Holdings, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Upstart Holdings, Inc. and subsidiaries (the "Company") as of December 31, 2019 and 2018, the related consolidated statements of operations and comprehensive income (loss), convertible preferred stock and stockholders' deficit and cash flows, for each of the three years in the period ended December 31, 2019, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Deloitte & Touche LLP San Francisco, CA March 3, 2020 We have served as the Company's auditor since 2015.

Upstart Holdings, Inc.

Consolidated Balance Sheets

Consolidated Balance Sheets

(In thousands, except share and per share data)

	December 31,		September 30,	Pro Forma September 30,
	2018	2019	2020	2020
			(unaudited)	*(unaudited)*
Assets				
Cash	$73,038	$44,389	$53,234	$
Restricted cash	49,204	35,678	57,414	
Loans (at fair value)	502,666	232,305	122,708	
Notes receivable and residual certificates (at fair value)	8,314	34,116	22,053	
Property, equipment, and software, net	1,502	6,030	9,060	
Operating lease right of use assets	—	16,190	13,904	
Other assets (includes $1,410, $4,725 and $6,558 at fair value as of December 31, 2018 and 2019, and September 30, 2020 (unaudited), respectively)	11,184	24,754	31,431	
Total assets[(a)]	$645,908	$393,462	$309,804	$

Liabilities, Convertible Preferred Stock, and Stockholders' Deficit				
Liabilities:				
Accounts payable	$2,923	$6,559	$6,049	$
Payable to investors	21,154	19,620	39,192	
Notes payable (at fair value; includes $2,447 payable to related parties as of December 31, 2018)	53,174	—	—	
Borrowings	74,983	118,609	100,588	
Payable to securitization note holders and residual certificate holders (includes $353,292 and $89,672 at fair value, and $61,439 and $41,343 payable to related parties as of December 31, 2018 and 2019, respectively)	373,068	96,107	—	
Other liabilities (includes $11,086, $12,446, and $17,308 at fair value as of December 31, 2018 and 2019, and September 30, 2020 (unaudited), respectively)	17,353	34,648	33,921	
Operating lease liabilities	—	17,061	14,841	
Total liabilities[(a)]	542,655	292,604	194,591	
Commitments and Contingencies				
Convertible preferred stock, $0.0001 par value; 53,927,657 shares authorized as of December 31, 2018 and 2019, and September 30, 2020 (unaudited), respectively; aggregate liquidation preference of $162,757, $166,257, and $166,257 as of December 31, 2018 and 2019, and September 30, 2020 (unaudited), respectively; 46,882,877 shares issued and outstanding as of December 31, 2018, and 47,349,577 shares issued and outstanding as of December 31, 2019, and September 30, 2020 (unaudited); no shares outstanding as of September 30, 2020 (unaudited), pro forma (unaudited)	157,923	162,546	162,546	
Stockholders' deficit:				
Common stock, $0.0001 par value; 90,000,000 shares authorized as of December 31, 2018 and 2019, and September 30, 2020 (unaudited), respectively; 12,991,270, 14,561,398, and 15,044,707 shares issued and outstanding as of December 31, 2018 and 2019, and September 30, 2020 (unaudited), respectively; shares outstanding as of September 30, 2020 (unaudited), pro forma (unaudited)	1	2	2	
Additional paid-in capital	8,406	12,489	22,914	
Accumulated deficit	(75,078)	(75,205)	(70,249)	
Total Upstart Holdings, Inc. stockholders' deficit	(66,671)	(62,714)	(47,333)	
Noncontrolling interests	12,001	1,026	—	
Total stockholders' deficit	(54,670)	(61,688)	(47,333)	
Total liabilities, convertible preferred stock, and stockholders' deficit	$645,908	$393,462	$309,804	$

Upstart Holdings, Inc.

Consolidated Balance Sheets

(In thousands, except share and per share data)

(a) The following table presents information on assets and liabilities related to variable interest entities ("VIEs") that are consolidated by Upstart Holdings, Inc. as of December 31, 2018 and 2019, and September 30, 2020. The assets in the table below may only be used to settle obligations of consolidated VIEs and are in excess of those obligations. The holders of the beneficial interests do not have recourse to the general credit of Upstart Holdings, Inc. The assets and liabilities in the table below include third-party assets and liabilities of consolidated VIEs and exclude intercompany balances that eliminate in consolidation.

	December 31,		September 30,
	2018	2019	2020
			(unaudited)
Assets			
Restricted cash	$32,225	$13,839	$16,017
Loans (at fair value)	501,959	231,109	121,761
Notes receivable and residual certificates (at fair value)	8,291	30,266	19,820
Other assets	2,854	453	25
Total assets	$545,329	$275,667	$ 157,623
Liabilities			
Accounts payable	$12	$60	$130
Payable to investors	4,382	—	—

Notes payable (at fair value)	53,174	—	—
Borrowings	53,968	96,037	79,611
Payable to securitization note holders and residual certificate holders (includes $353,292 and $89,672 at fair value, and $61,439 and $41,343 to related parties as of December 31, 2018 and 2019, respectively)	373,068	96,107	—
Other liabilities	1,611	1,103	33
Total liabilities	$486,215	$193,307	$ 79,774

The accompanying notes are an integral part of these consolidated financial statements.

Upstart Holdings, Inc.

Consolidated Statements of Operations and Comprehensive Income (loss)

Consolidated Statements of Operations and Comprehensive Income (Loss)

(In thousands, except share and per share data)

	Year Ended December 31,			Nine Months Ended September 30,	
	2017	2018	2019	2019	2020
				(unaudited)	*(unaudited)*
Revenue:					
Revenue from fees, net	$51,161	$88,482	$159,847	$98,699	$144,179
Interest income and fair value adjustments, net (includes $573, $2,452, $2,963, $2,260, and $1,014 of related parties expense and $0, ($4,031), $7,400, $5,597 and $4,238 of related parties fair value adjustments for the years ended December 31, 2017, 2018 and 2019, and nine months ended September 30, 2019 (unaudited), and 2020 (unaudited), respectively)	6,128	10,831	4,342	2,918	2,527
Total revenue	57,289	99,313	164,189	101,617	146,706
Operating expenses:					
Sales and marketing	33,838	63,633	93,175	61,236	65,113
Customer operations	10,232	15,416	24,947	16,593	24,792
Engineering and product development	5,324	8,415	18,777	11,480	24,651
General, administrative, and other	15,431	19,820	31,865	20,399	30,778
Total operating expenses	64,825	107,284	168,764	109,708	145,334
(Loss) income from operations	(7,536)	(7,971)	(4,575)	(8,091)	1,372
Other income	330	487	1,036	832	5,497
Expense on warrants and convertible notes, net	(1,649)	(3,734)	(1,407)	(2,626)	(2,317)
Net (loss) income before income taxes	(8,855)	(11,218)	(4,946)	(9,885)	4,552
Provision for income taxes	6	—	74	—	—
Net (loss) income before attribution to noncontrolling interests	(8,861)	(11,218)	(5,020)	(9,885)	4,552
Net (loss) income attributable to noncontrolling interests	(1,144)	1,101	(4,554)	(3,368)	(404)
Net (loss) income attributable to Upstart Holdings, Inc. common stockholders	$(7,717)	$(12,319)	$(466)	$(6,517)	$4,956
Net (loss) income per common share attributable to Upstart Holdings, Inc. stockholders, basic and diluted	$(0.56)	$(0.87)	$(0.03)	$(0.46)	$—
Weighted-average number of shares outstanding used in computing net loss per share attributable to Upstart Holdings, Inc. common stockholders, basic and diluted	13,873,810	14,128,183	14,335,611	14,313,262	14,663,623
Pro forma net loss per share attributable to Upstart Holdings, Inc. common stockholders, basic and diluted (unaudited)					$$
Weighted-average number of shares used to compute pro forma net loss per share attributable to Upstart Holdings, Inc. common stockholders, basic and diluted (unaudited)					

The accompanying notes are an integral part of these consolidated financial statements.

Upstart Holdings, Inc.

Consolidated Statements of Convertible Preferred Stock and Stockholders' Deficit

Consolidated Statements of Convertible Preferred Stock and Stockholders' Deficit

(In thousands, except share amounts)

	Convertible Preferred Stock		Common Stock		Additional Paid-inCapital	Accumulated Deficit	Total Upstart Holdings, Inc.Stockholders'Deficit	Noncontrolling Interests	Total Stockholders'Deficit
	Shares	Amount	Shares	Amount					
Balances as of December 31, 2016	35,137,187	$87,756	12,480,195	$1	$4,564	$(55,042)	$(50,477)	$—	$(50,477)
Issuance of Series C-1 convertible preferred stock	307,825	1,112	—	—	—	—	—	—	—
Issuance of common stock warrants	—	—	—	—	42	—	42	—	42
Issuance of common stock upon exercise of stock options	—	—	272,010	—	142	—	142	—	142
Stock-based compensation expense	—	—	—	—	1,290	—	1,290	—	1,290
Contributions of interests in consolidated VIEs	—	—	—	—	—	—	—	16,689	16,689
Return of capital to interests in consolidated VIEs	—	—	—	—	—	—	—	(2,238)	(2,238)
Net loss	—	—	—	—	—	(7,717)	(7,717)	(1,144)	(8,861)
Balances as of December 31, 2017	35,445,012	$88,868	12,752,205	$1	$6,038	$(62,759)	$(56,720)	$13,307	$(43,413)
Issuance of Series C-1 convertible preferred stock upon conversion of convertible promissory notes	5,871,382	21,210	—	—	—	—	—	—	—
Issuance of Series D convertible preferred stock, net of issuance costs of $2,255	5,566,483	47,845	—	—	—	—	—	—	—
Issuance of common stock upon exercise of stock options	—	—	239,065	—	323	—	323	—	323
Stock-based compensation expense	—	—	—	—	2,045	—	2,045	—	2,045
Contributions of interests in consolidated VIEs	—	—	—	—	—	—	—	9,166	9,166
Return of capital to interests in consolidated VIEs	—	—	—	—	—	—	—	(11,573)	(11,573)
Net (loss) income	—	—	—	—	—	(12,319)	(12,319)	1,101	(11,218)
Balance as of December 31, 2018	46,882,877	$157,923	12,991,270	$1	$8,406	$(75,078)	$(66,671)	$12,001	$(54,670)

Issuance of Series D convertible preferred stock, net of issuance costs of $8	444,428	3,992	—	—	—	—	—	—	—
Issuance of Series B convertible preferred stock upon exercise of convertible preferred stock warrants	300,103	1,631	—	—	—	—	—	—	—
Repurchase and retirement of Series C convertible preferred stock	(277,831)	(1,000)	—	—	—	339	339	—	339
Exercise of common stock warrants	—	—	1,297,884	—	—	—	—	—	—
Issuance of common stock upon exercise of stock options	—	—	272,244	1	277	—	278	—	278
Stock-based compensation expense	—	—	—	—	3,806	—	3,806	—	3,806
Return of capital to interests in consolidated VIEs	—	—	—	—	—	—	—	(4,960)	(4,960)
Deconsolidation of interests in consolidated VIEs	—	—	—	—	—	—	—	(1,461)	(1,461)
Net loss	—	—	—	—	—	(466)	(466)	(4,554)	(5,020)
Balance as of December 31, 2019	47,349,577	$162,546	14,561,398	$2	$12,489	$(75,205)	$(62,714)	$1,026	$(61,688)

Upstart Holdings, Inc.

Consolidated Statements of Convertible Preferred Stock and Stockholders' Deficit—(Continued)

(In thousands, except share amounts)

	Convertible Preferred Stock		Common Stock		Additional Paid-inCapital	Accumulated Deficit	Total Upstart Holdings, Inc. Stockholders' Deficit	Noncontrolling Interest	Total Stockholders'Deficit
	Shares	Amount	Shares	Amount					
Balance as of December 31, 2018	46,882,877	$157,923	12,991,270	$1	$8,406	$(75,078)	$(66,671)	$12,001	$(54,670)
Issuance of Series D convertible preferred stock, net of issuance costs of $8 (unaudited)	444,428	3,992	—	—	—	—	—	—	—
Issuance of Series B convertible preferred stock upon exercise of convertible preferred stock warrants (unaudited)	300,103	1,631	—	—	—	—	—	—	—
Issuance of common stock upon exercise of stock options (unaudited)	—	—	54,777	—	112	—	112	—	112
Exercise of common stock warrants (unaudited)	—	—	1,297,884	—	—	—	—	—	—
Stock-based compensation expense (unaudited)	—	—	—	—	2,204	—	2,204	—	2,204
Return of capital to interests in consolidated VIEs (unaudited)	—	—	—	—	—	—	—	(4,321)	(4,321)

Net loss (unaudited)	—	— —	—	—	—	(6,517)	(6,517)	(3,368)	(9,885)
Balance as of September 30, 2019 (unaudited)	47,627,408	$163,546	14,343,931	$1	$10,722	$(81,595)	$(70,872)	$4,312	$(66,560)
Balance as of December 31, 2019	47,349,577	$162,546	14,561,398	$2	$12,489	$(75,205)	$(62,714)	$1,026	$(61,688)
Issuance of common stock upon exercise of stock options (unaudited)	—	—	200,559	—	510	—	510	—	510
Issuance of common stock in connection with an incentive agreement (unaudited)	—	—	282,750	—	1,696	—	1,696	—	1,696
Stock-based compensation (unaudited)	—	—	—	—	7,432	—	7,432	—	7,432
Incentive share expense (unaudited)	—	—	—	—	787	—	787	—	787
Return of capital on interest in consolidated VIEs (unaudited)	—	—	—	—	—	—	—	(622)	(622)
Net (loss) income (unaudited)	—	—	—	—	—	4,956	4,956	(404)	4,552
Balance as of September 30, 2020 (unaudited)	47,349,577	$162,546	15,044,707	$2	$22,914	$(70,249)	$(47,333)	$—	$(47,333)

The accompanying notes are an integral part of these consolidated financial statements.

Upstart Holdings, Inc.

Consolidated Statements of Cash Flows

Consolidated Statements of Cash Flows

(In thousands)

	Year Ended December 31,			Nine Months Ended September 30,	
	2017	2018	2019	2019	2020
				(unaudited)	*(unaudited)*
Cash flows from operating activities					
Net (loss) income before attribution to noncontrolling interests	$(8,861)	$(11,218)	$(5,020)	$(9,885)	$4,552
Adjustments to reconcile net (loss) income to net cash (used in) provided by operating activities:					
Change in fair value of financial instruments (includes $0, $4,031, ($7,400), ($5,597) and ($4,238) from related parties for the years ended December 31, 2017, 2018 and 2019, and nine months ended September 30, 2019 (unaudited), and 2020 (unaudited), respectively)	(5,201)	42,282	34,716	29,608	18,801
Stock-based compensation	1,290	2,045	3,806	2,204	7,102
Loss (gain) on loan servicing arrangements and sale of noncontrolling interests, net	1,515	2,169	856	1,274	(1,747)
Depreciation and amortization	93	314	774	324	1,631
Incentive share expense	—	—	—	—	786
Noncash interest expense	42	19	74	31	54
Gain on repurchased and retired convertible preferred stock warrants	—	—	(3,657)	—	—
Accrued interest on convertible notes (includes $208 and $397 payable to related parties for the years ended December 31, 2017 and 2018, respectively)	416	794	—	—	—
Net changes in operating assets and liabilities:					
Purchase of loans for immediate resale to investors	(580,438)	(1,115,049)	(1,779,180)	(1,069,413)	(1,554,705)
Proceeds from immediate resale of loans to investors	580,438	1,115,049	1,779,180	1,069,413	1,554,705
Purchase of loans held-for-sale	—	—	—	—	(109,113)
Principal payments received for loans held for sale	—	—	—	—	15,237

Net proceeds from sale of loans held for sale	—	—	—	—	6,813
Other assets	(4,147)	(3,001)	(11,957)	(8,499)	(4,843)
Operating lease liability and right-of-use asset	—	—	871	755	66
Accounts payable	946	1,118	3,613	(1,509)	(592)
Payable to investors	23,525	14,100	(14,875)	(5,221)	13,137
Other liabilities	739	1,716	22,381	11,945	(4,701)
Net cash (used in) provided by operating activities	10,357	50,338	31,582	21,027	(52,817)

Upstart Holdings, Inc.

Consolidated Statements of Cash Flows—(Continued)

(In thousands)

	Year Ended December 31,			Nine Months Ended September 30,	
	2017	2018	2019	2019	2020
				(unaudited)	*(unaudited)*
Cash flows from investing activities					
Principal payments received for loans held by consolidated securitizations	$49,556	$199,325	$158,921	$130,103	$24,018
Net proceeds from sale of loans held-for-investment	45,084	45,698	100,678	64,182	88,136
Principal payments received for loans held-for-investment	26,660	38,678	48,124	40,792	12,277
Principal payments received for notes receivable and repayments of residual certificates	—	1,229	8,760	5,050	11,306
Purchase of loans held-for-investment	(102,541)	(169,442)	(265,286)	(185,340)	(3,774)
Purchase of notes receivable and residual certificates	—	—	(485)	—	(4)
Purchase of property and equipment	—	(148)	(4,004)	(253)	(1,282)
Capitalized software costs	(773)	(896)	(1,275)	(1,014)	(2,967)
Purchase of loans held by consolidated securitizations	(411,407)	(251,681)	—	—	—
Net cash (used in) provided by investing activities	(393,421)	(137,237)	45,433	53,520	127,710
Cash flows from financing activities					
Payments made on securitization notes and certificates (includes $0, $7,607, $3,262, $2,265 and $1,034 paid to related parties for the years ended December 31, 2017, 2018 and 2019, and nine months ended September 30, 2019 (unaudited), and 2020 (unaudited), respectively)	(49,262)	(226,775)	(176,742)	(144,956)	(26,126)
Repayments of borrowings	(111,139)	(92,954)	(109,939)	(78,036)	(99,835)
Repayments of notes payable	(13,634)	(21,468)	(22,637)	(22,637)	—
Distributions made to noncontrolling interests	(2,238)	(11,238)	(4,960)	(4,321)	(622)
Repurchase and retirement of convertible preferred stock warrants	—	—	(1,426)	—	—
Repurchase and retirement of convertible preferred stock	—	—	(661)	—	—
Proceeds from borrowings	118,780	144,048	153,491	110,830	81,761
Proceeds from issuance of notes payable	31,399	42,537	39,863	39,863	—
Proceeds from issuance of convertible preferred stock, net of issuance costs	1,112	49,925	1,912	1,912	—
Proceeds from exercise of convertible preferred stock warrants	—	—	1,631	500	—
Proceeds from exercise of stock options	142	323	278	112	510

Upstart Holdings, Inc.

Consolidated Statements of Cash Flows—(Continued)

(In thousands)

	Year Ended December 31,			Nine Months Ended September 30,	
	2017	2018	2019	2019	2020
				(unaudited)	*(unaudited)*

Proceeds from issuance of securitization notes and certificates (includes $9,750 and $54,839 from related parties for the years ended December 31, 2017 and 2018, respectively)	$400,866	$242,454	$—	$—	$—
Proceeds from sale of noncontrolling interests	16,689	8,914	—	—	—
Proceeds from issuance of convertible notes (includes $10,000 from related parties for the year ended December 31, 2017)	20,000	—	—	—	—
Net cash provided by (used in) financing activities	412,715	135,766	(119,190)	(96,733)	(44,312)
Net increase (decrease) in cash and restricted cash	29,651	48,867	(42,175)	(22,186)	30,581
Cash and restricted cash					
Beginning of period	43,724	73,375	122,242	122,242	80,067
End of period	$73,375	$122,242	$80,067	$100,056	$110,648
Supplemental disclosures of cash flow information					
Cash paid for interest	$9,603	$26,676	$26,871	$22,512	$6,954
Cash paid for amounts included in the measurement of lease liabilities	—	—	1,905	1,275	3,101
Supplemental disclosures of non-cash operating activities					
Total right-of-use assets capitalized	$—	$—	$16,190	$17,084	$187
Supplemental disclosures of non-cash investing and financing activities					
Derecognition of loans held-for-investment in consolidated VIE	$—	$—	$154,864	$72,757	$57,222
Derecognition of payable to securitization note holders and residual certificate holders	—	—	80,825	—	58,017
Derecognition of notes payable held in consolidated VIE	—	—	69,419	69,419	—
Securities retained under consolidated securitization transactions	—	9,501	31,160	31,160	—
Transfer of notes receivable and residual certificate on deconsolidation of VIE	—	—	3,699	3,339	—
Conversion of notes as part of issuance of convertible preferred stock (includes $10,605 from related parties for the year ended December 31, 2018)	—	21,210	—	—	—
Accrued convertible preferred stock issuance costs included in other liabilities	—	2,080	—		
Capitalized stock-based compensation expense	—	—	—	—	330

The accompanying notes are an integral part of these consolidated financial statements.

Upstart Holdings, Inc.

Notes to Consolidated Financial Statements

Notes to Consolidated Financial Statements

1. Description of Business and Significant Accounting Policies

Description of Business

Upstart Holdings, Inc. and its subsidiaries (together “Upstart,” or the “Company”) apply modern data science and technology to the process of originating consumer credit. The Company helps bank partners originate credit by providing them with a proprietary, cloud-based, artificial intelligence lending platform. As the Company’s technology continues to improve and additional banks adopt the Upstart platform, consumers benefit from improved access to affordable and frictionless credit.

Upstart Network, Inc. was incorporated in Delaware in 2012. Pursuant to a restructuring, Upstart Holdings, Inc. was incorporated in December 2013 and became the holding company of Upstart Network, Inc. The Company currently operates in the United States and is headquartered in San Mateo, California and Columbus, Ohio. The Company’s fiscal year ends on December 31.

Basis of Presentation and Consolidation

The accompanying consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (“GAAP”) and include the accounts of the Company, its wholly-owned subsidiaries, and consolidated variable interest entities (“VIEs”). All intercompany accounts and transactions have been eliminated. The Company’s functional and reporting currency is the U.S. dollar.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires that management make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting periods.

Significant estimates and assumptions made in the accompanying consolidated financial statements, which Management believes are critical in understanding and evaluating the Company's reported financial results include: (i) fair value determinations; (ii) stock-based compensation; (iii) consolidation of VIEs; and (iv) provision for income taxes, net of valuation allowance for deferred tax assets. The Company bases its estimates on various factors it believes to be reasonable under the circumstances. Actual results could differ from those estimates and such differences could affect the results of operations reported in future periods.

Unaudited Interim Financial Statements

The accompanying interim consolidated balance sheets as of September 30, 2020, the interim consolidated statements of operations and comprehensive income (loss) for the nine months ended September 30, 2019 and 2020, the interim consolidated statements of convertible preferred stock and stockholders' deficit for the nine months ended September 30, 2020, the interim consolidated statements of cash flows for the nine months ended September 30, 2019 and 2020 and related note information are unaudited.

The unaudited interim financial statements have been prepared on the same basis as the annual consolidated financial statements and in the Company's opinion, reflect all adjustments that are **Upstart Holdings, Inc.**

Notes to Consolidated Financial Statements

necessary to present fairly the Company's consolidated balance sheet as of September 30, 2020, and the related statements of operations and the comprehensive income (loss), the statements of convertible preferred stock and stockholders' deficit, and the cash flow statements for the nine months ended September 30, 2019 and 2020. The financial data and the other information disclosed in these notes to the consolidated financial statements related to these nine-month periods are unaudited.

The results of the nine months ended September 30, 2020 are not necessarily indicative of the results to be expected for the year ending December 31, 2020 or for any other future periods.

Unaudited Pro Forma Balance Sheet Information

The unaudited pro forma balance sheet information as of September 30, 2020 is presented as though all of the Company's outstanding shares of convertible preferred stock have been converted into shares of common stock upon the completion of an initial public offering ("IPO") of the Company's common stock. In addition, the pro forma balance sheet information assumes the reclassification of the convertible preferred stock warrant liability to additional paid-in capital upon completion of the IPO, as the warrants to purchase convertible preferred stock will be automatically net exercised. The unaudited pro forma balance sheet information does not assume any proceeds from the IPO.

Variable Interest Entities

A legal entity is considered a VIE if it has either a total equity investment that is insufficient to finance its operations without additional subordinated financial support or whose equity holders lack the characteristics of a controlling financial interest. The Company's variable interests arise from contractual, ownership, or other monetary interests in the entity. The Company consolidates a VIE when it is deemed to be the primary beneficiary. The Company determines it is the primary beneficiary if it has the power to direct activities that most significantly impact the VIE's economic performance and has the obligation to absorb losses or the right to receive benefits of the VIE that could be potentially significant to the VIE. The Company assesses whether or not it is the primary beneficiary of a VIE on an ongoing basis.

Noncontrolling Interests

Noncontrolling interests represent a portion of the equity of consolidated VIEs that are not held by the Company. These interests are recognized as a result of the admission of non-voting members into consolidated majority-owned affiliates ("MOAs"), which were formed in conjunction with the 2017-1, 2017-2, and 2018-1 securitizations for the purpose of holding subordinated certificates in sponsored securitizations for risk retention purposes. See "*Note 3. Securitizations and Variable Interest Entities*" for details. Earnings and losses associated with these VIEs, are allocated to noncontrolling interests proportionally to their ownership interests in these entities in the period they are incurred. Cash distributions to holders of noncontrolling interests are made in the period following the allocation of earnings and losses. Noncontrolling interests and associated income or losses for each year presented are disclosed as separate line items on the consolidated balance sheets and consolidated statements of operations and comprehensive income (loss), respectively.

Upstart Holdings, Inc.

Notes to Consolidated Financial Statements

Cash and Restricted Cash

Cash consists of bank deposits held in business checking and interest-bearing deposit accounts. As of December 31, 2018 and 2019, and September 30, 2020 (unaudited), the Company did not have any cash equivalent balances, defined as highly liquid financial instruments purchased with original maturities of three months or less.

Restricted cash primarily consists of bank deposits that are: (i) received from borrowers for interest and applied to loans as part of loan servicing, but not yet distributed to investors; (ii) received from investors as collateral for financing of loan purchases on the Upstart platform but not yet invested in issued loans; and (iii) collateral for a letter of credit the Company is required to maintain under its operating lease agreement.

The following table provides a reconciliation of cash and restricted cash reported within the consolidated balance sheets that sum to the total of the same amounts shown in the consolidated statements of cash flows (in thousands):

	December 31,			September 30,
	2017	2018	2019	2020
				(unaudited)
Cash	$42,020	$73,038	$44,389	$53,234
Restricted cash	31,355	49,204	35,678	57,414
Total cash and restricted cash	$73,375	$122,242	$80,067	$110,648

Financial Instruments not Measured at Fair Value

The Company's financial instruments not measured at fair value consist primarily of cash, restricted cash, and other assets (excluding certain financial instruments, which are measured at fair value), accounts payable, payable to investors, and other liabilities (excluding certain financial instruments, including loan servicing assets and liabilities, common stock warrant liabilities and convertible preferred stock warrant liabilities, which are measured at fair value). The carrying values of these financial instruments are considered to be representative of their respective fair values due to their short-term nature.

Similarly, distributions payable to investors in securitization transactions, included in payable to securitization note holders and residual certificates holders in the Company's consolidated balance sheets, are settled monthly as part of the waterfall payments and are not carried at fair value. Payable to investors includes amounts of loan repayments not yet distributed to investors, as well as amounts received from investors but not yet invested directly in whole loans or notes payable. Borrowings are presented at par, net of debt issuance costs and amortized over the contractual term, with accrued interest included as part of accounts payable on the consolidated balance sheets. The carrying value of borrowings approximates the fair value due to their relatively short maturities.

Fair Value Measurement

Assets and liabilities recorded at fair value on a recurring basis on the consolidated balance sheets are categorized based upon the level of judgment associated with the inputs used to measure their fair values. Fair value is defined as the exchange price that would be received for an asset or an exit price that would be paid to transfer a liability in the principal or most advantageous market for the **Upstart Holdings, Inc.**

Notes to Consolidated Financial Statements

asset or liability in an orderly transaction between market participants on the measurement date. The price used to measure fair value is not adjusted for transaction costs. The principal market is the market in which the Company would sell or transfer the asset with the greatest volume and level of activity for the asset. In determining the principal market for an asset or liability, it is assumed that the Company has access to the market as of the measurement date. If no market for the asset exists, or if the Company does not have access to the principal market, a hypothetical market is used.

The authoritative guidance on fair value measurements establishes a three-tier fair value hierarchy for disclosure of fair value measurements as follows:

Level 1—Unadjusted quoted market prices in active markets for identical assets or liabilities;

Level 2— Inputs (other than quoted prices included in Level 1) are either directly or indirectly observable for the asset or liability. These include quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active; and Level 3— Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

Assets and liabilities measured at fair value on a recurring basis include loans, notes receivable and residual certificates, notes payable, payable to securitization note holders and residual certificate holders, other assets, common stock warrant liabilities, convertible preferred stock warrant liabilities, loan servicing assets and liabilities, and other liabilities. When developing fair value measurements, the Company maximizes the use of observable inputs and minimizes the use of unobservable inputs. However, for certain instruments, the Company must utilize unobservable inputs in determining fair value due to the lack of observable inputs in the market, which requires greater judgment in measuring fair value. In instances where there is limited or no observable market data, fair value measurements for assets and liabilities are based primarily upon the Company's own estimates, and the measurements reflect information and assumptions that management believes a market participant would use in pricing the asset or liability.

Transfer of Financial Assets

Upstart-powered loans originated by bank partners are either retained by the bank partners, purchased by the Company for immediate resale to institutional investors under loan sale agreements, or purchased and held by the Company. Loans retained and held on the Company's consolidated balance sheets are classified as either held-for-investment or held-for-sale, and loans purchased for immediate resale to third-party investors are classified as held-for-sale. Immediate loan resales to institutional investors are accounted for as transfers of financial assets when the Company surrenders control of these loan assets. These sales typically occur shortly after the origination of the loans by the bank partner and the Company's subsequent acquisition of the loans from the originating bank partner. Loans sold to institutional investors are derecognized from the Company's consolidated balance sheets at the time of sale in accordance with Topic 860, *Transfers and Servicing*. The Company records an asset or a liability at fair value for its estimated post-sale servicing obligations. The Company also records liabilities at fair value for contingent obligations to repurchase loans that do not conform to the representations and warranties made to the loan purchaser at the time of sale. The net liability is included in other liabilities on the Company's consolidated balance sheets.

The Company retains certain loans purchased from originating bank partners upon completion of the required holding period primarily for product development purposes. Refer to "*Note 4. Fair Value Measurement*" for further details.

Loan Servicing Assets and Liabilities

Loan servicing assets and liabilities are recognized at fair value when the Company transfers loans, which qualify as sales under Topic 860 with servicing rights retained or when the Company enters into servicing agreements with bank partners who retain Upstart-powered loans. A loan servicing asset or liability exists depending on whether the revenue from servicing is expected to more than adequately compensate the Company for carrying out its servicing obligations.

Loan servicing assets and liabilities are recorded in other assets and other liabilities, respectively, in the consolidated balance sheets, with changes in fair value recorded in servicing revenue, net, which is part of revenue from fees, net in the consolidated statements of operations and comprehensive income (loss) in the periods presented. Refer to "*Note 2. Revenue*" for further details.

Property, Equipment, and Software, Net

Property, equipment, and software are stated at cost less accumulated depreciation and amortization. Depreciation and amortization are recognized using the straight-line method over the estimated useful lives of the assets, which are generally three years for internally developed software, computer equipment, and furniture and fixtures. Leasehold improvements are depreciated over the shorter of the remaining lease term or the estimated useful life.

Internally developed software is capitalized upon completion of the preliminary project stage, when it becomes probable that the project will be completed, and the software will be used as intended. Capitalized costs primarily consist of salaries and payroll related costs for employees directly involved in development efforts. Costs related to the preliminary project stage and activities occurring after the implementation of the software are expensed as incurred. Costs incurred for software upgrades are capitalized if they result in additional functionalities or substantial enhancements.

The Company evaluates its long-lived assets for potential impairment when events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. When such an event occurs, the Company determines whether there has been an impairment by comparing the anticipated undiscounted future net cash flows to the related asset group's carrying value. If an asset group is considered impaired, it is written down to its fair value, which is determined based on discounted cash flows or appraised values, depending on the nature of the assets. There were no impairments of long-lived assets as of December 31, 2018 and 2019, and September 30, 2020 (unaudited).

Leases

As of January 1, 2019, the Company adopted Accounting Standards Update ("ASU") 2016-02, *Leases (Topic 842)*. Periods subsequent to the adoption date are presented and disclosed in accordance with Topic 842, *Leases*, while comparative periods continue to be presented and disclosed in accordance with legacy guidance in Topic 840, *Leases*.

The Company determines if an arrangement is or contains a lease at inception. Operating leases are recorded on the consolidated balance sheet with right-of-use assets representing the right to use the underlying asset and lease liabilities representing the obligation to make lease payments. Right-of-use assets ("ROU") and lease liabilities are recognized at lease commencement primarily based on the present value of lease payments over the lease term, and as necessary, at modification. The operating lease ROU assets also include any initial direct costs, lease payments made prior to lease commencement, and lease incentives received. Variable lease payments are expensed as incurred and are not included within the ROU asset and lease liability calculation. Variable lease payments primarily include reimbursements of costs incurred by lessors for common area maintenance and utilities. The Company's lease terms are the noncancelable period including any rent-free periods provided by the lessor and may include options to extend or terminate the lease when it is reasonably certain that it will exercise that option. At lease inception, and in subsequent periods as necessary, the Company estimates the lease term based on its assessment of extension and termination options that are reasonably certain to be exercised. Lease costs for lease payments are recognized on a straight-line basis over the lease term. As the rate implicit on the Company's leases is not readily determinable, the Company uses its secured incremental borrowing rate to determine the present value of lease payments. The incremental borrowing rate is the rate of interest that the Company would have to pay to borrow an amount equal to the lease payments on a collateralized basis over a similar term and in a similar economic environment. As of December 31, 2019 and September 30, 2020 (unaudited), the Company did not have any material finance leases.

The Company has elected not to separate lease and non-lease components for any leases within its existing classes of assets and, as a result, accounts for any lease and non-lease components as a single lease component. The Company does not have any material leases with a term of 12 months or less.

Common Stock Warrant Liabilities

The Company issued common stock warrants in connection with loan agreements executed during the year ended December 31, 2018. These common stock warrants are exercisable at any time and have a repurchase option in the event of a qualified sale of the Company. Upon a qualified sale of the Company, the common stock warrant holder has the option to require the Company to repurchase the warrant in its entirety for a predetermined price based on the time that has elapsed between the issuance of the warrant and the date of acquisition. The warrants are contingently subject to repurchase at the option of the holder and are therefore, classified as liabilities and reported in other liabilities on the consolidated balance sheet at their estimated fair value. The warrants are subject to re-measurement at each balance sheet date and the change in fair value, if any, is recognized as expense on warrants and convertible notes, net in the consolidated statements of operations. The Company will continue to adjust the liability for changes in fair value until the repurchase, exercise or expiration of the warrants.

Convertible Preferred Stock Warrant Liabilities

The Company issued convertible preferred stock warrants to institutional investors that are exercisable at any time. Such warrants are recorded within other liabilities on the consolidated balance sheets at their estimated fair value because the shares underlying the warrants may obligate the Company to transfer assets to the holders at a future date under certain circumstances such as a deemed liquidation event. The fair value of the convertible preferred stock warrant liabilities is estimated using the Black-Scholes option-pricing model and the change in fair value, if any, is included in expense on warrants and convertible notes, net in the consolidated statements of operations and **Upstart Holdings, Inc.**

comprehensive income (loss). The Company will continue to remeasure these warrants until the earlier of the (i) expiration; (ii) exercise; or (iii) the consummation of an IPO, at which time all convertible preferred stock warrants will be net exercised into common stock. Upon exercise, the related convertible preferred stock warrant liability will be reclassified to additional paid-in capital.

Revenue Recognition

The Company's revenue consists of two components: revenue from fees, net and interest income and fair value adjustments, net. The revenue from fees, net line item on the consolidated statements of operations is primarily comprised of platform and referral fees, net, which are recognized based on ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)*. The Company adopted Topic 606 as of January 1, 2019, using the modified retrospective method for all contracts that were not complete as of the date of adoption. The adoption of Topic 606 did not have a material impact on the Company's consolidated balance sheets, consolidated statements of operations and comprehensive income (loss) and consolidated statements of cash flows as of the adoption date.

Topic 606 outlines a single comprehensive model in accounting for revenue arising from contracts with customers. The core principle, involving a five-step process, of the revenue model is that an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Refer to "*Note 2. Revenue*" for further details.

Operating Expenses

Sales and marketing

Sales and marketing expenses primarily consist of costs incurred across various advertising channels, including expenses for partnerships with third-parties providing borrower referrals, direct mail and digital advertising campaigns, as well as other expenses associated with building overall brand awareness and experiential marketing costs. Sales and marketing expenses also include payroll and other personnel-related costs, including stock-based compensation expense, for related teams. These costs are recognized in the period incurred.

Customer operations

Customer operations expenses include payroll and other personnel-related expenses, including stock-based compensation expense, for personnel engaged in onboarding, loan servicing, customer support and other related operational teams. These costs also include costs of third-party collection agencies and other systems and tools the Company uses as part of information verification, fraud detection, and payment processing activities. These costs are recognized in the period incurred.

Engineering and product development Engineering and product development expenses primarily consist of payroll and other employee-related expenses, including stock-based compensation expenses, for the engineering and product development teams as well the costs of systems and tools used by these teams. These costs are recognized in the period incurred.

General, administrative, and other General, administrative, and other expenses consist primarily of payroll and other employee-related expenses, including stock-based compensation expense for legal and compliance, finance and accounting, human resources and facilities teams, as well as depreciation and amortization of property, equipment and software, professional services fees, facilities and travel expenses. These costs are recognized in the period incurred.

Stock-Based Compensation

The Company issues stock options to employees and nonemployees, including directors and third-party service providers, which are initially measured at fair value at the date of grant using the Black-Scholes option-pricing model. Expenses associated with the stock options are recognized based on their respective grant-date fair values. Forfeitures of stock options are estimated at the time of grant and revised, as necessary, in subsequent periods if actual forfeitures differ from initial estimates. Stock-based compensation expense is recorded net of estimated forfeitures, such that the expense is recorded only for those stock options that are expected to vest.

Other Income

In the years ended December 31, 2017, 2018, and 2019, other income primarily consists of dividend income earned by the Company on its unrestricted cash balance. It is recognized in the period earned. In the years ended December 31, 2017 and 2018, other income also included amounts recognized by the Company in relation to a sublease agreement for an office space, which expired in the year ended December 31, 2018.

In April 2020, the Company received a forgivable loan under the Paycheck Protection Program ("PPP"), totaling $5.3 million with a stated annual interest rate of 1%. All loan payments are deferred for six months if not forgiven under the provisions of the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act"). The loan and accrued interest are forgivable for borrowers who use the loan proceeds for eligible expenses during a twenty-four week period following the borrower's receipt of the loan and maintain payroll and employee headcount. The Company has used the full proceeds of the loan for eligible expenses within the required period. The Company has determined that forgiveness of the loan under the CARES Act is reasonably assured and has recorded the full amount of proceeds as other income in the consolidated statement of operations and comprehensive income (loss).

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the consolidated financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled.

The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance may be established to reduce the **Upstart Holdings, Inc.**

Notes to Consolidated Financial Statements

deferred tax asset to the level at which it is "more likely than not" that the tax asset or benefits will be realized. Realization of tax benefits of deductible temporary differences and operating loss carryforwards depends on having sufficient taxable income of an appropriate character within the carryback or carryforward periods.

The Company recognizes the effect of income tax positions only if those positions are more likely than not of being sustained upon review by the taxing authority. Recognized income tax positions are measured at the largest amount that is greater than 50% likely of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs.

Net Loss Per Share Attributable to Common Stockholders of Upstart Holdings, Inc. Stockholders

The Company follows the two-class method when computing net loss per common share when shares are issued that meet the definition of participating securities. The two-class method determines net loss per common share for each class of common stock and participating securities according to dividends declared or accumulated and participation rights in undistributed earnings. The two-class method requires income available to common stockholders for the period to be allocated between common stock and participating securities based upon their respective rights to receive dividends as if all income for the period had been distributed. The Company's convertible preferred stock contractually entitles the holders of such shares to participate in dividends but does not contractually require the holders of such shares to participate in the Company's losses. Accordingly, for the periods where the Company is in a net loss position, the Company does not allocate any net loss attributable to common stockholders to the convertible preferred stock.

Diluted net loss per share is the amount of net loss available to each share of common stock outstanding during the reporting period, adjusted to include the effect of potentially dilutive common shares. For periods in which the Company reports net losses, basic and diluted net loss per share attributable to Upstart Holdings, Inc.'s common stockholders are the same because potentially dilutive common shares are not assumed to have been issued if their effect is anti-dilutive. Potentially dilutive common shares include incremental shares issued for convertible preferred stock, stock options, warrants to purchase convertible preferred stock and warrants to purchase common stock.

Unaudited Pro Forma Net Loss per Share Attributable to Common Stockholders of Upstart Holdings, Inc.

In contemplation of the IPO, the Company has presented the unaudited pro forma basic and diluted net loss per share attributable to Upstart Holdings, Inc. common stockholders, which has been computed to give effect to the conversion of the convertible preferred stock, and the automatic net exercise of convertible preferred stock warrants into shares of common stock. In addition, the numerator in the pro forma basic and diluted net loss per common share calculation has been adjusted to remove gains or losses resulting from the remeasurement of the convertible preferred stock warrant liability as the related convertible preferred stock warrant liability will be reclassified to additional paid-in capital upon the completion of an IPO. The unaudited pro forma net loss per share attributable to Upstart Holdings, Inc. common stockholders does not include the shares to be sold in the IPO.

Upstart Holdings, Inc.

Notes to Consolidated Financial Statements

Comprehensive Income (Loss)

Comprehensive (loss) income represents all changes in equity of the Company during the periods presented, resulting from transactions with non-owner sources. The Company's comprehensive (loss) income was equal to its net loss for the years ended December 31, 2017, 2018 and 2019, nine months ended September 30, 2019 (unaudited) and net income for the nine months ended September 30, 2020 (unaudited).

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash, restricted cash, and loans. The Company's cash and restricted cash are held in financial institutions in the United States. From time to time, amounts on deposit may exceed federally insured limits. The Company is exposed to credit risk in the event of default by these financial institutions to the extent the amount recorded on the Company's consolidated balance sheets exceeds the insured amounts by the Federal Deposit Insurance Corporation ("FDIC"). The Company reduces credit risk by placing its cash in high-credit-quality financial instruments that are managed by reputable institutions. The Company is further exposed to credit

risks on loans held on our consolidated balance sheets from changes in economic conditions that may cause individual borrower default due to inability or unwillingness to meet their financial obligations. The Company manages credit risk on loans by leveraging its AI models to effectively evaluate a borrower's credit worthiness and likelihood of default.

Significant customers are those which represent 10% or more of the Company's total revenue for each respective period presented. For the years ended December 31, 2017, 2018 and 2019, and nine months ended September 30, 2019 (unaudited) and 2020 (unaudited), the Company had one two customers that comprised the following percentages of total revenue for each of the periods below:

	Years ended December 31			Nine Months Ended September 30,	
	2017	2018	2019	2019	2020
				(unaudited)	
Customer A	83%	81%	80%	81%	65%
Customer B	*	*	*	*	15%

* Less than 10%

The Company did not have a significant concentration of credit risk in its accounts receivable balance as of December 31, 2018 and 2019 and had one customer that comprised 49% of accounts receivable within other assets as of September 30, 2020 (unaudited).

Segments

The Company has one reportable segment. The Company's chief operating decision maker, the Chief Executive Officer, reviews financial information presented on a consolidated basis for purposes of allocating resources and evaluating financial performance.

Emerging Growth Company Status

The Company is an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). Under the JOBS Act, emerging growth companies can delay **Upstart Holdings, Inc.**

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adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until those standards apply to private companies. The Company has elected to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that it is (i) no longer an emerging growth company or (ii) affirmatively and irrevocably opts out of the extended transition period provided in the JOBS Act. As a result, the consolidated financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates.

The JOBS Act does not preclude an emerging growth company from early adopting new or revised accounting standards. The Company early adopted ASU 2016-02, *Leases (Topic 842)*, effective January 1, 2019. The Company expects to use the extended transition period for any other new or revised accounting standards during the period which the Company remains an emerging growth company.

Recently Adopted Accounting Pronouncements

ASU 2014-09, *Revenue from Contracts with Customers (Topic 606):* Under the standard, revenue from contracts with customers is recognized when a customer obtains control of promised goods or services in an amount that reflects the consideration the entity expects to receive in exchange for those goods or services. The Financial Accounting Standards Board ("FASB") subsequently issued several amendments, including ASU 2016-08 - *Principal versus Agent Considerations*, ASU 2016-10 - *Identifying Performance Obligations and Licensing*, and ASU 2016-12 - *Narrow-Scope Improvements and Practical Expedients*. These amendments all have the same effective date and transition requirements as Topic 606. Income that was historically recognized under Topic 860, *Transfers and Servicing* and Topic 310, *Receivables* is excluded from the scope of the standard; as such, the Company has concluded that its accounting for interest income and fair value adjustments, net and income from servicing fees will not change under the standard.

The Company adopted Topic 606 on January 1, 2019 using the modified retrospective method for all contracts that were not complete as of the date of adoption. The Company did not have modifications of contracts that were not complete as of the effective date. Results for reporting periods beginning after January 1, 2019 are presented under Topic 606, while comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods.

The adoption of Topic 606 did not change (1) the timing and pattern of revenue recognition for revenue streams in the scope of Topic 606, which includes platform and referral fees, net within revenue from fees, net, or (2) the presentation of revenue as gross versus net. The Company did not have any material balances of contract assets, contract liabilities, and deferred contract costs prior to or after the adoption of Topic 606. Therefore, the adoption of Topic 606 did not have a material impact on the Company's consolidated balance sheets, consolidated statements of operations and comprehensive income (loss) and consolidated statements of cash flows as of the adoption date or for the year ended December 31, 2019. The Company has included the disclosures required by Topic 606 in "*Note 2. Revenue.*"

ASU 2016-01, *Financial Instruments – Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities:* This standard, which amends the accounting for equity **Upstart Holdings, Inc.**

investments, changes disclosure requirements related to instruments at amortized cost and fair value, and clarifies how entities should evaluate deferred tax assets for securities classified as available for sale. The guidance also requires an entity to present separately in other comprehensive income the portion of the total change in fair value of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to measure the liability under the fair value option. The Company adopted ASU 2016-01 on January 1, 2019. The adoption did not impact the Company's consolidated balance sheets, consolidated statements of operations and comprehensive income (loss) and consolidated statements of cash flows. The Company has included the disclosures required by ASU 2016-01 in "*Note 4. Fair Value Measurement.*"

ASU 2016-02, *Leases (Topic 842)*: This standard requires lessees to record on their balance sheets a lease liability for the obligation to make lease payments and a ROU asset for the right to use the underlying asset for the lease term. The Company adopted Topic 842 as of January 1, 2019 and has elected not to restate comparative periods presented in the consolidated financial statements. The new standard allows for several transition-related practical expedients. The Company elected the package of practical expedients permitted, which among other things, permits entities to not reassess: (i) whether any expired or existing contracts are or contain leases, (ii) lease classification for any expired or existing leases and, (iii) initial direct costs for any existing leases. At the time of adoption, all leases within the Company's portfolio are classified as operating leases.

Adoption of Topic 842 had an impact on the Company's consolidated balance sheets but did not have an impact on the Company's consolidated statements of operations and comprehensive income (loss) or consolidated statements of cash flows. The most significant impact was the recognition of ROU assets and lease liabilities of $1.0 million and $1.0 million as of January 1, 2019, respectively, with no cumulative effect in retained earnings. The operating lease expenses are included in general and administrative expense in the Company's consolidated statements of operations and comprehensive income (loss). The Company included the disclosures required by ASU 2016-02 in "*Note 12. Leases*."

ASU 2017-09, *Compensation – Stock Compensation (Topic 718): Scope of Modification Accounting*, which clarifies when to account for a change to the terms or conditions of a share-based payment award as a modification. The Company prospectively adopted ASU 2017-09 on January 1, 2019. The effect of the adoption on the consolidated financial statements was not material.

ASU 2018-07, *Compensation – Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting,* simplifies the accounting for share-based payments to nonemployees by aligning it with the accounting for share-based payments to employees, with certain exceptions. The Company adopted ASU 2018-07 as of January 1, 2019. The effect of the adoption on the consolidated financial statements was not material.

ASU 2018-13, Fair Value Measurement (Topic 820): *Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement*, modifies the disclosure requirements for fair value measurements by removing, modifying, or adding certain disclosures. The ASU eliminates disclosures such as the amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy and valuation processes for Level 3 fair value measurements. The ASU also adds new disclosure requirements for Level 3 measurements. The company adopted ASU 2018-13 on January 1, 2020. The effect of the adoption did not have a material impact on the Company's related disclosures.

Recently Issued Accounting Pronouncements

In June 2016, the FASB amended guidance related to impairment of financial instruments as part of ASU 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which will be effective January 1, 2023 for emerging growth companies that have adopted the private company relief. The guidance replaces the incurred loss impairment methodology with an expected credit loss model for which a company recognizes an allowance based on the estimate of expected credit loss. The Company accounts for its loans at fair value through net income, which is outside the scope of Topic 326. For available for sale debt securities, the guidance will require recognition of expected credit losses by recognizing an allowance for credit losses when the fair value of the security is below amortized cost and the recognition of this allowance is limited to the difference between the security's amortized cost basis and fair value. The Company is evaluating the impact this ASU will have on its consolidated balance sheets, consolidated statements of operations and comprehensive income (loss) and consolidated statements of cash flows. The Company plans to adopt Topic 326 effective as of January 1, 2023.

In August 2018, the FASB issued ASU 2018-15, *Intangibles – Goodwill and Other – Internal-Use Software – (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*, which requires a customer in a hosting arrangement that is a service contract to follow the internal-use software guidance in Topic 350-40 to determine which implementation costs to capitalize as assets or expense as incurred. The standard is effective January 1, 2021 for emerging growth companies that have adopted the private company relief. The amendments in this ASU can be applied either retrospectively or prospectively to all implementation costs after the date of adoption. The Company is evaluating the impact this ASU will have on its consolidated financial statements. The Company plans to adopt the ASU 2018-15 effective as of January 1, 2021.

2. Revenue

Revenue from fees, net

The Company disaggregates revenue from fees by type of service for the periods presented as follows (in thousands):

	Years ended December 31,			Nine Months Ended September 30,	
	2017	2018	2019	2019	2020
Revenue from fees, net:				*(unaudited)*	

Platform and referral fees, net	$48,067	$83,381	$144,055	$89,049	$123,485
Servicing fees, net	3,094	5,101	15,792	9,650	20,694
Total revenue from fees, net	$51,161	$88,482	$159,847	$98,699	$144,179

Platform and referral fees, net The Company enters into contracts with bank partners to provide access to a cloud-based artificial intelligence lending platform developed by the Company (the "Upstart platform") to enable banks to originate personal unsecured loans. The Upstart platform includes a cloud-based application (through Upstart.com or a white-label program) for submitting loan applications, verifying information provided within submitted applications, risk underwriting (through a series of proprietary technology **Upstart Holdings, Inc.**

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solutions), delivery of electronic loan offers, and if the offer is accepted by the borrower, an electronic loan documentation signed by the borrower. Bank partners can specify certain parameters of loans they are willing to originate. Under these contracts, bank partners can choose to use Upstart's referral services, which allow them to access new borrowers through Upstart's marketing channels. The Company's contracts with bank partners are noncancelable and generally have 12-month terms that automatically renew.

After origination, Upstart-powered loans are either retained by bank partners, purchased by the Company for immediate resale to institutional investors under loan sale agreements, or purchased and held by the Company. The Company pays loan premium and loan trailing fees on the loans that it purchases from bank partners. Loan premium fees are paid to the bank partners by the Company as a one-time fee at the time the loan is sold. The monthly loan trailing fees are paid based on the amount and timing of principal and interest payments made by borrowers of the underlying loans. Both the loan premium fees and loan trailing fees are consideration payable to customers and are recorded as a reduction to platform and referral fees, net, which is part of revenue from fees, net, in the consolidated statements of operations and comprehensive income (loss) for the periods presented. The Company recognized $2.1 million, $3.3 million, $5.5 million, $3.3 million, and $5.6 million of loan premium fees and loan trailing fees as contra-revenue within platform and referral fees, net for the years ended December 31, 2017, 2018, and 2019, and nine months ended September 30, 2019 (unaudited) and 2020 (unaudited), respectively.

The Company started paying loan trailing fees on January 1, 2019. As of December 31, 2019, the Company recorded an immaterial loan trailing fee liability, which is recorded at fair value and included within "other liabilities" on the Company's consolidated balance sheets. No loan trailing fee liability was recorded as of December 31, 2018. As of September 30, 2020 (unaudited), the Company recorded $0.9 million of loan trailing fee liability.

The Company's arrangements for platform and referral services typically consist of an obligation to provide one or both of these services to customers, which are our bank partners, on a when and if needed basis (a stand-ready obligation), and revenue is recognized as such services are performed. Additionally, the services have the same pattern and period of transfer, and when provided individually or together, are accounted for as a single combined performance obligation representing a series of distinct days of service.

Platform and referral services are typically provided under a fixed or declining (tier-based) price per unit based on volume or as a percentage of the total value of loans originated each period; however, pricing for these services may also be based on minimum monthly usage fees. The tier-based pricing, when offered, resets on a monthly basis and does not accumulate. Given that the nature of the Company's promise is to stand ready and provide continuous access to and process transactions through the platform, tier-based pricing based on usage represents variable consideration. Since the variable fees relate directly to the day in which such services are provided, they generally meet the criteria for allocating variable consideration entirely to one or more, but not all, performance obligations in a contract. Accordingly, when the requisite criteria are met, variable fees are allocated to and recognized on the day the services are provided. Fees for platform and referrals services are typically billed and paid on a monthly basis. As such, the Company's contracts with customers do not include a significant financing component.

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The Company did not recognize revenue from performance obligations satisfied in prior periods for the year ended December 31, 2019 and the nine months ended September 30, 2020 (unaudited). The Company had no material contract assets, contract liabilities, or deferred contract costs recorded as of December 31, 2019 and September 30, 2020 (unaudited). The Company had $1.6 million, $5.4 million, and $4.9 million of accounts receivable in other assets on the consolidated balance sheets related to contracts with customers as of December 31, 2018 and 2019, and September 30, 2020 (unaudited), respectively. The Company's allowance for bad debt was immaterial as of December 31, 2018 and 2019, and September 30, 2020 (unaudited), and the Company's bad debt expense was immaterial for the periods presented.

Servicing fees, net

The Company also enters into contracts with bank partners and institutional investors to provide loan servicing for the life of Upstart-powered loans. These services commence upon origination of these loans by bank partners and include collection, processing and reconciliations of payments received, investor reporting and borrower customer support as well as distribution of funds to the holders of the loans. The Company charges the loan holder a monthly servicing fee calculated based on a predetermined percentage of the outstanding principal balance. Servicing fees also include certain ancillary fees charged to borrowers on a per transaction basis for processing late payments and payments declined due to insufficient funds. Servicing fees are recognized in the period the services are provided. Loan servicing fees are not within the scope of Topic 606 and are accounted for under Topic 860, *Transfers and servicing of financial assets*.

Servicing fees, net also include gains and losses on assets and liabilities recognized under loan servicing arrangements for loans retained by bank partners or loans sold to institutional investors. Such gains or losses are recognized based on whether the benefits of servicing are expected to more than adequately compensate the Company for carrying out its servicing obligations. The Company recognized net gain (loss) related to loan servicing rights upon the sale of

$(1.5) million, $(1.9) million, $(0.9) million, $(1.3) million, and $1.7 million for the years ended December 31, 2017, 2018, and 2019, and nine months ended September 30, 2019 (unaudited), and 2020 (unaudited), respectively. Servicing fees also include changes in fair value of loan servicing assets and liabilities in the periods presented.

The Company outsources borrower payment collections for loans in default to third-party collection agencies. The Company charges bank partners and institutional investors for collection agency fees related to their outstanding loan portfolio. The Company has discretion in hiring the collection agencies and determining the scope of their work. As the principal in the arrangement, the Company recognizes gross revenue from collection agency fees in the period that the services are provided. Revenue from collection agency fees are included in servicing fees, net as part of revenue from fees, net in the Company's consolidated statements of operations and comprehensive income (loss). The total fees charged by collection agencies are also recognized in the period incurred and reported as part of customer operations expenses. The Company recognized $0.5 million, $0.9 million $2.1 million, $1.5 million, and $2.1 million for collection agency fees, which are included in servicing fees, net, for the years ended December 31, 2017, 2018 and 2019, and nine months ended September 30, 2019 (unaudited) and 2020 (unaudited), respectively.

Interest Income and Fair Value Adjustments, Net

Interest income and fair value adjustments, net is comprised of interest income, interest expense and net changes in the fair value of financial instruments, held in the Company's normal course of business at fair value, including loans, notes receivable and residual certificates, payable to securitization note holders and residual certificate holders, and notes payable.

The table below presents components of the interest income and fair value adjustments, net presented in the Company's consolidated statements of operations and comprehensive income (loss) (in thousands):

	Years ended December 31			Nine Months Ended September 30,	
	2017	2018	2019	2019	2020
				(unaudited)	
Interest income and fair value adjustments, net:					
Interest income[(1)]	$21,134	$76,683	$63,313	$ 51,299	$ 22,705
Interest expense[(1)]	(9,420)	(26,483)	(26,485)	(22,128)	(6,952)
Fair value and other adjustments, net[(1)]	(5,586)	(39,369)	(32,486)	(26,253)	(13,226)
Total interest income and fair value adjustments, net	$6,128	$10,831	$4,342	$ 2,918	$ 2,527

(1) Includes interest income, interest expense and fair value adjustments, net related to consolidated securitization trusts as follows:

	Years ended December 31			Nine Months Ended September 30,	
	2017	2018	2019	2019	2020
				(unaudited)	
Interest income and fair value adjustments, net related to consolidated securitization trusts:					
Interest income	$13,454	$60,425	$38,218	$ 31,909	$5,173
Interest expense	(2,694)	(17,200)	(6,331)	(5,662)	(1,074)
Fair value and other adjustments, net	(6,005)	(37,607)	(30,676)	(24,180)	(3,148)
Total interest income and fair value adjustments, net related to consolidated securitization trusts	$4,755	$5,618	$1,211	$ 2,067	$951

Interest income

Interest income is recognized based on the terms of the underlying agreements with borrowers for loans held on the Company's consolidated balance sheets and is earned over the life of a loan.

Interest income also includes accrued interest earned on outstanding loans but not collected. Loans that have reached a delinquency of over 120 days are classified as non-accrual status and any accrued interest recorded in relation to these loans is reversed in the respective period. As of December 31, 2018 and 2019, and September 30, 2020 (unaudited), the Company has recorded $1.2 million of accrued interest income in loans on the consolidated balance sheets.

Interest expense

Interest expense is primarily related to interest recorded on the notes issued as part of the consolidated securitizations and on the Company's borrowings. Interest expense includes accrued interest incurred but not paid. Accrued interest expenses were immaterial as of December 31, 2018 and 2019, and September 30, 2020 (unaudited).

Fair value and other adjustments, net Fair value and other adjustments, net include changes in fair value of financial instruments, other than loan servicing assets and liabilities, common stock warrant liabilities, and convertible preferred stock warrant liabilities. These adjustments are recorded in the Company's earnings and include both realized and unrealized changes to the value of related assets and liabilities. Refer to "*Note 4. Fair Value Measurement"* for additional information.

Fair value and other adjustments, net also include interest income attributable to third-party residual certificate holders for the consolidated securitization and amounts received from borrowers for previously charged-off loans held on the Company's consolidated balance sheets. These amounts are recognized in the period received.

3. Securitizations and Variable Interest Entities

Consolidated VIEs

The Company consolidates VIEs in which the Company has a variable interest and is determined to be the primary beneficiary. This determination is based on whether the Company has a variable interest (or combination of variable interests) that provides the Company with (a) the power to direct the activities that most significantly impact the VIE's economic performance and (b) the obligation to absorb losses or right to receive benefits that could be potentially significant to the VIE. The Company continually reassesses whether it is the primary beneficiary of a VIE throughout the entire period the Company is involved with the VIE.

The Company also determines whether decision-maker or service-provider fees are variable interests. Decision-maker or service-provider fees are not considered variable interests when the arrangement does not expose the Company to risks of loss that a potential VIE was designed to pass on to its variable interest holders, the fees are commensurate, the arrangement is at market, and the Company does not have any other interests (including direct interests and certain indirect interests held through related parties) that absorb more than an insignificant amount of a VIE's potential variability. This determination can have a significant impact on the Company's consolidation analysis, as it could affect whether a legal entity is a VIE and whether the Company is the primary beneficiary of a VIE. When the Company's decision-maker or service-provider fee is not a variable interest, the Company is viewed as acting as a fiduciary for the potential VIE.

See "*Note 1. Description of Business and Significant Accounting Policies"* for additional information.

Warehouse Entities

The Company established Upstart Loan Trust and Upstart Warehouse Trust to enter into warehouse credit facilities for the purpose of purchasing Upstart-powered loans. See *"Note 7.*

Borrowings" for additional information. These entities are Delaware statutory trusts that are structured to be bankruptcy-remote, with third-party banks operating as trustees.

Consolidated Securitizations The Company entered into three private offering securitization transactions in June 2017 ("2017-1"), November 2017 ("2017-2"), and April 2018 ("2018-1"), respectively. As the sponsor of these securitization transactions, the Company created several legal entities for the roles of depositors, issuers, and grantor trusts and MOAs for each securitization transaction. Under the risk retention requirements in Title 17 U.S. *Code of Federal Regulations* Part 246, *Credit Risk Retention*, promulgated by Securities and Exchange Commission ("RR"), the Company is required to retain at least 5% of the economic risk in the securitization transactions in which the Company is the retaining sponsor. The Company elected to satisfy the RR requirements by holding Eligible Horizontal Retained Interests ("EHRIs") in the form of subordinated certificates within the established MOAs.

Concurrently with the closing of the 2017-1, 2017-2, and 2018-1 securitization transactions, while maintaining its status as the primary beneficiary of the related MOAs, the Company sold 80% of its interests in these MOAs to an institutional investor in exchange for cash of approximately $8.0 million, $7.8 million, and $8.0 million, respectively, based on the fair value of the residual certificates held in the MOAs as determined on the pricing dates. As a result of the sales, the Company maintained a 20% interest in the MOAs and its status as the managing member, while the investor became a non-voting limited member of these MOAs. The institutional investor's ownership interests in the 2017-1, 2017-2, and 2018-1 MOAs represent the noncontrolling interests on the consolidated balance sheets as of December 31, 2018 and 2019.

Upon closing of these securitization transactions, the Company determined that the servicing fees represented a variable interest in these securitization entities due to the EHRIs held by the Company's MOAs to satisfy the RR requirements. The EHRIs held by these MOAs were deemed to potentially absorb more than an insignificant amount of the VIEs' expected losses or expected returns at the inception of the securitization transactions. The Company also determined that it was the primary beneficiary of these entities and consolidated the MOAs and trusts associated with the 2017-1, 2017-2, and 2018-1 securitization transactions.

Subsequent to the expiration of the RR requirements for 2017-1 and 2017-2 in December 2019 and 2018-1 in June 2020 (unaudited), the residual certificates held by each of the respective MOAs were distributed based on the proportional equity held by Upstart and the investor. This distribution required the Company to reassess whether its servicing fee is a variable interest. Although the Company maintains a reduced level of variable interests in the 2017-1 and 2017-2 securitization transactions through the EHRIs, the Company's other interests subsequent to these distributions are no longer expected to absorb more than an insignificant amount of each of the VIE's expected losses or expected returns. Therefore, the Company concluded that the fees for servicing the securitization transactions are no longer considered variable interests, and as such the powers the Company possesses through the servicing arrangements are no longer considered in the primary beneficiary determination. As a result, the Company concluded it was no longer the primary

beneficiary of the 2017-1, 2017-2, and 2018-1 securitization transactions. The Company deconsolidated the legal entities associated with the 2017-1 and 2017-2 securitization transactions as of December 31, 2019 and 2018-1 as of June 30, 2020 (unaudited). The Company recorded an immaterial net gain on the deconsolidation of these entities. The Company maintained its role as servicer of these securitization transactions.

The Company sponsored three additional securitization transactions in August 2018 (“2018-2”), February 2019 (“2019-1”) and August 2019 (“2019-2”), respectively. As the retaining sponsor of these transactions, the Company was subject to the RR requirements and satisfied them through Eligible Vertical Interests (“EVIs”) in the form of a combination of securitization notes and residual certificates through the established MOAs. The Company concluded that it has a variable interest and is the primary beneficiary of the MOAs associated with these securitization transactions. As a result, the Company consolidated these MOAs as of December 31, 2018 and 2019. The Company determined that it is not the primary beneficiary of the trusts which hold the loans associated with these securitization transactions, primarily because the Company’s servicing fees are not considered variable interests, and that the transfer of loans as collateral into these securitization transactions met the definition of a sale under Topic 860, *Transferring and Servicing*. As such, the Company derecognized these loans from the consolidated balance sheets upon the closing of these securitization transactions. Refer to the *Unconsolidated Securitizations* section below for more information.

Other Consolidated VIEs Upstart Loan Trust 2, a Delaware statutory trust, holds personal loans facilitated through the Upstart platform that do not meet the criteria for inclusion in the warehouse credit facilities, or that were the result of the Company’s repurchases of loans for breaches of representations and warranties made to institutional investors, as described above.

Upstart Network Trust (“UNT”), also a Delaware statutory trust, was established in 2014 to facilitate Upstart’s fractional loan program. Under the program, the investors purchased securities issued by UNT that represented a portion of expected cash flows from repayments of the loans acquired by UNT which were funded by proceeds from securities issued to the investors. The program was formally discontinued in 2019. The Company is the servicer of UNT’s loan assets and previously concluded that the servicing fee represents a variable interest and that the Company is the primary beneficiary of UNT. However, during 2019, as a result of a reduction in the Company’s investment in UNT and with consideration given to the business decision to sunset the fractional loans program to new investments, upon the required reassessment the Company determined that its servicing fee is no longer a variable interest. Although the Company still maintains a reduced level of variable interests in UNT through investments in securities issued by UNT, the Company’s other interests are no longer expected to absorb more than an insignificant amount of UNT’s expected losses or expected returns. As a result of the powers the Company possesses through the servicing arrangement being excluded from the primary beneficiary determination, the Company concluded that it is no longer the primary beneficiary and therefore deconsolidated UNT during 2019. An immaterial loss related to servicing rights was recognized on deconsolidation. The fair value of the Company’s investment in UNT is included in notes receivable and residual certificates in the consolidated balance sheets as of December 31, 2019 and September 30, 2020 (unaudited).

The following tables present a summary of financial assets and liabilities from the Company’s involvement with consolidated VIEs (in thousands):

	Assets	Liabilities	Net Assets
December 31, 2018			
Warehouse Entities	$78,418	$47,506	$30,912
Securitizations:			
Securitization Trusts	391,601	372,450	19,151
Majority-owned Affiliates	8,291	7,326	965
Other Consolidated VIEs	67,019	58,933	8,086
Total Consolidated VIEs	$545,329	$486,215	$59,114

	Assets	Liabilities	Net Assets
December 31, 2019			
Warehouse Entities	$131,903	$80,206	$51,697
Securitizations:			
Securitization Trusts	98,572	95,995	2,577
Majority-owned Affiliates	30,266	17,058	13,208
Other Consolidated VIEs	14,926	48	14,878
Total Consolidated VIEs	$275,667	$193,307	$82,360

	Assets	Liabilities	Net Assets

September 30, 2020 (unaudited)			
Warehouse Entities	$123,535	$70,376	$53,159
Securitizations:			
Securitization Trusts	—	—	—
Majority-owned Affiliates	19,820	9,398	10,422
Other Consolidated VIEs	14,268	—	14,268
Total Consolidated VIEs	$157,623	$79,774	$77,849

The Company's continued involvement in all of its securitizations in which it is the sponsor and its involvement in UNT includes loan servicing rights and obligations for which it receives servicing fees over the life of the underlying loans. The Company monitors its status as the primary beneficiary and in case of reconsideration events, updates the analysis accordingly.

Unconsolidated VIEs

The Company's transactions with unconsolidated VIEs include securitizations of unsecured personal whole loans and sales of whole loans to VIEs. The Company has various forms of involvement with VIEs, including servicing of loans and holding senior or residual interests in the VIEs.

Unconsolidated Securitizations As of December 31, 2019, the Company's unconsolidated VIEs include entities established as the issuers and grantor trusts for the 2017-1, 2017-2, 2018-2, 2019-1, and 2019-2 securitization transactions (the "Unconsolidated Securitizations"). As of September 30, 2020 (unaudited), the Company's unconsolidated VIEs also included 2018-1. The Company's continued involvement in the **Upstart Holdings, Inc.**

unconsolidated VIEs is in the form of its role as the sponsor and the servicer of these transactions. For each of the unconsolidated securitizations, the Company determined that it is not the primary beneficiary.

In cases where the VIEs are not consolidated and the transfer of the loans from the Company to the securitization trust meets sale accounting criteria, the Company recognizes a gain or loss on sales of loans. The net proceeds of the sale represent the fair value of any assets obtained or liabilities incurred as part of the transaction. The assets are transferred into a trust such that the assets are legally isolated from the creditors of the Company and are not available to satisfy obligations of the Company. These assets can only be used to settle obligations of the underlying securitization trusts.

Upstart Network Trust The Company's unconsolidated VIEs include UNT, which was deconsolidated during the year ended December 31, 2019 upon discontinuation of the fractional loan program.

The following tables summarize the aggregate carrying value of assets and liabilities of unconsolidated VIEs in which the Company holds a variable interest but is not the primary beneficiary (in thousands):

	Assets	Liabilities	Net Assets	Maximum Exposure toLosses
December 31, 2018				
Securitizations	$189,518	$170,330	$ 19,188	$9,383
Total Unconsolidated VIEs	$189,518	$170,330	$ 19,188	$9,383
	Assets	**Liabilities**	**Net Assets**	**Maximum Exposure toLosses**
December 31, 2019				
Securitizations	$778,628	$640,592	$138,036	$34,828
Upstart Network Trust	77,207	77,207	—	3,303
Total Unconsolidated VIEs	$855,835	$717,799	$138,036	$38,131
	Assets	**Liabilities**	**Net Assets**	**Maximum Exposure toLosses**
		(unaudited)		
September 30, 2020				
Securitizations	$549,469	$461,341	$88,128	$27,035
Upstart Network Trust	47,900	47,900	—	2,034
Total Unconsolidated VIEs	$597,369	$509,241	$88,128	$29,069

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The carrying value of assets that relate to variable interests in unconsolidated VIEs consists of $8.3 million, $30.3 million, and $19.8 million which are included in notes receivable and residual certificates on the consolidated balance sheets as of December 31, 2018 and 2019, and September 30, 2020 (unaudited), respectively. The Company also had $1.1 million, $4.6 million, and $7.2 million of cash deposits made to reserve accounts for related securitizations, included in other assets on the consolidated balance sheets as of December 31, 2018 and 2019, and September 30, 2020 (unaudited), respectively. The net assets of UNT were included in the Company's consolidated balance sheet as of December 31, 2018.

The Company's maximum exposure to loss from its involvement with unconsolidated VIEs represents the estimated loss that would be incurred under severe, hypothetical circumstances, for which the Company believes the possibility is remote, such as where the value of securitization notes and senior and residual certificates the Company holds as part of the RR requirement declines to zero.

The following table summarizes activity related to the unconsolidated securitization transactions on the Company's consolidated financial statements (in thousands):

	December 31,		September 30,
	2018	2019	2020
			(unaudited)
Principal derecognized from loans securitized	$46,115	$95,342	$26,784
Net gains recognized from loans securitized included in earnings	733	1,395	671
Fair value of securitization notes and residual certificates retained in the transaction	8,314	25,649	—
Cash proceeds from loans securitized	40,202	70,845	27,059
Cash proceeds from servicing and other administrative fees on loans securitized	409	2,777	6,304
Cash proceeds from interest received on securitization notes and residual certificates	585	3,112	1,204

Retained Interest in Unconsolidated VIEs

The investors and the securitization trusts have no direct recourse to the Company's assets, and holders of the securities issued by the securitization trusts can look only to the assets of the securitization trusts that issued their securities for payment. The beneficial interests held by the Company and the Company's MOAs are subject principally to the credit and prepayment risk stemming from the underlying unsecured personal whole loans.

Off-Balance Sheet Loans

Off-balance sheet loans relate to securitization transactions for which the Company has some form of continuing involvement, including as servicer. For a loan related to securitization transactions where servicing is the only form of continuing involvement, the Company would only experience a loss if it were required to repurchase such a loan due to a breach in representations and warranties associated with its loan sale or servicing contracts. Additionally, in the unlikely event principal payments on the loans backing a securitization are insufficient to pay senior note holders, any amounts the Company contributed to the securitization reserve accounts may be depleted.

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Notes to Consolidated Financial Statements

In December 2019 and February 2020, the Company co-sponsored securitization transactions ("2019-3" and "2020-1", respectively) with an investment bank. The Company was not required to retain economic risk in these securitization transactions as the co-sponsor investment bank acted as the retaining sponsor. Similar to 2018-2, 2019-1, and 2019-2, the Company contributed certain loans to this securitization as collateral and recognized this transfer under Topic 860, *Transferring and Servicing*. The Company is also the servicer of the 2019-3 and 2020-1 securitization transactions.

In September 2020 (unaudited), the Company co-sponsored an additional securitization transaction ("2020-2") with an investment bank. The Company did not retain economic risk in this transaction and did not contribute any loans as collateral. The Company is the servicer of this securitization.

4. Fair Value Measurement

The following table presents assets and liabilities measured at fair value (in thousands):

	December 31, 2018			
	Level 1	Level 2	Level 3	Total
Assets				
Loans	$ —	$ —	$502,666	$502,666
Notes receivable and residual certificates	—	—	8,314	8,314
Other assets	—	—	1,410	1,410
Total assets	$—	$—	$512,390	$512,390
Liabilities				
Notes payable	$—	$—	$53,174	$53,174

Other liabilities	—	—	1,375	1,375
Loan servicing liabilities	—	—	1,685	1,685
Payable to securitization notes and residual certificate holders	—	—	353,292	353,292
Convertible preferred stock warrant liabilities	—	—	7,579	7,579
Common stock warrant liabilities	—	—	447	447
Total liabilities	$—	$—	$417,552	$417,552

	December 31, 2019			
	Level 1	**Level 2**	**Level 3**	**Total**
Assets				
Loans	$ —	$ —	$232,305	$232,305
Notes receivable and residual certificates	—	—	34,116	34,116
Loan servicing assets	—	—	4,725	4,725
Total assets	$—	$—	$271,146	$271,146
Liabilities				
Other liabilities	$—	$—	$504	$504
Loan servicing liabilities	—	—	5,140	5,140
Payable to securitization notes and residual certificate holders	—	—	89,672	89,672
Convertible preferred stock warrant liabilities	—	—	5,666	5,666
Common stock warrant liabilities	—	—	1,136	1,136
Total liabilities	$—	$—	$102,118	$102,118

	September 30, 2020			
	Level 1	**Level 2**	**Level 3**	**Total**
	(unaudited)			
Assets				
Loans	$ —	$ —	$ 122,708	$ 122,708
Notes receivable and residual certificates	—	—	22,053	22,053
Loan servicing assets	—	—	6,558	6,558
Total assets	$—	$—	$ 151,319	$ 151,319
Liabilities				
Other liabilities	$—	$—	$894	$894
Loan servicing liabilities	—	—	7,349	7,349
Payable to securitization notes and residual certificate holders	—	—	—	—
Convertible preferred stock warrant liabilities	—	—	7,458	7,458
Common stock warrant liabilities	—	—	1,607	1,607
Total liabilities	$—	$—	$ 17,308	$ 17,308

Financial instruments are categorized in the fair value hierarchy based on the significance of unobservable factors in the overall fair value measurement. Since the Company's loans, notes receivable and residual certificates, notes payable, loan servicing assets and liabilities, payable to securitization note holders and residual certificate holders, other assets and liabilities, convertible preferred stock warrants, and common stock warrants, do not trade in an active market with readily observable prices, the Company uses significant unobservable inputs to measure the fair value of these assets and liabilities.

The Company has elected the fair value option for loans, notes receivable and residual certificates, notes payable, and payable to securitization note holders and residual certificate holders. The election allows for assets and related liabilities to be measured similarly. Changes in the fair value of the loans are partially offset by corresponding changes in the fair value of notes payable, and payable to securitization note holders and residual certificate holders. The

net fair value adjustments are presented as interest income and fair value adjustments, net in the consolidated statements of operations and comprehensive income (loss).

There were no transfers between Level 1, Level 2 or Level 3 of the fair value hierarchy during the periods presented.

Loans

Loans included in the Company's consolidated balance sheets are classified as either held-for-sale or held-for-investment. The loans held-for-investment include those loans which are contributed as collateral and held in the consolidated securitizations.

The following table presents the fair value of classes of loans held by the Company (in thousands):

	December 31		September 30,
	2018	2019	2020
			(unaudited)
Loans held-for-sale	–	–	$108,146
Loans held-for-investment	$134,650	$141,555	14,562
Loans held-for-investment in consolidated securitizations	368,016	90,750	–
Total	$502,666	$232,305	$122,708

Valuation Methodology Loans held-for-sale and held-for-investment, excluding those in consolidated securitizations, are measured at estimated fair value using a discounted cash flow model. The fair valuation methodology considers projected prepayments and historical defaults, losses and recoveries to project future losses and net cash flows on loans. Net cash flows are discounted using an estimate of market rates of return. The fair value of these loans also includes accrued interest, which was immaterial as of December 31, 2018 and 2019, and September 30, 2020 (unaudited).

As of December 31, 2018 and 2019, and September 30, 2020 (unaudited), the Company elected the measurement alternative under Topic 810, *Consolidation,* and maximizes the use of observable inputs to estimate the fair value of the financial assets and liabilities of consolidated securitization entities. Under the measurement alternative, the Company measures the financial assets, which consist of held-for-investment and held-for-sale loans in the consolidated balance sheets, and financial liabilities, which consist of securitization notes and residual certificates issued to institutional investors, included in payable to securitization note holders and residual certificate holders in the consolidated balance sheets, using the more observable of the fair value of the financial assets and liabilities. The Company determined the fair value of the securitization notes and residual certificates is more observable than that of the loans. The securitization notes and residual certificates are measured at fair value, and the loans are measured based on the sum of the fair value of the securitization notes and residual certificates, with changes in fair value included in the consolidated statements of operations and comprehensive income (loss).

Significant Inputs and Assumptions The following table presents quantitative information about the significant unobservable inputs used for the Company's Level 3 fair value measurements for loans held-for-investment and held-for-sale:

	December 31, 2018			December 31, 2019			September 30, 2020		
							(unaudited)		
	Minimum	Maximum	Weighted-Average[2]	Minimum	Maximum	Weighted-Average[2]	Minimum	Maximum	Weighted-Average[2]
Discount rate	5.52%	14.58%	5.78%	4.72%	14.57%	4.98%	6.81%	16.91%	7.29%
Credit risk rate[1]	0.05%	43.21%	18.17%	0.31%	52.29%	17.19%	0.36%	52.31%	17.85%
Prepayment rate[1]	22.16%	33.37%	25.53%	11.34%	64.00%	29.49%	11.33%	78.36%	30.22%

(1) Expressed as a percentage of the original principal balance of the loans

(2) Unobservable inputs were weighted by relative fair value

Discount rates—The discount rates are rates of return used to discount future expected cash flows to arrive at a present value, which represents the fair value. The discount rates used for the projected net cash flows are the Company's estimates of the rates of return that market participants would require when investing in these financial instruments with cash flows dependent on credit quality of the related loan. A risk premium component is implicitly included in the discount rates to reflect the amount of compensation market participants require due to the uncertainty inherent in the instruments' cash flows resulting from risks such as credit and liquidity.

Credit risk rates—The credit risk rates are an estimate of the net cumulative principal payments that will not be repaid over the entire life of a financial instrument. The credit risk rates are expressed as a percentage of the original principal amount of the instrument. The estimated net cumulative loss represents the sum of the net losses estimated to occur each month of the life of the instrument, net of the average recovery expected to be received.

Prepayment rates—Prepayment rates are an estimate of the cumulative principal prepayments that will occur over the entire life of a loan as a percentage of the original principal amount of the loan. The assumption regarding cumulative prepayments impacts the projected balances and expected terms of the loans.

The above inputs are similarly used in estimating fair value of related financial instruments. Refer to *Notes Payable* and *Assets and Liabilities related to Securitization Transactions* sections below for more information.

Significant Recurring Level 3 Fair Value Input Sensitivity The below table presents the sensitivity of the loans held-for-sale and held-for-investment, excluding those in consolidated securitizations, to adverse changes in key assumptions used in the valuation model as of December 31, 2018 and 2019, and September 30, 2020 (unaudited), respectively. The estimated fair value of these loans is not sensitive to adverse changes in expected prepayment rates as such changes would not result in a significant impact on the fair value in either periods.

	December 31,		September 30,
(amounts in thousands)	2018	2019	2020
			(unaudited)
Fair value of loans	$134,650	$141,555	$122,708
Discount rates			
100 basis point increase	(1,762)	(1,898)	(1,483)
200 basis point increase	(3,488)	(3,755)	(2,937)
Expected credit risk rates on underlying loans			
10% adverse change	(2,321)	(2,325)	(1,953)
20% adverse change	(4,649)	(4,656)	(3,911)

Rollforward of Level 3 Fair Values The following tables include a rollforward of the loans classified within Level 3 of the fair value hierarchy (in thousands):

	Loans Held-for-Sale	Loans Held-for-Investment	Loans Held-for-Investment(Securitized)	Total
Fair value at December 31, 2017	$—	$63,883	$355,619	$419,502
Purchases of loans	—	169,442	251,681	421,123
Sale of loans	—	(55,199)	—	(55,199)
Purchase of loans for immediate resale to investors	1,115,049	—	—	1,115,049
Immediate resale to investors	(1,115,049)	—	—	(1,115,049)
Repayments received	—	(38,332)	(199,325)	(237,657)
Changes in fair value recorded in earnings	—	(5,882)	(39,959)	(45,841)
Other changes	—	738	—	738
Fair value at December 31, 2018	$—	$134,650	$368,016	$502,666

	Loans Held-for-Sale	Loans Held-for-Investment	Loans Held-for-Investment(Securitized)	Total
Purchases of loans	$—	$ 265,286	$—	$ 265,286
Sale of loans	—	(131,838)	—	(131,838)
Purchase of loans for immediate resale to investors	1,779,180	—	—	1,779,180
Immediate resale to investors	(1,779,180)	—	—	(1,779,180)
Repayments received	—	(47,950)	(158,921)	(206,871)
Changes in fair value recorded in earnings	—	(5,821)	(36,238)	(42,059)
Changes due to deconsolidation	—	(72,757)	(82,107)	(154,864)
Other changes	—	(15)	—	(15)
Fair value at December 31, 2019	$—	$141,555	$ 90,750	$232,305

	Loans Held-for-Sale	Loans Held-for-Investment	Loans Held-for-Investment(Securitized)	Total

	(unaudited)			
Transfer of loans from held-for-investment to held-for-sale	$125,297	$(125,297)	$—	$—
Purchases of loans	109,113	3,774	—	112,887
Sale of loans	(94,949)	—	—	(94,949)
Purchase of loans for immediate resale to investors	1,554,705	—	—	1,554,705
Immediate resale to investors	(1,554,705)	—	—	(1,554,705)
Repayments received	(23,390)	(4,124)	(24,018)	(51,532)
Changes in fair value recorded in earnings	(7,940)	(1,352)	(9,508)	(18,800)
Changes due to deconsolidation	—	—	(57,222)	(57,222)
Other changes	15	6	(2)	19
Fair value at September 30, 2020	$108,146	$14,562	$—	$122,708

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Notes Payable

As of December 31, 2018, the notes payable balance of $53.2 million consisted of amounts owed to investors for their purchases of fractional interests in loans issued by the Company's consolidated VIE, UNT. As of December 31, 2019, and September 30, 2020 (unaudited), the notes payable balance was zero due to the deconsolidation of UNT.

Valuation Methodology Notes payable is measured at estimated fair value using a discounted cash flow model. The fair valuation methodology considers projected prepayments and historical defaults, losses and recoveries on the Company's loans to project future losses and net cash flows on loans. Net cash flows on loans are discounted using an estimate of market rates of return.

Significant Inputs and Assumptions The following table presents quantitative information about the significant unobservable inputs used for the Company's Level 3 fair value measurements for notes payable held:

	December 31, 2018			December 31, 2019			September 30, 2020		
							(unaudited)		
	Minimum	Maximum	Weighted-Average[2]	Minimum	Maximum	Weighted-Average[2]	Minimum	Maximum	Weighted-Average[2]
Discount rate	5.52%	14.58%	5.78%	*	*	*	*	*	*
Credit risk rate[1]	0.05%	43.21%	12.19%	*	*	*	*	*	*
Prepayment rate[1]	22.16%	33.37%	25.67%	*	*	*	*	*	*

(1) Expressed as a percentage of the original principal balance of the loans underlying the financial instruments

(2) Unobservable inputs were weighted by relative fair value

* Not applicable as of December 31, 2019 and September 30, 2020

Significant Recurring Level 3 Fair Value Input Sensitivity The table below presents sensitivity of the notes payable to adverse changes in key assumptions used in the valuation models as of December 31, 2018. The estimated fair value of notes payable is not sensitive to adverse changes in expected prepayment rates as such changes would not result in a significant impact on the fair value.

(amounts in thousands)	December 31, 2018	December 31, 2019	September 30, 2020
			(unaudited)
Fair value of notes payable	$53,174	$—	$—
Discount rates			
100 basis point increase	(696)	—	—
200 basis point increase	(1,377)	—	—
Expected credit risk rates on underlying loans			
10% adverse change	(917)	—	—
20% adverse change	(1,836)	—	—

Rollforward of Level 3 Fair Values The following table presents a rollforward of the notes payable classified by the Company within Level 3 of the fair value hierarchy (in thousands):

	Notes Payable
Fair value at December 31, 2017	$ 34,713
Issuance of notes payable	42,537
Repayments and settlements	(21,127)
Changes in fair value recorded in earnings	(3,117)
Other changes	168
Fair value at December 31, 2018	$53,174
Issuance of notes payable	39,863
Repayments and settlements	(22,468)
Changes in fair value recorded in earnings	(736)
Changes due to deconsolidation	(69,419)
Other changes	(414)
Fair value at December 31, 2019	$–
Issuance of notes payable (unaudited)	–
Repayments and settlements (unaudited)	–
Changes in fair value recorded in earnings (unaudited)	–
Other changes (unaudited)	–
Fair value at September 30, 2020 (unaudited)	$–

Assets and Liabilities related to Securitization Transactions

As of December 31, 2018 and 2019, and September 30, 2020 (unaudited), the Company held notes receivable and residual certificates with an aggregate fair value of $8.3 million, $34.1 million, and $22.1 million, respectively. The balances consist of securitization notes and residual certificates corresponding to the 5% economic risk retention the Company is required to maintain as the retaining sponsor of the unconsolidated securitizations. As of December 31, 2018 and 2019, and September 30, 2020 (unaudited), the Company also had payables to securitization note holders and residual certificate holders with an aggregate fair value of $353.3 million, $89.7 million, and $0 million, respectively. The balances represent securitization notes and residual certificates issued and sold to institutional investors in securitization transactions, where the issuing trusts are consolidated in the Company's consolidated financial statements. Accrued interest on these financial instruments is immaterial as of December 31, 2018 and 2019. As of September 30, 2020 (unaudited), the balance for payables to securitization note holders and residual certificate holders and related accrued interest was $0 million due to deconsolidation of previously consolidated securitizations.

Valuation Methodology The discounted cash flow methodology is used to estimate the fair value of notes receivable and residual certificates and payables to securitization note holders and residual certificate holders (the "securities"), using the same projected net cash flows as their related loans. This model uses inputs that are inherently judgmental and reflect the Company's best estimates of the assumptions a market participant would use to calculate fair value.

Significant Inputs and Assumptions The following table presents quantitative information about the significant unobservable inputs used for the Company's Level 3 fair value measurements of assets and liabilities related to securitization transactions:

	December 31, 2018			December 31, 2019			September 30, 2020 *(unaudited)*		
	Minimum	Maximum	Weighted-Average[(2)]	Minimum	Maximum[(2)]	Weighted-Average[(2)]	Minimum	Maximum	Weighted-Average[(2)]
Notes receivable and residual certificates									
Discount rate	4.19%	14.00%	6.12%	2.91%	14.00%	5.29%	2.93%	14.00%	5.77%

Credit risk rate[1]	0.05%	43.21%	14.83%	0.18%	50.67%	17.08%	0.04%	50.69%	16.96%
Prepayment rate[1]	22.16%	33.37%	25.50%	15.19%	59.83%	27.44%	15.60%	36.88%	27.58%
Payable to securitization note holders and residual certificate holders									
Discount rate	3.60%	14.00%	6.59%	5.03%	14.00%	5.88%	11.86%	14.00%	12.29%
Credit risk rate[1]	0.05%	43.21%	12.91%	0.20%	40.97%	15.17%	0.66%	40.74%	16.29%
Prepayment rate[1]	22.16%	33.37%	26.14%	16.14%	32.47%	25.68%	16.23%	32.46%	25.94%

(1) Expressed as a percentage of the original principal balance of the loans underlying the financial instruments

(2) Unobservable inputs were weighted by relative fair value

Significant Recurring Level 3 Fair Value Input Sensitivity The securities issued in the securitization transactions are senior or subordinated based on the waterfall criteria of loan payments to each security class, with the residual interest (the "residual certificates") issued being the first to absorb credit losses in accordance with the waterfall criteria. Accordingly, the residual certificates are the most sensitive to adverse changes in credit risk rates. Depending on the specific securitization, a hypothetical increase in the credit risk rate of 10% to 20% would result in significant decreases in the fair value of the residual certificates. On average, a hypothetical increase in the credit risk rate of 20% would result in a 25% decrease in the fair value of the residual certificates. The remaining classes of securities, with the exception of those in 2018-2, are all overcollateralized such that changes in credit risk rates are not expected to have significant impacts on their fair values.

The fair value of the securities is also sensitive to adverse changes in discount rates, which represent estimates of the rates of return that institutional investors would require when investing in financial instruments with similar risk and return characteristics. On average, a hypothetical 100 basis point increase in discount rates results in a decrease in fair value of the securities (including securitization notes and residual certificates) of 1.43%, 1.40%, and 1.15% as of December 31, 2018 and 2019, and September 30, 2020 (unaudited), respectively. On average, a hypothetical 200 basis point increase in discount rates results in a decrease in fair value of the securities (including securitization notes and residual certificates) of 2.80%, 2.77%, and 2.28% as of December 31, 2018 and 2019, and September 30, 2020 (unaudited), respectively.

The fair value of securitization notes and residual certificates are not sensitive to adverse changes in expected prepayment rates as such changes would not result in a significant impact on the fair value as of December 31, 2018 and 2019, and September 30, 2020 (unaudited).

Rollforward of Level 3 Fair Values The following tables include a rollforward of the assets and liabilities related to securitization transactions classified by the Company within Level 3 of the fair value hierarchy (in thousands):

	Notes Receivable and ResidualCertificates	Payable to Securitization NoteHolders andResidual CertificateHolders
Fair value at December 31, 2017	$—	$339,291
Purchases and issuances of securitization notes and residual certificates	9,501	242,454
Repayments and settlements	(1,229)	(226,775)
Changes in fair value recorded in earnings	42	(1,678)
Fair value at December 31, 2018	$8,314	$353,292
Purchases and issuances of securitization notes and residual certificates	31,645	—
Repayments and settlements	(8,760)	(176,742)
Changes in fair value recorded in earnings	(782)	(6,053)
Changes due to deconsolidation	3,699	(80,825)
Fair value at December 31, 2019	$ 34,116	$ 89,672
Purchases and issuances of securitization notes and residual certificates (unaudited)	4	—
Repayments and settlements (unaudited)	(11,306)	(26,126)
Changes in fair value recorded in earnings (unaudited)	(761)	(5,529)
Changes due to deconsolidation (unaudited)	—	(58,017)

Fair value at September 30, 2020 (unaudited)	$22,053	$—

Loan Servicing Assets and Liabilities

Valuation Methodology Loan servicing assets and liabilities are measured at estimated fair value using a discounted cash flow model. The cash flows in the valuation model represent the difference between the contractual servicing fees charged to institutional investors and an estimated market servicing fee. Since contractual servicing fees are generally based on the monthly unpaid principal balance of the underlying loans, the expected cash flows in the model incorporate estimates of net losses and prepayments.

Significant Inputs and Assumptions The following table presents quantitative information about the significant unobservable inputs used for the Company's Level 3 fair value measurements for loan servicing assets and liabilities:

	December 31, 2018			December 31, 2019			September 30, 2020 *(unaudited)*		
	Minimum	Maximum	Weighted-Average[2]	Minimum	Maximum	Weighted-Average[2]	Minimum	Maximum	Weighted-Average[2]
Discount rate	15.00%	30.00%	22.81%	15.00%	35.00%	22.70%	15.00%	35.00%	22.42%
Credit risk rate[1]	0.04%	43.21%	17.47%	0.05%	52.76%	16.72%	0.03%	52.78%	16.54%
Market-servicing rate[3][4]	0.81%	0.81%	0.81%	0.78%	0.78%	0.78%	0.75%	0.75%	0.75%
Prepayment rate[1]	22.16%	33.37%	25.67%	11.60%	76.45%	28.57%	9.15%	88.81%	30.36%

(1) Expressed as a percentage of the original principal balance of the loans underlying the servicing arrangement

(2) Unobservable inputs were weighted by relative fair value

(3) Excludes ancillary fees charged to borrowers that would be passed on to a third-party servicer

(4) Expressed as a percentage of the outstanding principal balance of the loan

Discount rates—The discount rates are the Company's estimate of the rates of return that market participants in servicing rights would require when investing in similar servicing rights. Discount rates for servicing rights on existing loans are adjusted to reflect the time value of money and a risk premium intended to reflect the amount of compensation market participants would require due to the uncertainty associated with these instruments' cash flows.

Credit risk rates—The credit risk rates are the Company's estimate of the net cumulative principal payments that will not be repaid over the entire life of a loan expressed as a percentage of the original principal amount of the loan. The assumption regarding net cumulative losses impacts the projected balances and expected terms of the loans, which are used to project future servicing revenues.

Market-servicing rates—Market-servicing rate is an estimated measure of adequate compensation for a market participant, if one was required. The rate is expressed as a fixed percentage of outstanding principal balance on a per annum basis. The estimate considers the profit that would be demanded in the marketplace to service the portfolio of outstanding loans subject to the Company's servicing agreements.

Prepayment rates—Prepayment rates are the Company's estimate of the cumulative principal prepayments that will occur over the entire life of a loan as a percentage of the original principal amount of the loan. The assumption regarding cumulative prepayments impacts the projected balances and expected terms of the loans, which are used to project future servicing revenues.

Significant Recurring Level 3 Fair Value Input Sensitivity The table below presents the fair value sensitivity of loan servicing assets and liabilities to adverse changes in key assumptions. The fair value of loan servicing assets and liabilities is not sensitive to adverse changes in discount rates as such changes would not result in a significant impact on the fair value as of December 31, 2018 and 2019, and September 30, 2020 (unaudited), respectively.

(amounts in thousands)	December 31, 2018	2019	September 30, 2020 *(unaudited)*
Fair value of loan servicing assets	$—	$ 4,725	$6,558
Expected servicing cost			
10% servicing cost increase	—	(29,631)	(27,576)
20% servicing cost increase	—	(59,262)	(55,152)

Expected prepayment rates			
10% adverse change	—	(3,629)	(2,951)
20% adverse change	—	(7,440)	(6,033)

(amounts in thousands)	December 31, 2018	2019	September 30, 2020 *(unaudited)*
Fair value of loan servicing liabilities	$ 1,685	$ 5,140	$ 7,349
Expected servicing cost on underlying loans			
10% servicing cost increase	847	32,234	30,902
20% servicing cost increase	1,693	64,467	61,804
Expected prepayment rates			
10% adverse change	136	3,948	3,307
20% adverse change	278	8,093	6,760

Rollforward of Level 3 Fair Values The following table presents a rollforward of the loan servicing assets and liabilities classified by the Company within Level 3 of the fair value hierarchy (in thousands):

	Loan Servicing Assets	Loan Servicing Liabilities
Fair value at December 31, 2017	$—	$837
Sale of loans	—	1,917
Changes in fair value recorded in earnings	—	(1,069)
Fair value at December 31, 2018	$—	$1,685
Sale of loans	3,874	4,730
Changes in fair value recorded in earnings	851	(1,275)
Fair value at December 31, 2019	$ 4,725	$ 5,140
Sale of loans (unaudited)	5,003	3,256
Changes in fair value recorded in earnings (unaudited)	(3,170)	(1,047)
Fair value at September 30, 2020 (unaudited)	$6,558	$7,349

Upstart Holdings, Inc.

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Other Assets and Liabilities

As of December 31, 2018, the Company's Level 3 financial instruments included other assets and other liabilities, related to the Company's legacy loan programs which were winding down. The other assets and liabilities had fair values of $1.4 million and $1.4 million, respectively, which were estimated using the discounted cash flow model based on expected cash flows of the underlying loans. Significant inputs used for estimating the fair value of these financial instruments included discount rates of 6.00% to 9.70% and credit risk rates of 0.00% to 3.00%.

The fair value sensitivity of the other assets and liabilities to adverse changes in key assumptions would not result in a material impact on the Company's financial position.

Rollforward of Level 3 Fair Values The following tables include a rollforward of other assets and liabilities classified by the Company within Level 3 of the fair value hierarchy (in thousands):

	Other Assets	Other Liabilities
Fair value at December 31, 2017	$ 1,886	$ 1,851
Repayments and settlements	(346)	(341)
Other changes	(130)	(135)

Fair value at December 31, 2018	$1,410	$1,375
Issuances	$—	$568
Repayments and settlements	(174)	(230)
Changes in fair value recorded in earnings	(24)	(3)
Changes due to deconsolidation	(1,136)	(1,136)
Other changes	(76)	(70)
Fair value at December 31, 2019	$—	$504
Issuances (unaudited)	$—	$632
Repayments and settlements (unaudited)	—	(219)
Changes in fair value recorded in earnings (unaudited)	—	(23)
Fair value at September 30, 2020 (unaudited)	$—	$894

Common Stock and Convertible Preferred Stock Warrants

Valuation Methodology The fair values the of common stock warrant liabilities and convertible preferred stock warrant liabilities are estimated using the Black-Scholes option-pricing model. The Black-Scholes option-pricing model considers several variables and assumptions in estimating the fair value of the warrants, including the per share fair value of the underlying securities, exercise price, expected term, risk-free interest rate, expected annual dividend yield and expected stock price volatility over the expected term.

Upstart Holdings, Inc.

Notes to Consolidated Financial Statements

Significant Inputs and Assumptions The following table presents quantitative information about the significant unobservable inputs used for the Company's Level 3 fair value measurements for common stock and convertible preferred stock warrants:

	December 31, 2018			December 31, 2019			September 30, 2020		
	Minimum	Maximum	Weighted-Average[1]	Minimum	Maximum	Weighted-Average[1]	Minimum	Maximum	Weighted-Average[1]
								(unaudited)	
Convertible preferred stock warrant liabilities									
Annual volatility	67.64%	75.19%	69.04%	53.00%	55.89%	*	80.00%	81.81%	*
Expected term (years)	0.46	2.86	2.34	0.50	1.86	*	0.21	1.11	*
Dividend rate	—	—	—	—	—	*	—	—	*
Risk-free interest rate	1.51%	2.47%	2.32%	1.58%	1.60%	*	0.10%	0.12%	*
Fair value of underlying securities	$5.37	$5.37	$5.37	$6.68	$12.22	*	$8.12	$13.86	*
Common stock warrant liabilities									
Annual volatility	51.21%	*	*	57.39%	*	*	83.09%	*	*
Expected term (years)	9.81	*	*	8.81	*	*	8.06	*	*
Dividend rate	—	*	*	—	*	*	—	*	*
Risk-free interest rate	2.67%	*	*	1.88%	*	*	0.52%	*	*
Fair value of underlying securities	$3.80	*	*	$8.88	*	*	$10.71	*	*

(1) Unobservable inputs were weighted based on convertible preferred stock warrants outstanding

* Not applicable as of the respective periods presented. Only one set of each of the convertible preferred stock warrants and common stock warrants were outstanding as of December 31, 2019 and September 30, 2020. Accordingly, weighted average inputs are not applicable.

Volatility—Since the Company is privately held and does not have an active trading market for its common or convertible preferred stock, the expected volatility is estimated based on the average volatility for comparable publicly-traded companies, over a period equal to the expected term of the warrants.

Expected term—The expected term represents the contractual life of the warrants being valued.

Dividend rate—The Company has never paid dividends on its common stock or convertible preferred stock and does not anticipate paying dividends on common stock. Therefore, the Company uses an expected dividend yield of zero.

Risk-free rate—The risk-free interest rate is determined from the implied yields from U.S. Treasury zero-coupon bonds with a remaining term consistent with the contractual term of the warrants being valued.

Fair value of underlying security—The estimated fair value of the shares of underlying securities is determined by the Company's board of directors as there is no public market for the Company's common stock or preferred stock. The board of directors determines the fair value of the underlying securities by considering a number of objective and subjective factors, including: third-party valuations of the Company's common stock and convertible preferred stock, the valuation of comparable companies, the Company's operating and financial performance, and a general and an industry-specific economic outlook, amongst other factors.

Significant Recurring Level 3 Fair Value Input Sensitivity The fair value sensitivity of the common stock warrant liabilities and convertible preferred stock warrant liabilities to adverse changes in key assumptions would not result in a material impact on the Company's financial position.

Rollforward of Level 3 Fair Values The following table presents a rollforward of the common stock warrant liabilities and convertible preferred stock warrant liabilities classified by the Company within Level 3 of the fair value (in thousands):

	Common Stock Warrant Liabilities	Convertible Preferred StockWarrant Liabilities
Balance as of December 31, 2017	$—	$4,884
Issuance of warrants	220	—
Changes in fair value recorded in earnings	227	2,695
Balance as of December 31, 2018	$447	$7,579
Exercises in the period	—	(1,131)
Repurchases and retirements in the period	—	(5,083)
Changes in fair value recorded in earnings	689	4,301
Balance as of December 31, 2019	$ 1,136	$ 5,666
Changes in fair value recorded in earnings (unaudited)	471	1,792
Balance as of September 30, 2020 (unaudited)	$ 1,607	$ 7,458

5. Loans at Fair Value

The following table presents the aggregate fair value and aggregate principal outstanding of all loans and loans that were 90 days or more past due included in the consolidated balance sheet (in thousands):

	Loans			Loans > 90 Days Past Due		
	December 31,		September 30	December 31,		September 30
	2018	2019	2020	2018	2019	2020
			(unaudited)			*(unaudited)*
Outstanding principal balance	$550,466	$276,974	$142,394	$4,362	$1,926	$1,398
Net fair value and accrued interest adjustments	(47,800)	(44,669)	(19,686)	(4,212)	(1,859)	(1,360)
Fair value	$502,666	$232,305	$122,708	$150	$67	$38

The Company places loans on non-accrual status at 120 days past due. Any accrued interest recorded in relation to these loans is reversed in the respective period. The Company charges-off loans no later than 120 days past due.

6. Balance Sheet Components

Other Assets

Other assets consisted of the following (in thousands):

	December 31,		September 30,
	2018	2019	2020
			(unaudited)
Servicing fees and other receivables	$2,527	$8,321	$9,135
Deposits	1,256	6,429	7,750
Prepaid expenses	5,917	5,224	3,089
Loan servicing assets (at fair value)	—	4,725	6,558
Other assets (include $1,410 at fair value as of December 31, 2018)	1,484	55	4,899
Total other assets	$11,184	$24,754	$31,431

Servicing fees and other receivables represent amounts recognized as revenue but not yet collected in relation to servicing and other agreements with institutional investors and bank partners.

Property, Equipment, and Software, Net

Property, equipment, and software, net consisted of the following (in thousands):

	December 31,		September 30,
	2018	2019	2020
			(unaudited)
Internally developed software	$1,889	$3,164	$6,461
Computer equipment	124	672	1,111
Furniture and fixtures	114	1,638	1,770
Leasehold improvements	15	1,970	2,763
Total property, equipment, and software	2,142	7,444	12,105
Accumulated depreciation and amortization	(640)	(1,414)	(3,045)
Total property, equipment, and software, net	$1,502	$6,030	$9,060

Depreciation and amortization expense on property, equipment, and software for the years ended December 31, 2017, 2018, and 2019, was immaterial to the consolidated statements of operations and comprehensive income (loss). For the nine months ended September 30, 2020 (unaudited), depreciation and amortization expense on property, equipment, and software was $1.6 million. As of December 31, 2018 and 2019, and September 30, 2020 (unaudited), capitalized internally developed software balances, net of accumulated amortization, were $1.4 million, $2.2 million, and $4.9 million, respectively.

Other Liabilities

Other liabilities consisted of the following (in thousands):

	December 31,		September 30,
	2018	2019	2020
			(unaudited)
Accrued expenses	$5,158	$15,006	$11,321
Accrued payroll	848	5,746	3,722
Convertible preferred stock warrant liabilities	7,579	5,666	7,458
Common stock warrant liabilities	447	1,136	1,607
Loan servicing liabilities	1,685	5,140	7,349
Liability for repurchase and indemnification activities	140	176	143
Other liabilities	1,496	1,778	2,321
Total other liabilities	$17,353	$34,648	$33,921

7. Borrowings

The following table summarizes outstanding principal balances of borrowings (in thousands):

	December 31,		September 30,
	2018	2019	2020
			(unaudited)
Term loans	$19,217	$17,200	$15,550

Revolving credit facility	2,000	5,500	5,500
Warehouse credit facilities	47,266	79,096	70,213
Risk retention funding loans	6,702	16,941	9,398
Total payments due	75,185	118,737	100,661
Unamortized debt discount	(202)	(128)	(73)
Total borrowings	$74,983	$118,609	$100,588

Term Loans

In February 2016, the Company, together with its wholly-owned subsidiary, Upstart Network, Inc. (“UNI”) as the co-borrower, entered into a loan and security agreement (the “LSA”) with a third-party lender to obtain a term loan of $5.5 million. The term loan had an original maturity of March 1, 2019. In September 2018, the parties amended the LSA to extend the maturity date to December 1, 2020. Commencing on the effective date of the amended LSA, the Company is required to repay the term loan in thirty (30) equal monthly installments plus accrued interest. Any outstanding principal and accrued and unpaid interest are due in full on December 1, 2020. The term loan bears a floating interest of prime rate plus 1.75% per annum, payable on the first calendar day of each month. As of December 31, 2018 and 2019, and September 30, 2020, the interest rates were 7.25%, 6.50%, and 5.00%, respectively.

In October 2018, the Company and UNI entered into a mezzanine loan and security agreement with the same lender to obtain a second term loan of up to $15.0 million (the “Mezzanine Loan”). The Mezzanine Loan bears interest at the greater of prime rate plus 5.25% or 10.00% per annum, payable monthly. As of December 31, 2018 and 2019, and September 30, 2020, the interest rates were 10.75%, 10.00% and 8.50%, respectively. The principal balance is due upon maturity on October 1, 2021.

The term loans are secured by all assets of the Company, excluding assets of consolidated securitizations and cash and restricted cash relating to other borrowing arrangements.

Revolving Credit Facility

UNI Credit Facility

In connection with the LSA with the same lender above, as amended in September 2018, the Company and UNI also obtained a revolving credit facility of up to $5.5 million (the “UNI Credit Facility”). The UNI Credit Facility had an original termination and maturity date of June 1, 2020. During the nine months ended September 30, 2020 (unaudited), the parties agreed to extend the maturity date of the UNI Credit Facility to December 1, 2020 when the outstanding principal and any accrued and unpaid interest are due and payable in full. The UNI Credit Facility bears floating interest at the greater of prime rate plus 1.00% or 4.25% annum, payable monthly, subject to a monthly minimum interest requirement prior to maturity. As of December 31, 2018 and 2019, and September 30, 2020, the interest rates were 6.50%, 5.75% and 4.25%, respectively.

The UNI Credit Facility is secured by all assets of the Company, excluding assets of consolidated securitizations and cash and restricted cash relating to other borrowing arrangements. The UNI Credit Facility contains certain financial covenants. As of December 31, 2019 and September 30, 2020 (unaudited), the Company was in material compliance with all applicable covenants under the revolving credit and security agreement.

As of December 31, 2018 and 2019, and September 30, 2020 (unaudited), outstanding borrowings under the UNI Credit Facility were $2.0 million, $5.5 million, and $5.5 million, respectively.

Warehouse Credit Facilities

Upstart Loan Trust Credit Facility In November 2015, the Company’s consolidated VIE, Upstart Loan Trust (“ULT”), entered into a revolving credit and security agreement with a third-party lender (the “ULT Warehouse Credit Facility”). The credit and security agreement for the ULT Warehouse Credit Facility was amended and restated in its entirety in May 2020. Under the revolving credit and security agreement, as amended from time to time, ULT may borrow up to $100.0 million (subject to a borrowing base capacity) until the earlier of May 15, 2021 or the occurrence of an accelerated amortization event. An accelerated amortization event includes failure to satisfy certain loan performance metrics or the occurrence of an event of default. The proceeds may only be used to purchase unsecured personal loans from Upstart’s platform and to pay fees and expenses related to the credit facility. The ULT Warehouse Credit Facility matures on the earlier of May 15, 2022 or acceleration of the facility following an event of default, upon which date 100% of the outstanding principal amount, together with any accrued and unpaid interest, becomes due and payable. The entire amount of the outstanding principal and interest may be prepaid at any time without penalty. The ULT Warehouse Credit Facility bears a floating interest rate of LIBOR plus a spread ranging from 3.35% to 4.00% per annum, due and payable monthly in arrears. The Company is subject to additional interest payments under a minimum utilization requirement of $35 million (unaudited). As of December 31, 2018 and 2019, and September 30, 2020, the interest rates were 5.66%, 5.68% and 4.08%, respectively. The maximum advance rate under the ULT Warehouse Credit Facility on outstanding principal of loans held by ULT was 85% as of December 31, 2019 and 80% as of September 30, 2020 (unaudited).

Notes to Consolidated Financial Statements

The ULT Warehouse Credit Facility contains certain financial covenants. As of December 31, 2019 and September 30, 2020 (unaudited), ULT was in material compliance with all applicable covenants under the ULT Warehouse Credit Facility. The creditors of ULT have no recourse to the general credit of the Company, except for certain limited obligations of ULT to its creditors that are guaranteed by the Company. The Company does not guarantee the credit performance of the loans owned by ULT, and the loans and other assets owned by ULT are not available to settle the claims of creditors of the Company.

The following table includes the aggregate balances held by ULT that were pledged as collateral for the ULT Warehouse Credit Facility and included in loans at fair value and restricted cash in the condensed consolidated balance sheets, respectively (in thousands):

	ULT Warehouse Credit Facility		
	December 31,		September 30,
	2018	2019	2020
			(unaudited)
Outstanding borrowings	$42,739	$54,770	$52,754
Aggregate outstanding principal of loans pledged as collateral	$62,291	$73,489	$80,962
Aggregate fair value of personal loans purchased and held by ULT	$65,967	$86,742	$81,989
Restricted cash pledged as collateral	$3,880	$3,441	$13,032

Upstart Warehouse Trust Credit Facility In May 2018, the Company's consolidated VIE, Upstart Warehouse Trust ("UWT") entered into a revolving credit and security agreement with third-party lenders, including one subordinated lender, for an uncommitted credit facility up to $152.0 million (the "UWT Warehouse Credit Facility") to fund UWT's purchase of loans from Upstart's platform. The ability to borrow additional amounts under this warehouse credit facility expired in May 2020. The UWT Warehouse Credit Facility matures on the earlier of May 21, 2021 or the acceleration of the facility following an event of default, upon which date 100% of the outstanding principal, together with any accrued and unpaid interest, becomes due and payable. The entire amount of the outstanding debt may be prepaid at any time without penalty. The UWT Warehouse Credit Facility bears a floating interest rate of LIBOR plus 2.75% for a total amount up to $125.0 million and LIBOR plus 6.25% for an additional amount up to $27.0 million funded by the subordinated lender. These interest rates increased by an additional 0.75% following the scheduled expiration of the revolving period on May 22, 2020. As of December 31, 2018 and 2019, and September 30, 2020, the interest rates were 4.77%, 4.97% and 3.34%, respectively. The maximum advance rates under the UWT Warehouse Credit Facility for the senior loans and the subordinated loans held by UWT were 70% and 85%, respectively, as of December 31, 2018 and 2019, and September 30, 2020 (unaudited).

The UWT Warehouse Credit Facility contains certain financial covenants. As of December 31, 2019, and September 30, 2020 (unaudited), UWT was in material compliance with all applicable covenants under the UWT Warehouse Credit Facility. The creditors of UWT have no recourse to the general credit of the Company except for certain limited obligations of UWT to its creditors that are guaranteed by the Company. The Company does not guarantee the credit performance of the loans owned by UWT, and the loans and other assets owned by UWT are not available to settle the claims of creditors of the Company.

Upstart Holdings, Inc.

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The following table includes the aggregate balances held by UWT that were pledged as collateral for the UWT Warehouse Credit Facility and included in loans at fair value and restricted cash in the condensed consolidated balance sheets, respectively (in thousands):

	UWT Warehouse Credit Facility		
	December 31,		September 30,
	2018	2019	2020
			(unaudited)
Outstanding borrowings	$4,527	$24,326	$17,459
Aggregate outstanding principal of loans pledged as collateral	$6,056	$36,228	$25,606
Aggregate fair value of personal loans purchased and held by UWT	$6,946	$39,557	$27,164
Restricted cash pledged as collateral	$224	$1,720	$1,326

Risk Retention Funding Loans

In October 2018, Upstart RR Funding 2018-2, LLC (the "2018-2 RR entity"), a consolidated VIE of UNI, entered into a loan and security agreement (the "2018-2 RR Financing Agreement") to finance the Company's risk retention balance in the Upstart Securitization Trust 2018-2. Under this agreement, the balance borrowed by the 2018-2 RR entity has an interest rate of 4.00% per annum and is repaid using cash proceeds received by the 2018-2 RR entity as part of monthly cash distributions from the 2018-2 securitization on securitization notes and residual certificates. As of December 31, 2018 and 2019, the outstanding principal balance under the 2018-2 RR Financing Agreement was $6.7 million and $3.2 million, respectively. As of September 30, 2020 (unaudited), the outstanding principal balance under the 2018-2 RR Financing Agreement was immaterial.

In September 2019, Upstart RR Funding 2019-2, LLC (the "2019-2 RR entity"), a consolidated VIE of UNI, entered into a loan and security agreement (the "2019-2 RR Financing Agreement") to finance the Company's risk retention balance in the Upstart Securitization Trust 2019-2. Under this agreement, the balance borrowed by the 2019-2 RR entity has an annual interest rate of 4.33% and is repaid using cash proceeds received by the 2019-2 RR entity as part of

monthly cash distributions from the 2019-2 securitization on securitization notes and residual certificates. As of December 31, 2019, the outstanding principal balance under the 2019-2 RR Financing Agreement was $13.8 million. As of September 30, 2020 (unaudited), the outstanding principal balance under the 2019-2 RR Financing Agreement was $9.4 million.

The borrowings are solely the obligations of the 2018-2 RR entity and 2019-2 RR entity, respectively, and the Company is not obligated thereon. The securities and other assets owned by each RR entity are not available to settle the claims of creditors of the Company. Assets pledged as collateral for the risk retention funding loans include $8.3 million, $22.0 million and $14.5 million of securities held for risk retention for the 2018-2 and 2019-2 securitization transactions, included in notes receivables and residual certificates on the consolidated balance sheets as of December 31, 2018 and 2019, and September 30, 2020 (unaudited), respectively.

The following table summarizes the aggregate amount of maturities of all borrowings as of September 30, 2020 (in thousands):

	September 30, 2020 *(unaudited)*
Remainder of 2020	$6,050
2021	32,459
2022	53,868
2023	8,283
2024	–
Total	$100,660

8. Convertible Promissory Notes

In September and October 2017, respectively, the Company issued $10.0 million of subordinated convertible promissory notes to each of two institutional investors, one of which is a related party of the Company, for total proceeds of $20.0 million. The notes had an annual interest of 8.00% and a maturity date of June 30, 2018. On June 30, 2018, the outstanding principal and accrued and unpaid interests of $21.2 million on the convertible promissory notes were converted into 5,871,382 shares of Series C-1 convertible preferred stock at a per share price of $3.612, equal to the issue price in the Series C-1 financing round. No convertible promissory notes were issued or outstanding as of and for the years ended December 31, 2018 and 2019, and as of and for the nine months ended September 30, 2020 (unaudited). Refer to "*Note 15. Related Party Transactions*"**.**

In conjunction with the issuance of the convertible promissory notes, the Company issued warrants to purchase an aggregate of 830,468 shares of Series C-1 convertible preferred stock. Of these warrants, 415,234 were issued to a related party of the Company. On conversion of the convertible promissory notes on June 30, 2018, these warrants were cancelled.

9. Convertible Preferred Stock and Convertible Preferred Stock Warrants

Convertible Preferred Stock

As of December 31, 2018, the Company's convertible preferred stock consisted of the following balances (in thousands, except share and per share amounts):

	Shares Authorized	Shares Issued andOutstanding	Carrying Value	Aggregate LiquidationPreference
Series Seed	2,009,641	2,009,641	$1,693	$1,750
Series A	5,547,713	5,547,713	5,828	5,900
Series B	10,140,679	8,640,160	14,312	14,395
Series C	9,724,108	9,724,108	34,877	35,000
Series C-1	15,394,772	15,394,772	53,368	55,612
Series D	11,110,744	5,566,483	47,845	50,100
Total	53,927,657	46,882,877	$157,923	$162,757

As of December 31, 2019, the Company's convertible preferred stock consisted of the following balances (in thousands, except share and per share amounts):

	Shares Authorized	Shares Issued andOutstanding	Carrying Value	Aggregate LiquidationPreference
	(unaudited)			

Series Seed	2,009,641	2,009,641	$ 1,693	$1,750
Series A	5,547,713	5,547,713	5,828	5,900
Series B	10,140,679	8,940,263	15,943	14,895
Series C	9,724,108	9,446,277	33,877	34,000
Series C-1	15,394,772	15,394,772	53,368	55,612
Series D	11,110,744	6,010,911	51,837	54,100
Total	53,927,657	47,349,577	$162,546	$166,257

As of September 30, 2020, the Company's convertible preferred stock consisted of the following balances (in thousands, except share and per share amounts):

	Shares Authorized	Shares Issued andOutstanding	Carrying Value	Aggregate LiquidationPreference
Series Seed (unaudited)	2,009,641	2,009,641	$1,693	$1,750
Series A (unaudited)	5,547,713	5,547,713	5,828	5,900
Series B (unaudited)	10,140,679	8,940,263	15,943	14,895
Series C (unaudited)	9,724,108	9,446,277	33,877	34,000
Series C-1 (unaudited)	15,394,772	15,394,772	53,368	55,612
Series D (unaudited)	11,110,744	6,010,911	51,837	54,100
Total	53,927,657	47,349,577	$162,546	$166,257

The holders of the Series Seed, A, B, C, C-1, and D convertible preferred stock (together the "convertible preferred stock") have various rights, preferences, privileges, and restrictions, with respect to voting, dividends, liquidation, and conversion as follows:

Dividends

The holders of Series Seed, A, B, C, C-1, and D convertible preferred stock are entitled to receive noncumulative dividends at an annual rate of $0.07, $0.09, $0.13, $0.29, $0.29, and $0.72 per share payable, respectively, if and when, declared by the board of directors, prior and in preference to any payment of any dividend on the common stock. The holders of convertible preferred stock are also entitled to participate in dividends on common stock on an as-converted basis. As of December 31, 2018 and 2019, and September 30, 2020 (unaudited), no dividends have been declared or paid to date.

Voting Rights

Each share of convertible preferred stock has voting rights equal to the number of shares of common stock into which such preferred stock is convertible. The holders of convertible preferred stock vote together with the holders of common stock as a single class.

Upstart Holdings, Inc.

`Notes to Consolidated Financial Statements`

Liquidation Preference In the event of any liquidation, dissolution, or winding up of the Company, either voluntary or involuntary, the holders of convertible preferred stock shall be entitled to receive, on the same basis for each class, prior and in preference to any distribution of any of the assets of the Company to the holders of common stock, an amount equal to $0.8708, $1.0635, $1.666089, $3.599299, $3.612413 and $9.000295 per share for each outstanding share of Series Seed, A, B, C, C-1 and D convertible preferred stock then held, plus any declared or accrued but unpaid dividends thereon. If, upon occurrence of such event, the assets and funds distributed among the holders of convertible preferred stock shall be insufficient to permit the payment, then the entire assets and funds of the Company legally available for distribution shall be distributed ratably among the holders of convertible preferred stock in proportion to the preferential amount each such holder is otherwise entitled to receive.

In the event of the liquidation, dissolution, winding up of the Company, or occurrence of (i) sale, lease, transfer, or disposal of any subsidiary or substantially all of its assets or (ii) merger with, into, or consolidation with another entity (the "Liquidation Transaction"), after payment of all preferential amounts required to be paid to the holders, the remaining assets of the Company available for distribution to the Company's stockholders shall be distributed among the holders of common stock.

Conversion Rights

At the option of the holder, each share of convertible preferred stock is convertible into shares of common stock as is determined by dividing $0.8708, $1.0635, $1.666089, $3.599299, $3.612413 and $9.000295 per share for Series Seed, A, B, C, C-1 and D, respectively, by the conversion price applicable to such shares. The initial conversion price per share is $0.8708, $1.0635, $1.666089, $3.599299, $3.612413 and $9.000295 per share for Series Seed, A, B, C, C-1 and D convertible preferred stock, respectively. The conversion ratio for the convertible preferred stock shall be subject to appropriate adjustments for stock splits, stock dividends, combinations, subdivisions, recapitalizations, or the like. In addition, if the Company should issue any additional stock without consideration or for a consideration per share less than the conversion price for the convertible preferred stock, the conversion price for each series shall automatically be adjusted in accordance with anti-dilution provisions contained in the Company's Amended Certificate of Incorporation.

Each share of convertible preferred stock will automatically convert into shares of common stock at the conversion rate then in effect upon the earlier of (i) the closing of a firm commitment underwritten public offering registered on Form S-1 with the offering price not less than $13.451340 per share and aggregate proceeds of not less than $150.0 million, net of underwriting discounts and commissions or (ii) the vote or written consent of the holders of at least 65% of the then-outstanding shares of convertible preferred stock, voting together as a single class, and the vote of written consent of at least a majority of the shares of Series D convertible preferred stock, voting separately as a single class.

Classification

The Company has classified its convertible preferred stock as mezzanine equity on the consolidated balance sheets as the stock is contingently redeemable. Upon the occurrence of certain deemed liquidation events that are outside the Company's control, including liquidation, sale or transfer of the Company, holders of the convertible preferred stock can cause redemption for cash. During the **Upstart Holdings, Inc.**

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years ended December 31, 2018 and 2019, and September 30, 2020 (unaudited), the Company did not adjust the carrying value of the convertible preferred stock to the deemed liquidation value of such shares as a deemed liquidation event was not probable.

Convertible Preferred Stock Warrants

During June through November 2014, the Company issued initial lenders in the Upstart platform warrants to purchase an aggregate of 1,500,519 shares of Series B convertible preferred stock at a strike price of $0.01 or $1.67 per share. Of these warrants, 1,500,519 were outstanding as of December 31, 2018, and 600,208 were outstanding as of December 31, 2019, and September 30, 2020 (unaudited). The warrants have a contractual term of five to seven years and expire between June 2019 and November 2021. The convertible preferred stock warrants are recorded within other liabilities on the consolidated balance sheets at their estimated fair value. See "*Note 4. Fair Value Measurement*" for further details.

Repurchase of Convertible Preferred Stock and Convertible Preferred Stock Warrants

In November 2019, the Company repurchased and retired 277,831 shares of the Company's Series C convertible preferred stock held by investors for a purchase price of $0.7 million. On repurchase, the portion equal to the original issuance price of $1.0 million was recorded as a reduction to convertible preferred stock and the excess of the original issuance price over the repurchase price was reflected as a decrease in accumulated deficit.

On the same day, the Company also repurchased and cancelled 600,208 warrants to purchase Series B convertible preferred stock held by the same investor for a purchase price of $1.4 million. Upon repurchase, the Company derecognized $5.1 million of the convertible preferred stock warrant liabilities to reflect the fair value of the warrants repurchased. The Company recognized a $3.7 million gain on repurchase of the warrants, calculated as the difference between the price paid to repurchase the warrants and the fair value of the warrants immediately before the repurchase. The gain on repurchase of the warrants is included in expense on warrants and convertible notes, net in the consolidated statements of operations and comprehensive income (loss).

10. Common Stock and Common Stock Warrants

Common Stock

As of December 31, 2018 and 2019, and September 30, 2020 (unaudited), the Company had reserved shares of common stock for issuance, on an as-converted basis, as follows:

	December 31,		September 30,
	2018	2019	2020
			(unaudited)
Convertible preferred stock outstanding	46,882,877	47,349,577	47,349,577
Options issued and outstanding	12,293,165	16,502,206	19,356,042
Shares available for future stock option grants	2,500,951	1,319,666	3,865,271
Warrants to purchase convertible preferred stock	1,500,519	600,208	600,208
Warrants to purchase common stock	1,617,553	319,669	319,669
Total	64,795,065	66,091,326	71,460,291

Common Stock Warrants

In March 2015 through July 2017, the Company issued warrants to purchase common stock in connection with the Mezzanine Loan and other historical borrowings. The Company also issued warrants to purchase common stock to other investors in March 2016. The outstanding warrants to purchase common stock not subject to remeasurement as of the balance sheet dates are as follows:

	Warrants Outstanding				
	December 31,				
Issuance Date	2018	2019	September 30, 2020	Exercise Price perShare	Term (Years)
			(unaudited)		

March 2015	78,031	78,031	78,031	$1.67	10
February 2016	60,084	60,084	60,084	1.17	10
March 2016	1,297,884	—	—	0.0001	7
July 2017	31,554	31,554	31,554	1.35	10
	1,467,553	169,669	169,669		

The estimated grant date fair value of the above common stock warrants granted in March 2015 through July 2017 was immaterial and recognized as an expense in the period granted.

Common Stock Warrants Measured at Fair Value on a Recurring Basis In October 2018, the Company issued warrants to purchase an aggregate of 150,000 shares of common stock, with an exercise price of $2.16 per share. The estimated grant date fair value of the common stock warrants was recognized as debt issuance costs in the period granted. The common stock warrants were outstanding in their entirety at December 31, 2018 and 2019, and September 30, 2020. The common stock warrants have a contractual term of ten years and expire in October 2028. These common stock warrants are recorded with other liabilities on the consolidated balance sheets at their estimated fair value. See *"Note 4. Fair Value Measurement"* for further details.

11. Equity Incentive Plans

In 2012, the Company adopted the Equity Incentive Plan ("2012 Equity Incentive Plan") authorizing the granting of incentive stock options ("ISOs") and non-statutory stock options ("NSOs") to eligible participants. As of December 31, 2019, the Company is authorized to issue up to 19,063,647 shares of common stock under the 2012 Equity Incentive Plan. Under the 2012 Equity Incentive Plan, the exercise price of an ISO and NSO shall not be less than 100% of the estimated fair value of the shares on the date of grant, as determined by the board of directors. The exercise price of an ISO granted to a 10% stockholder shall not be less than 110% of the estimated fair value of the shares on the date of grant, as determined by the board of directors. Options generally vest over four years and are exercisable for up to 10 years after the date of grant if the employee provides service to the Company for at least three years.

Activity under the Company's stock option plan is set forth below (in thousands, except share and per share amounts):

	Options Available for Grant	Number of Options	Weighted-AverageExercisePrice PerShare	Weighted-Average Remaining ContractualLife (years)	Aggregate IntrinsicValue
Balances at December 31, 2018	2,500,951	12,293,165	$1.05	6.9	$33,793
Options authorized	3,300,000	—			
Options granted	(5,188,219)	5,188,219			
Options exercised	—	(272,244)			
Options cancelled and forfeited	706,934	(706,934)			
Balances at December 31, 2019	1,319,666	16,502,206	$1.86	6.9	$115,764
Options authorized (unaudited)	5,600,000	—			
Options granted (unaudited)	(3,847,132)	3,847,132			
Options exercised (unaudited)	—	(200,559)			
Options cancelled and forfeited (unaudited)	792,737	(792,737)			
Balances at September 30, 2020	3,865,271	19,356,042	$3.11	6.7	$166,484
Options exercisable – September 30, 2020 (unaudited)		11,422,684	$1.21	5.1	$119,997
Options vested and expected to vest – September 30, 2020 (unaudited)		17,810,692	$2.81	6.5	$158,673

The aggregate intrinsic value is calculated as the difference between the exercise price of the underlying awards and the fair value of the Company's stock as of December 31, 2019. The aggregate intrinsic value of options exercised for the years ended December 31, 2017, 2018 and 2019, and nine months ended September 30, 2019 (unaudited) and 2020 (unaudited) was $0.5 million, $0.6 million, and $2.1 million, $0.2 million, and $2.0 million, respectively. The weighted-average grant date fair value of options granted during the years ended December 31, 2017, 2018 and 2019, and nine months ended September 30, 2020 (unaudited), was $1.21, $1.68, $3.99, and $5.76 per share, respectively. The total fair value of options vested for the years ended December 31, 2017, 2018 and 2019, and nine months ended September 30, 2020 (unaudited), was $0.9 million, $1.8 million, $2.7 million, and $4.5 million, respectively.

As of December 31, 2019, and September 30, 2020, total unrecognized stock-based compensation expense was $15.3 million and $22.9 million, respectively, which is expected to be recognized over a weighted-average period of 2.5 years and 1.3 years, respectively.

Non-Employee Stock-Based Compensation

During the years ended December 31, 2017, 2018 and 2019, and the nine months ended September 30, 2020 (unaudited), the Company granted non-qualified options to non-employees to purchase 149,037, 148,295, 135,969, and 0 shares, respectively, of common stock under the 2012 Equity Incentive Plan. Non-employee options were issued with various vesting periods depending on the specific terms of each option and services provided by non-employees.

Fair Value of Options Granted

In determining the fair value of the stock-based awards, the Company uses the Black-Scholes option-pricing model and assumptions discussed below. Each of these inputs is subjective and generally requires significant judgment.

Fair Value of Common Stock—The fair value of the shares of common stock has historically been determined by the Company's board of directors as there is no public market for the common stock. The board of directors determines the fair value of the common stock by considering a number of objective and subjective factors, including third-party valuations of the Company's common stock, the valuation of comparable companies, the Company's operating and financial performance, and general and industry specific economic outlook, among other factors.

Expected Term—The expected term represents the period that the Company's stock options are expected to be outstanding. For the years ended December 31, 2017, 2018 and 2019, and nine months ended September 30, 2020 (unaudited), the Company determined the expected term for employee stock options based on historical terminations and exercise behavior, which factors in an extended post-termination exercise provision for vested awards for certain employees that provide more than three years of service to the Company. The Company uses the contractual term for all nonemployee awards.

Volatility—Since the Company is privately held and does not have an active trading market for its common stock, the expected volatility is estimated based on the average volatility for comparable publicly-traded companies, over a period equal to the expected term of the stock option grants.

Risk-free Rate—The risk-free rate assumption is based on the U.S. Treasury zero coupon issues in effect at the time of grant for periods corresponding with the expected term of the option.

Dividends—The Company has never paid dividends on its common stock and does not anticipate paying dividends on common stock. Therefore, the Company uses an expected dividend yield of zero.

The following assumptions were used to estimate the fair value of employee and nonemployee stock options granted and the resulting fair values:

	Year ended December 31,			Nine months ended September 30,	
	2017	2018	2019	2019	2020
				(unaudited)	
Expected term (in years)	5.0 – 10.0	5.9 – 10.0	5.5 – 10.0	5.6 – 10.0	5.3 – 10.0
Expected volatility	54.14% – 56.84%	54.70% – 58.59%	55.69% – 59.23%	56.50% – 58.91%	53.23% – 72.02%
Risk-free rate	1.80% – 2.38%	2.16% – 3.13%	1.67% – 2.40%	1.78% – 2.40%	0.33% – 1.50%
Dividend yield	–%	–%	–%	–%	–%

The Company recorded stock-based compensation in the following expense categories in its consolidated statements of operations and comprehensive income (loss) for employees and non-employees (in thousands):

	Year ended December 31,			Nine months ended September 30,	
	2017	2018	2019	2019	2020
				(unaudited)	
Sales and marketing	$32	$183	$278	$157	$1,136
Customer operations	124	178	433	252	625
Engineering and product development	574	753	1,803	932	3,181
General, administrative, and other	560	931	1,292	863	2,160
Total	$1,290	$2,045	$3,806	$2,204	$7,102

12. Leases

The Company's operating leases are primarily for its corporate headquarters in San Mateo, California and Columbus, Ohio. Both operating leases include early termination options, and one of the leases includes renewal options for two successive five-year periods. The exercise of these options was not recognized as part of the ROU assets and lease liabilities, as the Company did not conclude, at the commencement date of the leases, that the exercise of renewal options or termination options was reasonably certain. In connection with one of the leases, a letter of credit was issued on behalf of the Company

for the benefit of the landlord in the amount of $2.0 million. The letter of credit is secured by a certificate of deposit which is included in restricted cash on the consolidated balance sheet. In connection with the Columbus lease, the Company is entitled to receive tenant improvement allowances of up to $0.7 million.

As of December 31, 2019, future minimum noncancelable lease payments are as follows (in thousands):

Year ending December 31,	Operating Leases
2020	$4,117
2021	4,236
2022	4,357
2023	4,483
2024	1,476
Thereafter	897
Total undiscounted lease payments	19,566
Less: Present value adjustment	(2,505)
Operating lease liabilities	$17,061

As of December 31, 2019 and September 30, 2020 (unaudited), the Company does not have any operating leases which are yet to commence.

As of December 31, 2018, the Company leased one office space under a noncancelable operating lease agreement. The agreement had an expiration date in October 2019. This lease was also in place as of December 31, 2017, in addition to another leasing contract that expired during 2018.

This space was sub-leased to a third party through the expiration date of the related contract. The sub-leasing agreement included terms that are not materially different from the original lease and did not relieve the Company from its obligations to the lessor. As of December 31, 2018, the remaining future minimum lease payments related to this lease were $1.0 million through its expiration date in October 2019.

Rent expense for the Company's operating leases was $1.3 million, $1.3 million, $3.4 million, $2.2 million, and $3.9 million for the years ended December 31, 2017, 2018 and 2019, and nine months ended September 30, 2019 (unaudited) and 2020 (unaudited), respectively. Variable lease payments such as common area maintenance and parking fees were included in operating expenses and were $1.0 million for both the year ended December 31, 2019 and nine months ended September 30, 2020 (unaudited). Rent expense for the Company's short-term leases was immaterial for the year ended December 31, 2019 and September 30, 2020 (unaudited).

Supplemental cash flow and noncash information related to the Company's operating leases was as follows (in thousands):

	Year Ended December 31,2019	Nine Months EndedSeptember 30,2020
		(unaudited)
Cash flows from operating activities		
Cash paid for amounts included in the measurement of lease liabilities	$1,905	$3,101
Right-of-use assets obtained in exchange for lease obligations		
Total right-of-use assets capitalized	$16,190	$187

The following summarizes additional information related to the Company's operating leases:

	Year ended December 31,2019	Nine months endedSeptember 30,2020
		(unaudited)
Weighted average remaining lease term (in years)	4.6	4.9
Weighted average discount rate	5.84%	5.84%

13. Commitments and Contingencies

Loan Purchase Obligation

Under the Company's loan agreements with certain bank partners, the banks retain ownership of the loans facilitated through Upstart's platform for three days or longer (the "holding period") after origination, as required under the respective agreements. The Company has committed to purchase the loans at the unpaid principal balance, plus accrued interest, at the conclusion of the required holding period. As of December 31, 2018 and 2019, and September 30, 2020 (unaudited), respectively, the total loan purchase commitment included the outstanding principal balance of $14.7 million, $51.9 million, and $59.3 million plus accrued interest.

Repurchase and Indemnification Contingency

Under the terms of the loan purchase and loan servicing agreements between the Company and institutional investors, as well as in agreements with investors in securitizations where the Company is not the sponsor, the Company may, in certain circumstances, become obligated to repurchase loans from such investors. Generally, these circumstances include the occurrence of verifiable identity theft, the failure of sold loans to meet the terms of certain loan-level representations and warranties that speak as of the time of origination or sale, the failure to comply with other contractual terms with the investors, or a violation of the applicable federal, state, or local lending laws.

The maximum potential amount of future payments associated under this obligation is the outstanding balances of the loans sold to the investors, which at December 31, 2018 and 2019, and September 30, 2020 (unaudited), is $1,818.4 million, $3,498.1 million and $4,411.7 million, respectively. The Company recognizes a liability for the repurchase obligation based on historical experience when the loans are issued. The liability is subsequently remeasured when a related loss is probable and can be reasonably estimated. Actual payments made relating to the Company's repurchase and indemnification obligations were immaterial historically. The Company has recorded contingent liabilities as of December 31, 2018 and 2019 of immaterial amounts to cover estimated future obligations related to these contractual terms. These amounts are included in other liabilities on the Company's consolidated balance sheets.

Legal

From time to time the Company is subject to, and it is presently involved in, litigation and other legal proceedings. Accounting for contingencies requires the Company to use judgment related to both the likelihood of a loss and the estimate of the amount or range of loss. The Company records a loss contingency when it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. As of December 31, 2018 and 2019, and September 30, 2020 (unaudited), no loss contingency has been recorded in connection with legal proceedings arising in the ordinary course of business.

Contingencies

Accounting for contingencies requires the Company to use judgment related to both the likelihood of a loss and the estimate of the amount or range of loss. The Company records a loss contingency when it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. The Company discloses material contingencies when it believes a loss is not probable but reasonably possible. Although the Company cannot reasonably determine the outcome of any litigation or tax matters, it does not believe there are currently any such actions that, if resolved unfavorably, would have a material impact on its consolidated financial statements.

Indemnifications

In the ordinary course of business, the Company may provide indemnifications of varying scope and terms to vendors, directors, officers and other parties with respect to certain matters. In addition, the Company has entered into indemnification agreements with directors and certain officers and employees that will require the Company, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors, officers or employees. No **Upstart Holdings, Inc.**

demands have been made upon the Company to provide indemnification under such agreements, and thus, there are no claims that the Company is aware of that could have a material effect on the Company's consolidated financial statements.

14. Income Taxes

Income tax expense included in the statements of income and comprehensive income consisted of the following (in thousands):

	Year Ended December 31,		
	2017	2018	2019
Current:			
Federal	$—	$—	$—
State	6	—	74
Total current tax expense	6	—	74
Deferred:	—	—	—
Federal	—	—	—
State	—	—	—
Total deferred tax expense	$—	$—	$—
Total provision for income taxes	$ 6	$ —	$ 74

Income tax expense differed from the amount computed by applying the federal statutory income tax rate of 21% to pretax loss as a result of the following (in thousands):

	Year Ended December 31, 2019

	2017	2018	2019
Federal tax at statutory rate	$(2,721)	$(2,681)	$(1,039)
State income taxes, net of federal tax benefit	(10)	34	74
Stock-based compensation	186	246	411
Fair value adjustment on preferred warrants	345	320	(253)
Noncontrolling interests	—	(274)	956
Research and development credit	(143)	(300)	(372)
Tax Return to Tax Provision Adjustment	(658)	(480)	1,028
Federal revaluation of deferred tax due to tax reform	7,070	—	—
Change in valuation allowance	(4,117)	3,147	(844)
Other	54	(12)	113
Provision for income taxes	$6	$—	$74

Upstart Holdings, Inc.

`Notes to Consolidated Financial Statements`

The tax effects of temporary differences that gave rise to significant portions of the Company's deferred tax assets and liabilities related to the following (in thousands):

	December 31,	
	2018	2019
Deferred tax assets:		
Net operating loss carryforwards	$23,768	$17,180
Stock-based compensation	772	1,151
Accruals and reserves	585	313
Operating lease liabilities	—	4,961
Research and development credits	2,399	2,274
Investment in partnerships	—	775
Amortization	171	145
Servicing assets	481	120
Depreciation	12	—
Other	65	28
Total deferred tax assets	28,253	26,947
Less: valuation allowance	(21,800)	(20,720)
Deferred tax assets – net of valuation allowance	6,453	6,227
Deferred tax liabilities:		
Fair adjustment – residual certificates	6,218	1,165
Depreciation	—	354
Investment in partnerships	230	—
Right of use asset	—	4,708
Other	5	—
Total deferred tax liabilities	6,453	6,227
Net deferred tax assets	$—	$—

Management believes that, based on available evidence, both positive and negative, it is more likely than not that the deferred tax assets will not be utilized, and as such the Company maintains a full valuation allowance at December 31, 2019. The valuation allowance decreased by $1.1 million for the years ended December 31, 2018 and 2019, respectively, primarily as a result of current year activities.

As of December 31, 2019, the Company had approximately $61.3 million and $53.0 million of federal and state (post-apportioned) net operating losses, respectively, that will begin to expire in 2034. The Company also has federal and California research and development tax credits of approximately $2.0 million and $1.5 million, respectively. The federal research credits will begin to expire in 2032 and the California research credits have no expiration date. The Internal Revenue Code ("IRC") limits the amount of net operating loss carryforwards that a company may use in a given year in the event of certain

cumulative changes in ownership over a three-year period as described in Section 382 of the IRC. Utilization of net operating loss carryforwards and credits may be subject to a substantial annual limitation due to the ownership change limitations provided by the IRC, as amended, and similar state provisions. The annual limitation may result in the expiration of net operating losses and credits before utilization. The Company performed an ownership analysis and identified two previous ownership changes in 2013 and 2015, as defined under Section 382 and 383 of the IRC, however neither resulted in a material limitation that will reduce the total amount of net operating loss carryforwards and credits that can be utilized.

A reconciliation of the beginning and ending balances of gross unrecognized tax benefits is as follows (in thousands):

	Year Ended December 31,		
	2017	2018	2019
Balance at beginning of year	$286	$448	$697
Additions for tax positions of prior years	—	—	69
Tax positions related to the current year	162	249	265
Balance at end of year	$448	$697	$1,031

If recognized, substantially all of the balance would unfavorably affect the Company's effective income tax rate in future periods. As of December 31, 2019, the Company had $1.0 million in unrecognized income tax benefits and there were increases of $0.3 million to the Company's unrecognized tax benefits during the year. The Company does not anticipate any significant increases to unrecognized tax benefit during the next 12 months. The Company's policy is to classify interest and penalties associated with unrecognized tax benefits as income tax expense. The Company had no interest or penalty accruals associated with uncertain tax benefits in its consolidated balance sheet and consolidated statement of operations and comprehensive income (loss) for the tax year ended December 31, 2019.

The Company files income tax returns in the U.S. federal jurisdiction and various state jurisdictions and has identified its federal, California, and New York tax returns as "major" tax filings. The Company is not currently under examination by income tax authorities in federal or state jurisdictions. However, because the Company has net operating losses and credits carried forward in several jurisdictions, including the United States federal, California, and New York jurisdictions, certain items attributable to closed tax years are still subject to adjustment by applicable taxing authorities through an adjustment to tax attributes carried forward to open years. All tax returns will remain open for examination by the federal and most state taxing authorities for three years and four years, respectively, from the date of utilization of any net operating loss carryforwards or research and development credits.

For the nine months ended September 30, 2019 and 2020 (unaudited)

The Company's income tax provision for the nine months ended September 30, 2019 and 2020 reflects an estimate of the corresponding year's annual effective tax rate and includes, when applicable, adjustments for discrete items. The Company's provision for income taxes has not been historically significant to the business as the Company was in a cumulative loss position in prior years. The provision for income taxes consists primarily of state taxes in jurisdictions in which the Company conducts business.

The Company did not recognize any income tax expense for the nine months ended September 30, 2019 and 2020. As such, the Company's net effective tax rate is 0.0% for the nine months ended September 30, 2019 and 2020. The effective tax rate differs from the U.S. statutory tax rate primarily due to the valuation allowances on the Company's deferred tax assets as it is more likely than not that some or all of the Company's deferred tax assets will not be realized.

As of September 30, 2020, the Company retains a full valuation allowance on its deferred tax assets in the United States. The realization of the Company's deferred tax assets depends primarily on

its ability to generate taxable income in future periods. The amount of deferred tax assets considered realizable in future periods may change as management continues to reassess the underlying factors it uses in estimating future taxable income.

15. Related Party Transactions

Since the Company's inception, it has engaged in various transactions with its executive officers and directors, holders of more than 10% of its voting securities, and their affiliates.

Convertible Promissory Notes

In 2017, the Company issued $20.0 million of subordinated convertible promissory notes to two investors, of which $10.0 million was issued to a related party equity investor of the Company. On June 30, 2018, the outstanding principal and accrued and unpaid interest on the convertible promissory notes were converted into shares of Series C-1 convertible preferred stock. As such, no convertible promissory notes were outstanding as of December 31, 2018 and 2019, and September 30, 2020 (unaudited).

Securitization Transactions

The related party investor and its affiliates also participated in securitization transactions sponsored and serviced by the Company in the years ended December 31, 2017, 2018 and 2019, and nine months ended September 30, 2020 (unaudited) by contributing loans and purchasing securitization notes or residual certificates. As of December 31, 2018 and 2019, and September 30, 2020 (unaudited), the balance of payable to securitization note holders and residual certificate holders due to the related party investor and its affiliates was $61.4 million, $41.3 million, and $0 million, respectively.

Other Transactions

The Company's executive officers and non-officer directors participate on Upstart's platform by purchasing fractional interest in loans, which are included in notes payable on the Company's consolidated balance sheet as of December 31, 2018. As of December 31, 2019 and September 30, 2020 (unaudited), as a result of the deconsolidation of UNT, the notes payable is not included in the Company's consolidated balance sheets. The fair value of such notes payable purchased by executive officers and non-officer directors and included in the consolidated balance sheets were $2.4 million as of December 31, 2018 and $0 as of December 31, 2019 and September 30, 2020 (unaudited). Interest income and expense and servicing fees related to the notes payable held by the Company's executive officers and non-officer directors were immaterial in all periods presented.

16. Net (Loss) Income Per Share Attributable to Upstart Holdings, Inc. Common Stockholders

For periods in which the Company reports net losses, basic and diluted net loss per share attributable to Upstart Holdings, Inc.'s common stockholders are the same because potentially dilutive common shares are not assumed to have been issued if their effect is anti-dilutive.

Upstart Holdings, Inc.

Notes to Consolidated Financial Statements

The following securities were excluded from the computation of diluted net loss per share attributable to Upstart Holdings, Inc. common stockholders for the periods presented, because including them would have been anti-dilutive (on an as-converted basis):

	Year ended December 31,			September 30,	
	2017	2018	2019	2019	2020
				(unaudited)	
Convertible preferred stock	35,445,012	46,882,877	47,349,577	47,627,408	47,349,577
Options to purchase common stock	11,920,884	12,293,165	16,502,206	14,656,713	19,356,042
Warrants to purchase convertible preferred stock	1,500,519	1,500,519	600,208	1,200,416	600,208
Warrants to purchase common stock	1,467,553	1,617,553	319,669	319,669	319,669
Total	50,333,968	62,294,114	64,771,660	63,804,206	67,625,496

Unaudited Pro Forma Net Loss Per Share Attributable to Upstart Holdings, Inc. Common Stockholders

The following table sets forth the computation of the Company's unaudited pro forma basic and diluted net loss per share attributable to Upstart Holdings, Inc. common stockholders (in thousands, except share and per share data) assuming the automatic conversion of the convertible preferred stock and net exercise of the convertible preferred stock warrants into common stock upon consummation of an IPO as if such an event had occurred as of the beginning of the respective period, or the issuance date of the convertible preferred stock, if later:

	Year Ended December 31, 2019	Nine Months Ended September 30,2020
Numerator		
Net (loss) income attributable to Upstart Holdings, Inc. common stockholders	$(466)	$—
Add: Change in fair value of convertible preferred stock warrant liability	4,301	1,792
Add: noncumulative dividends on convertible preferred stock	—	4,956
Net income used in calculating pro forma earnings per share attributable to common stockholders, basic and diluted	$3,835	$6,748
Denominator		
Weighted-average common shares outstanding used to calculate net income per share attributable to Upstart Holdings, Inc. common stockholders, basic	14,335,611	14,663,623
Pro forma adjustment to reflect assumed conversion of convertible preferred stock	47,349,577	47,349,577
Pro forma adjustment to reflect assumed net exercise of convertible preferred stock warrants		
Weighted-average number of shares used to compute pro forma net loss per share attributable to Upstart Holdings, Inc. common stockholders, basic		
Pro forma net income per share attributable to Upstart Holdings, Inc. common stockholders, basic		
Weighted-average number of shares used to compute pro forma net loss per share attributable to Upstart Holdings, Inc. common stockholders, diluted		

Pro forma net income per share attributable to Upstart Holdings, Inc. common stockholders, diluted	$$

Upstart Holdings, Inc.

Notes to Consolidated Financial Statements

17. Subsequent Events

Subsequent Events (audited)

The Company has evaluated the impact of events that have occurred subsequent to December 31, 2019, through March 3, 2020, the date at which the consolidated financial statements as of and for the years ended December 31, 2017, 2018 and 2019 were available to be issued. Based on the evaluation, the Company has determined no subsequent events were required to be recognized or disclosed.

Subsequent Events (unaudited)

The Company has evaluated the impact of events that have occurred subsequent to September 30, 2020, through November 4 2020, the date at which the consolidated interim financial statements as of September 30, 2020 and for the nine months ended September 30, 2019 and 2020 were available to be issued. Based on the evaluation, the Company has determined no subsequent events were required to be recognized or disclosed except the matter below.

In October 2020, the Company paid down $13.5 million on the UWT Warehouse Credit Facility. On November 2, 2020, the Company paid in full the remaining outstanding borrowings and accrued interest under the UWT Warehouse Credit Facility of $4.0 million. The UWT Warehouse Credit Facility had an original maturity date of May 21, 2021. The Company terminated the UWT Warehouse Credit Facility in November 2020.

^^ Upstart

Part Ii

Information Not Required in Prospectus

ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth all expenses to be paid by us, other than underwriting discounts and commissions, upon completion of this offering. All amounts shown are estimates except for the SEC registration fee, the FINRA filing fee and the exchange listing fee.

	Amount to bePaid
SEC registration fee	$10,910
FINRA filing fee	13,500
Exchange listing fee	*
Printing and engraving expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Transfer agent and registrar fees	*
Miscellaneous expenses	*
Total	$ *

* To be filed by amendment.

ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Section 145 of the Delaware General Corporation Law authorizes a corporation’s board of directors to grant, and authorizes a court to award, indemnity to officers, directors, and other corporate agents.

We expect to adopt an amended and restated certificate of incorporation, which will become effective immediately prior to the completion of this offering, and which will contain provisions that limit the liability of our directors for monetary damages to the fullest extent permitted by Delaware law. Consequently, our directors will not be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duties as directors, except liability for the following:

- any breach of their duty of loyalty to our company or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; or

- any transaction from which they derived an improper personal benefit.

Any amendment to, or repeal of, these provisions will not eliminate or reduce the effect of these provisions in respect of any act, omission or claim that occurred or arose prior to that amendment or repeal. If the Delaware General Corporation Law is amended to provide for further limitations on the personal liability of directors of corporations, then the personal liability of our directors will be further limited to the greatest extent permitted by the Delaware General Corporation Law.

In addition, we expect to adopt amended and restated bylaws, which will become effective immediately prior to the completion of this offering, and which will provide that we will indemnify, to the fullest extent permitted by law, any person who is or was a party or is threatened to be made a party to any action, suit or proceeding by reason of the fact that he or she is or was one of our directors or officers or is or was serving at our request as a director or officer of another corporation, partnership, joint venture, trust or other enterprise. Our amended and restated bylaws are expected to provide that we may indemnify to the fullest extent permitted by law any person who is or was a party or is threatened to be made a party to any action, suit or proceeding by reason of the fact that he or she is or was one of our employees or agents or is or was serving at our request as an employee or agent of another corporation, partnership, joint venture, trust or other enterprise. Our amended and restated bylaws will also provide that we must advance expenses incurred by or on behalf of a director or officer in advance of the final disposition of any action or proceeding, subject to limited exceptions.

Further, we have entered into or will enter into indemnification agreements with each of our directors and executive officers that may be broader than the specific indemnification provisions contained in the Delaware General Corporation Law. These indemnification agreements require us, among other things, to indemnify our directors and executive officers against liabilities that may arise by reason of their status or service. These indemnification agreements also require us to advance all expenses incurred by the directors and executive officers in investigating or defending any such action, suit or proceeding. We believe that these agreements are necessary to attract and retain qualified individuals to serve as directors and executive officers.

The limitation of liability and indemnification provisions that are expected to be included in our amended and restated certificate of incorporation, amended and restated bylaws, and the indemnification agreements that we have entered into or will enter into with our directors and executive officers may discourage stockholders from bringing a lawsuit against our directors and executive officers for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against our directors and executive officers, even though an action, if successful, might benefit us and other stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and executive officers as required by these indemnification provisions. At present, we are not aware of any pending litigation or proceeding involving any person who is or was one of our directors, officers, employees or other agents or is or was serving at our request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, for which indemnification is sought, and we are not aware of any threatened litigation that may result in claims for indemnification.

We have obtained insurance policies under which, subject to the limitations of the policies, coverage is provided to our directors and executive officers against loss arising from claims made by reason of breach of fiduciary duty or other wrongful acts as a director or executive officer, including claims relating to public securities matters, and to us with respect to payments that may be made by us to these directors and executive officers pursuant to our indemnification obligations or otherwise as a matter of law.

Certain of our non-employee directors may, through their relationships with their employers, be insured or indemnified against certain liabilities incurred in their capacity as members of our board of directors.

The underwriting agreement to be filed as Exhibit 1.1 to this registration statement will provide for indemnification by the underwriters of us and our officers and directors for certain liabilities arising under the Securities Act or otherwise.

ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES.

Since January 1, 2017, we have issued the following unregistered securities:

Convertible Promissory Note Issuances

In September 2017, we issued subordinated convertible notes in the aggregate principal amount of $20.0 million in a private placement. We refer to these notes as the 2017 convertible notes. The 2017 convertible notes accrued interest at a rate equal to 8.0% per year. Each of these notes was converted on June 30, 2018 into shares of our Series C-1 preferred stock.

Warrant Issuances and Exercises

In July 2017, we issued a warrant to purchase a total of 31,554 shares of common stock to one accredited investor at an exercise price of $1.35 per share.

In September 2017, we issued warrants to purchase a total of 830,468 shares of preferred stock to two accredited investors at an exercise price of $3.612413 per share. Each of these warrants was terminated on June 30, 2018.

In October 2018, we issued warrants to purchase a total of 150,000 shares of common stock to two accredited investors at an exercise price of $2.16 per share.

Preferred Stock Issuances

From January 2017 through February 2017, we sold an aggregate of 307,825 shares of our Series C-1 convertible preferred stock to 3 accredited investors at a purchase price of $3.612413 per share, for an aggregate purchase price of $1.1 million.

From December 2018 to March 2019, we sold an aggregate of 5,788,697 shares of our Series D convertible preferred stock to 4 accredited investors at a purchase price of $9.000295 per share, for an aggregate of $54.1 million.

Common Stock Issuances

In September 2020, we sold 282,750 shares of our common stock to an accredited investor, as part of a strategic transaction.

Option Issuances

From January 1, 2017 through the filing date of this registration statement, we granted to our directors, officers, employees, consultants, and other service providers options to purchase an aggregate of 11,979,935 shares of our common stock under our equity compensation plans at exercise prices ranging from approximately $1.35 to $11.72 per share.

We believe the offers, sales, and issuances of the above securities were exempt from registration under the Securities Act (or Regulation D or Regulation S promulgated thereunder) by virtue of Section 4(a)(2) of the Securities Act because the issuance of securities to the recipients did not involve a public offering, or in reliance on Rule 701 because the transactions were pursuant to compensatory benefit plans or contracts relating to compensation as provided under such rule. The recipients of the securities in each of these transactions represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were placed upon the stock certificates issued in these transactions. All recipients had adequate access, through their relationships with us, to information about us. The sales of these securities were made without any general solicitation or advertising.

ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a) *Exhibits.*

See the Exhibit Index immediately preceding the signature page hereto for a list of exhibits filed as part of this registration statement on Form S-1, which Exhibit Index is incorporated herein by reference.

(b) *Financial Statement Schedules.*

All financial statement schedules are omitted because the information called for is not required or is shown either in the consolidated financial statements or in the notes thereto.

ITEM 17. UNDERTAKINGS.

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers, and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Exhibit Index

Exhibit Number	Description
1.1*	Form of Underwriting Agreement.
3.1	Amended and Restated Certificate of Incorporation of the registrant, as currently in effect.
3.2*	Form of Amended and Restated Certificate of Incorporation of the registrant, to be in effect upon completion of this offering.
3.3	Bylaws of the registrant, as amended, as currently in effect.
3.4*	Form of Amended and Restated Bylaws of the registrant, to be in effect upon completion of this offering.
4.1*	Form of common stock certificate of the registrant.
4.2	Amended and Restated Investors' Rights Agreement among the registrant and certain holders of its capital stock, amended as of December 31, 2018.
4.3	Form of warrant to purchase Series B preferred stock.
4.4	Form of warrant to purchase common stock.
5.1*	Opinion of Wilson Sonsini Goodrich & Rosati, P.C.

10.1+*	Form of Indemnification Agreement between the registrant and each of its directors and executive officers.
10.2+*	Upstart Holdings, Inc. 2020 Equity Incentive Plan and related form agreements.
10.3+	Upstart Holdings, Inc. 2012 Stock Plan and related form agreements.
10.4+*	Upstart Holdings, Inc. Employee Incentive Compensation Plan.
10.5+*	Upstart Holdings, Inc. 2020 Employee Stock Purchase Plan.
10.6+*	Upstart Holdings, Inc. Executive Change in Control and Severance Policy and related participation agreements.
10.7+*	Upstart Holdings, Inc. Outside Director Compensation Policy.
10.8	Sub-Sublease Agreement, dated April 1, 2019, between Bay Meadows Station 3 Investors, LLC and Open Text Inc., Snowflake, Inc. and Upstart Holdings, Inc.
10.9	Amended and Restated Loan and Security Agreement, dated September 5, 2018, between Silicon Valley Bank, Upstart Holdings, Inc. and Upstart Network, Inc. amended as of October 22, 2018, August 14, 2019, June 30, 2020, October 1, 2020 and November 3, 2020.
10.10	Mezzanine Loan and Security Agreement, dated October 22, 2018, between Silicon Valley Bank, Upstart Holdings, Inc. and Upstart Network, Inc. amended as of June 30, 2020 and October 1, 2020.
10.11	Amended and Restated Revolving Credit and Security Agreement, dated May 22, 2020, between Upstart Loan Trust and Goldman Sachs Bank USA.
10.12	Revolving Credit and Security Agreement, dated May 23, 2018, between Upstart Warehouse Trust and Deutsche Bank AG, New York Branch, and Wilmington Savings Fund Society, FSB, amended as of August 3, 2018 and July 10, 2020.
10.13	Third Amended and Restated Loan Program Agreement, dated January 1, 2019, between Upstart Network, Inc. and Cross River Bank, as amended November 20, 2019.

Exhibit Number	Description
10.14	Third Amended and Restated Loan Sale Agreement, dated January 1, 2019, between Upstart Network, Inc. and Cross River Bank.
10.15	Amended and Restated Promotion Agreement, dated May 11, 2020, between Upstart Network, Inc. and Credit Karma Offers, Inc.
10.16	TransUnion Master Agreement for Consumer Reporting and Ancillary Services, dated March 20, 2015, between Upstart Network, Inc. and Trans Union LLC, amended as of July 20, 2015.
21.1*	List of subsidiaries of the registrant.
23.1	Consent of Deloitte & Touche LLP, Independent Registered Public Accounting Firm.
23.2*	Consent of Wilson Sonsini Goodrich & Rosati, P.C. (included in Exhibit 5.1).
24.1	Power of Attorney (included on page II-7).

* To be filed by amendment. All other exhibits are submitted herewith.

+ Indicates management contract or compensatory plan.

Signatures

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in San Mateo, California, on the 5th day of November, 2020.

UPSTART HOLDINGS, INC.	
By:	/s/ Dave Girouard
	Dave Girouard
	Chief Executive Officer

Power of Attorney (included on page II-7).

POWER OF ATTORNEY KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Dave Girouard, Sanjay Datta and Alison Nicoll, and each one of them, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in their name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to sign any registration statement for the same offering covered by this registration statement that is to be effective on filing pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and all post-effective amendments thereto, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement on Form S-1 has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Dave Girouard	Chief Executive Officer and Director	
Dave Girouard	(*Principal Executive Officer*)	November 5, 2020
/s/ Sanjay Datta	Chief Financial Officer	

Sanjay Datta	(*Principal Financial Officer*)	November 5, 2020
/s/ Natalia Mirgorodskaya	Corporate Controller	
Natalia Mirgorodskaya	(*Principal Accounting Officer*)	November 5, 2020
/s/ Paul Gu	Director	
Paul Gu		November 5, 2020
/s/ Mary Hentges	Director	
Mary Hentges		November 5, 2020
/s/ Oskar Mielczarek de la Miel	Director	
Oskar Mielczarek de la Miel		November 5, 2020

Signature	Title	Date
/s/ Ciaran O'Kelly	Director	
Ciaran O'Kelly		November 5, 2020
/s/ Sukhinder Singh Cassidy	Director	November 5, 2020
Sukhinder Singh Cassidy		
/s/ Robert Schwartz	Director	November 5, 2020
Robert Schwartz		
/s/ Hilliard C. Terry III	Director	November 5, 2020
Hilliard C. Terry III		