Commoditizing loan applications through technology while paving the way for big data investing

Building a better working world

Table of contents

1 **Foreword**
Page 1

2 **Alternative lending: who is playing the game?**
Page 3

2A **Alternative lending ecosystem**
Page 4

2B **Alternative lenders – not all are the same**
Page 7

2C **Growth and opportunity**
Page 8

3 **Operating model: capabilities enhanced through technology and data**
Page 11

3A **The borrower experience**
Page 12

3B **Investor considerations for a new asset class**
Page 21

4 **Challenges the industry faces**
Page 25

5 **Why financial institutions should be interested**
Page 27

6 **What does the future hold?**
Page 31

1 Foreword

Alternative lending refers to a growing industry of digitally based lending platforms for different borrowing needs, including consumer, small and medium enterprise (SME), student loans and mortgages. Within the last 10 years, this industry has emerged to become the subject of much discussion and speculation due to the technological innovations it uses to simplify and expand consumer access to capital, its stance on regulation, and the potential threat it presents to traditional financial institutions.

Alternative lending platforms provide an end-to-end loan experience through digital delivery, from application and origination to underwriting and servicing. Alternative lenders perform the credit underwriting process and approve or decline a loan application based on the borrower's risk score in near real time, relying heavily on proprietary algorithms and the collection of different sources of data directly from the borrower or third parties. The efficiency, scalability, reduced cost and digital capabilities provide clear differentiators to consumers when compared to a traditional bank, which could take multiple weeks for processing a loan.

As the industry matures, there is greater skepticism regarding whether this lending model can withstand a down cycle, increased regulatory oversight, challenges with the credit underwriting practices, as well as the operational challenges associated with scalability (e.g., internal controls, operational risk management and loan servicing). Also, since this industry hinges on everything digital, there are increasing concerns around cybersecurity and online fraud within the digital banking world.

Alternative lenders have built their base around a set of core competencies, which will continue to be key trends that sustain the sector's growth:

- Firms must continue to *simplify the borrower experience*, expanding to newer products and segments.
- *Big data and analytics* are the core resources to target underserved customers.
- *Lowering of funding costs* will remain essential to continue to offer competitive pricing, and turning the alternative lending asset class into a mainstream will be the best way of achieving this objective.
- As *bank partnerships* allow alternative lenders to expand their reach, they will need to complement their current offerings with other financial products if they are to become bank competitors instead of their service providers.

Traditional financial institutions must not be oblivious to the trends in this industry. From a market share perspective, alternative lenders may still be looked at as an insignificant threat, but the rate of change and growth alternative lenders are going through is worth a warning since it signifies opportunities to a large scope of financial institutions. Through partnerships, banks can strengthen their lending offerings, while wealth management firms can broaden their scope of products to offer holistic financial advice and incorporate loans to their customer base. Financial institutions must be aware of the following opportunities:

1. Financial institutions can enhance the lending client's experience, which currently is subpar when compared to alternative lenders who leverage real-time underwriting to fund a loan in under a day.
2. Wealth management firms and other financial institutions, which have traditionally not focused on lending, can broaden the scope of their offerings, providing holistic financial advice.
3. Financial institutions can expand their customer base, whether it is clients outside of their current risk frontiers or by focusing on millennials who will be the recipients of the next generational wealth transfer, addressing their current liability needs.
4. There is a fixed income investment opportunity that alternative lenders are generating through the creation of this new asset class, which has had positive returns even in the 2008–2009 market downturn.

This whitepaper takes a critical look at this industry from different angles — both the borrower perspective and investor perspective.

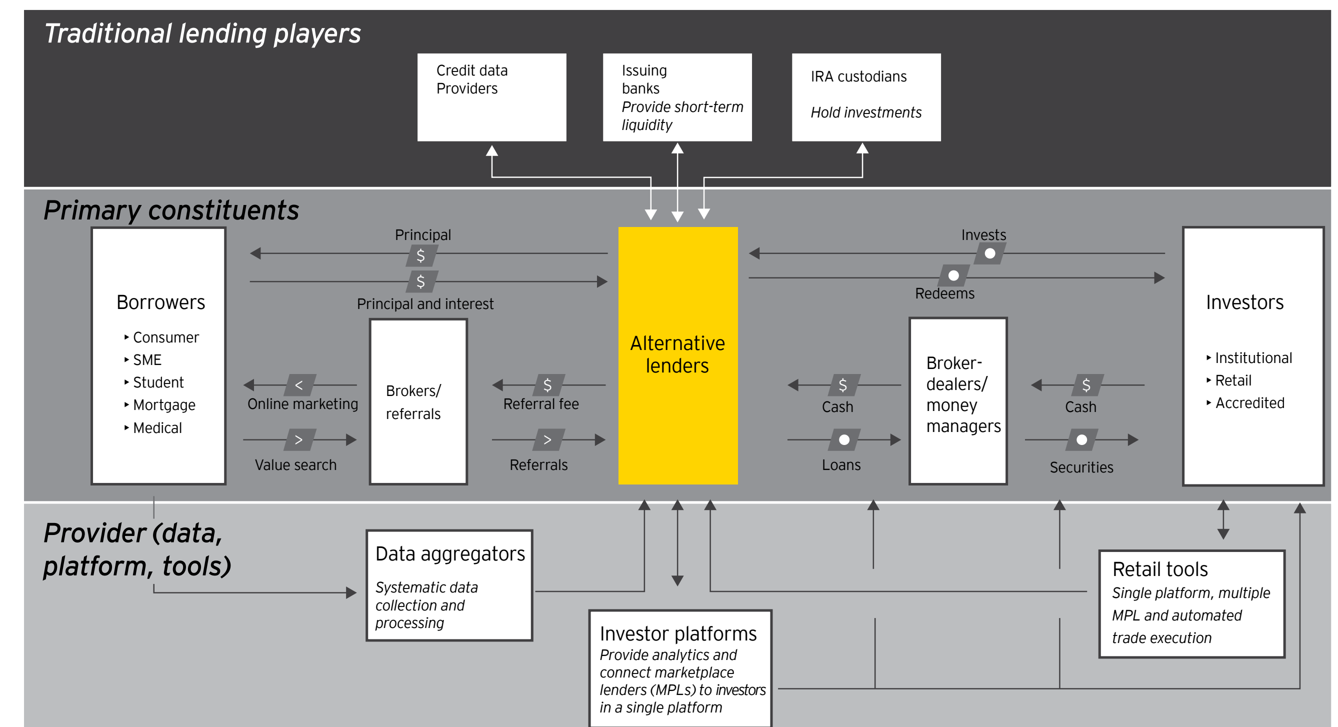
2 Alternative lending: who is playing the game?

2A.

Alternative lending ecosystem

The alternative lending ecosystem is defined by a large variety of players and participants, each of them playing a distinct role to connect borrowers and investors. This concept is essential to understand the industry's evolution and outlook, as innovations are emerging.

Figure 1. Alternative lending ecosystem



Traditional lending players

The current ecosystem cannot survive without traditional lending players since the issuing **banks** provide the liquidity necessary to meet the market demand for loans that are posted in the alternative lending platforms. Once a loan has been posted on a platform and, subsequently, investors have purchased the total sum of the loan, issuing banks provide borrowers with the full principal and investors instantly hold the loan.

In addition, alternative lenders develop their own methods of assessing credit risk. While the value of the credit profile comes from accurately weighing the data points, **credit data providers** such as Equifax and TransUnion amass critical data that is used by traditional banks and alternative lenders alike.

Furthermore, alternative lenders also rely on third-party custodians to hold their clients' investments. **IRA custodians** allow pure marketplace lenders to offer retirement accounts as investment products, where their retail clients' investments in loans can be administered.

Primary constituents

Foundationally, **alternative lenders** connect **borrowers** directly with **investors** through peer-to-peer (P2P) lending. An investor can buy the entirety or a fraction of a borrower's loan, who in turn may hold its debt with several investors. Meanwhile, other participants who act as intermediaries and facilitate access to both borrowers and investors have proliferated.

From the borrower's perspective, brokers/referrals are mostly made up of **commercial banks** and **exchanges**, who partner with alternative lenders to refer creditworthy borrowers (who may not meet the criteria to obtain a traditional loan) in exchange for a fee.

From the investor's perspective, **broker-dealers** and **money managers** are conduits of financing through structured securities with underlying loans that could be whole or fractional.

Providers (data, platform, tools)

Aside from alternative lenders themselves, other innovative players are fostering the use of analytics and technology that borrowers and investors benefit from. The evolution of third-party platforms and tools is making this industry very robust and more valuable by providing an additional layer of transparency, aggregation and analysis.

Through **data aggregators**, businesses that are seeking a loan can link their services accounts — such as Amazon, PayPal or Stripe — for alternative lenders to better calculate their respective risk profile. Creditworthy borrowers have an incentive to share as much data as possible, since the data itself can provide alternative lenders with more granularity that can potentially result in a reduction of interest rates and qualification for a higher loan size.

Investors have access to a variety of data points and **investor platforms** facilitate the access to this data. Moreover, they allow retail and institutional investors to connect with multiple marketplace lenders simultaneously. By creating an online environment for investors to browse through various marketplaces, investor platforms are offering marketplace lenders the opportunity to further diversify their capital structure while helping investors to better allocate capital by leveraging data analytics and portfolio benchmarking.

The process of purchasing a single loan originated by a marketplace lender remains time-consuming for retail investors. As a result, **retail tools** have emerged to allow investors to scale the amount of capital invested (and re-invested) efficiently. These tools are allowing users to tailor individual strategies and pick loans automatically, offering technology-driven substitutes that scale investments and simultaneously facilitate flexible investment strategies through automated trade executions.

Alternative lenders remain nimble and cost efficient by leveraging analytics and open architecture to integrate with third parties.

2B.

Alternative lenders – not all are the same

Alternative lenders can be broadly segmented across two different dimensions: **borrowers served and funding model.**

1. Borrowers served

- ***SMEs***: Lenders like OnDeck, Funding Circle or Kabbage position themselves to primarily serve SMEs, providing borrowers with the liquidity necessary to purchase inventory, expand the workforce or even refinance debt. Early entrants like LendingClub that benefit from having a longer track record are progressively adding SMEs as a borrower segment, though without a significant impact to this date.
- ***Individuals***: Alternative lenders focused on individual's market-specific products, mainly consumer loans (LendingClub, Prosper and Avant) and student loans (SoFi and CommonBond), with a growing offer on mortgages, and diversify their offerings to serve their customers holistically.

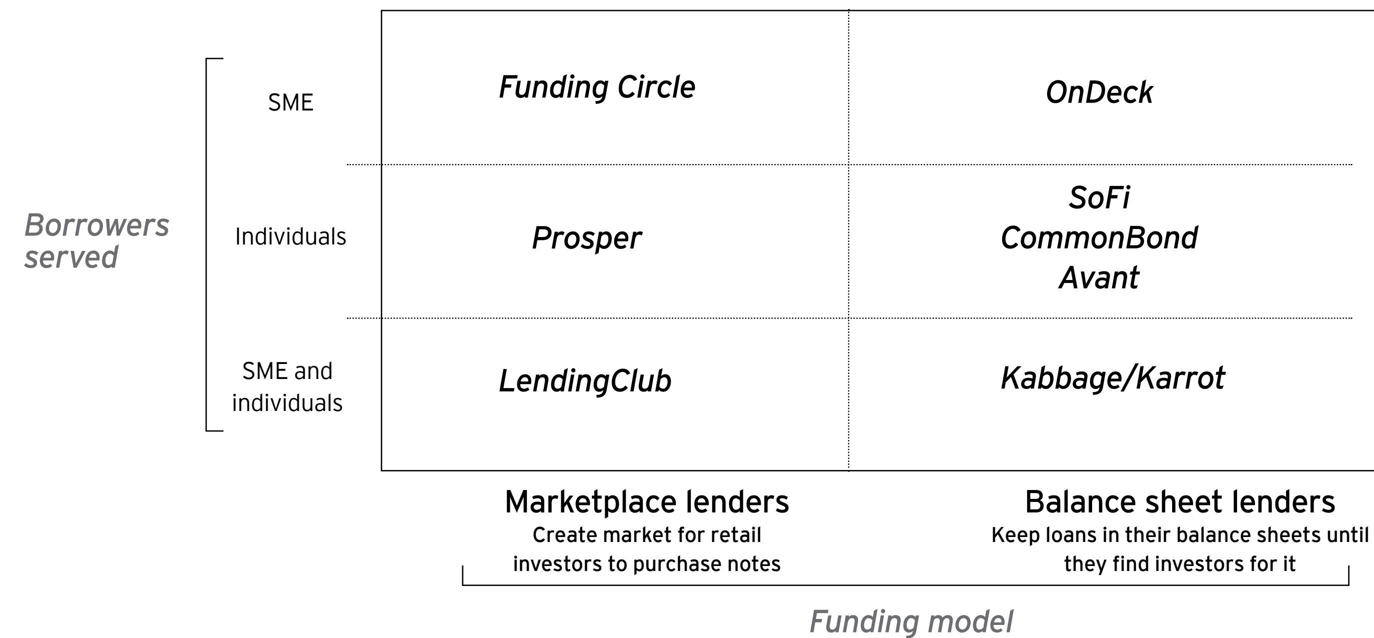
2. Funding model

- **Marketplace lenders** seek to transfer the risk of holding the loans from one party to another.
- **Balance sheet lenders** bear the risk of holding the loans on their books, though for a limited period of time, reducing exposure.

Throughout this paper, the terms *marketplace lenders* and *balance sheet lenders* — separate types of alternative lenders — will not be used synonymously as their distinctions will be discussed.

A distinct type of firm are lending-as-a-service (LaaS) providers, which offer risk assessment and underwriting on-demand to stores or brands that want to offer loans while outsourcing the processes to do it. Some of them may also offer the funding. These firms are also emerging players in the alternative lending space, but will not be called out specifically throughout this paper since most alternative lenders have started to also enter this type of business model through partnerships, which will be addressed later on.

Figure 2. Segmentation of alternative lenders



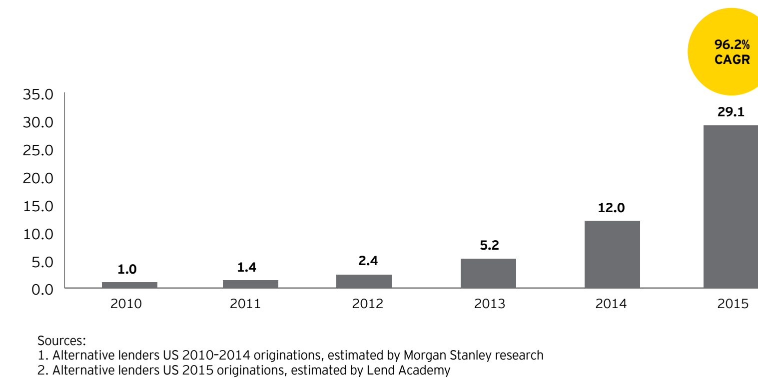
Sources:
Based on EY research

2C.

Growth and opportunity

How has the market grown?

Figure 3. Total US alternative lenders loan originations ($b)



Sources:
1. Alternative lenders US 2010–2014 originations, estimated by Morgan Stanley research
2. Alternative lenders US 2015 originations, estimated by Lend Academy

With an estimated $29.1 billion originated in the US market by leading alternative lenders in 2015 alone, the online lending space has been growing consecutively for the past five years in part due to its focus on underserved markets.

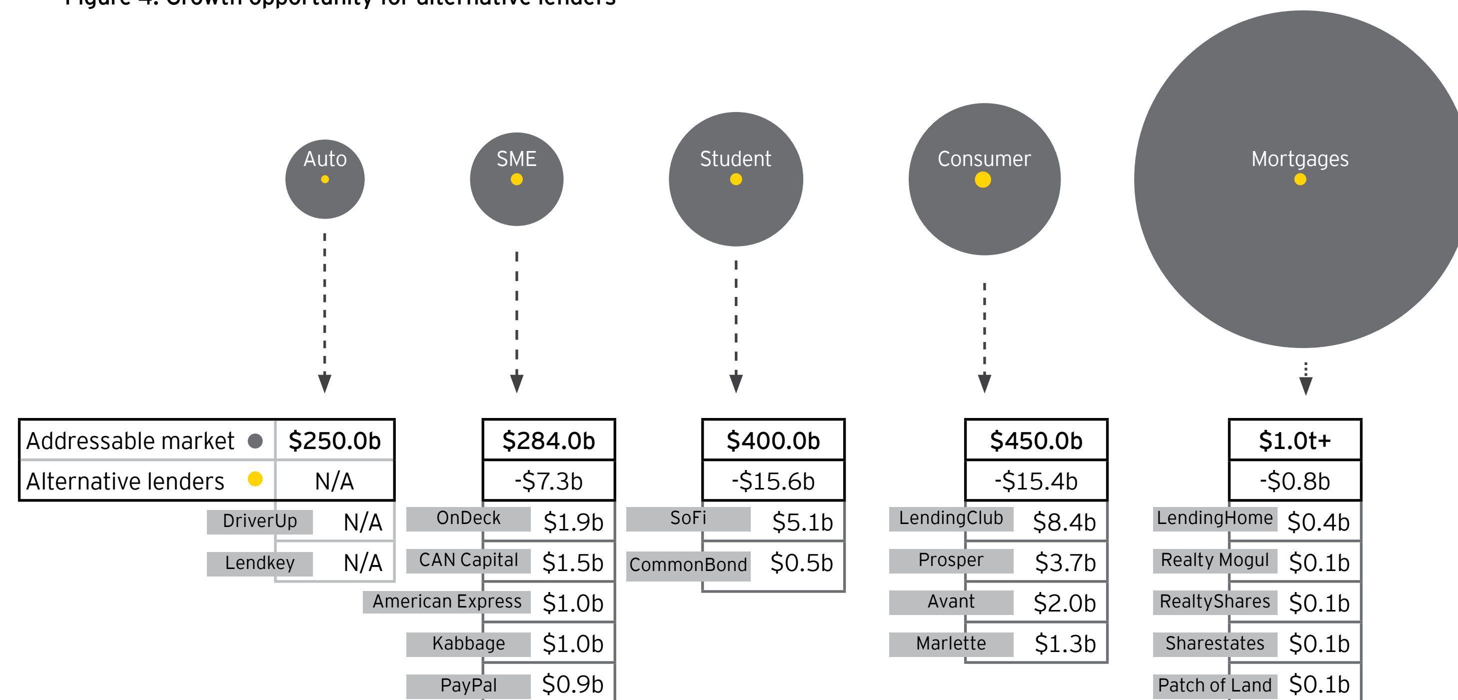
Alternative lenders are issuing loans to the following underserved markets:

- ***Consumers seeking to consolidate debt*** at more competitive market rates than their current debt balances
  - ***Case in point:*** A survey conducted by LendingClub highlights that borrowers who took out a personal loan through the platform aiming to pay off high-interest credit cards or consolidate debt were able to save an average of 32% in interest.[1] Borrowers surveyed reported an original outstanding debt with an average interest rate of 20.60%, compared to the 14.00% rate received from LendingClub. The average loan size was $13,000 to $17,000.
- ***SMEs whose business size and loan amounts are considered too low*** to be profitable for banks
  - ***Case in point:*** Online lenders continue to reduce the barriers to entry for SMEs by offering loan amounts and annual revenue minimums at low terms. Kabbage offers loans as low as $2,000 and requires annual revenue minimums of only $50,000. The larger, more established OnDeck offers $5,000 loans and sets its minimum annual revenue requirement at $100,000.
- ***Mispriced students with low probabilities of default*** who received standardized government-issued loan rates that don't accurately assess creditworthiness
  - ***Case in point:*** SoFi and CommonBond have adopted a strategy of targeting super-prime borrowers who typically have a credit score in the mid-700s range, significantly reducing default rates. As of March 2016, Moody's claims that SoFi has only written off $1.8 million out of the nearly $6 billion originated to more than 100,000 clients.
- ***Risk-adjusted consumers and SMEs*** that, based on their risk profile, are being denied loans by banks, as they stand outside the bank's risk frontiers
- ***Case in point:*** Online lenders are offering risk-adjusted loans to consumers with minimum credit scores of 660, a debt-to-income ratio of up to 40% and minimum four years of employment experience. For SMEs, alternative lenders stretch to up to one year of business history and a minimum credit score of 500 for business owners.

Sources:
1. "LendingClub for Borrowers: A Complete Review," ***Magnify Money website***, www.magnifymoney.com/blog/personal-loans/lendingclub-review-borrowers-insiders-reveal578301843/, accessed May 2016.

Current share and opportunities

Figure 4. Growth opportunity for alternative lenders



Sources:

1. Smittipon Srethapramote et al, "Global Marketplace Lending Disruptive Innovation in Financials," ***Morgan Stanley Blue Paper***, May 2015.

2. Peter Renton, "Global Overview of Online Lending," presented at 2016 Lend Academy, San Francisco, US.

Through a targeted approach of serving the underserved market, the alternative lenders have been able to get a foothold in the lending market. However, in order to continue the high growth rate, they will need to differentiate themselves in multiple ways, including:

1	Continue to simplify the experience by making it faster and easier for borrowers to access capital	The digital infrastructure that is already facilitating the onboarding process for consumers and SMEs can also be designed to reduce critical pain points in the loan processes for new products, such as mortgages or car loans.
2	Qualify more underserved individuals and businesses using big data and analytics on prospect data	Many underserved segments are currently targeted, but there remain many others that have not been addressed by traditional financial institutions or alternative lenders. The length of credit or employment history are some of the limitations placed even by alternative lenders to their clients, leaving young individuals or recent immigrants out of the target population.
3	Offer competitive pricing while remaining profitable, through lowering of funding costs	Firms in the consumer lending space have effectively reduced operating ratios to 2% compared to a traditional bank's 5% to 7%. This allows them to offer competitive rates; however, the nature of marketplace lending makes it impossible for these firms to access cheap deposit funds. To truly lower funding costs, these firms will need to expand the sources of funding by making the asset class accessible through wire houses and financial advisors.
4	Gain access to larger groups of clients, supported by a holistic financial offering through partnerships	Partnerships with traditional financial institutions have taken place, initially to have banks as investors, and now with a growing number of firms looking to enhance their lending capabilities. This will likely expand to other types of firms, likely outside the financial services space. Though a safe alternative to enhance marketing efficiency, there is a risk for alternative lenders to shift their business model to business to business. If these firms do not want to become LaaS providers, they will need to develop complementary solutions to engage clients holistically.

3 Operating model: capabilities enhanced through technology and data

3A.

The borrower experience

Client acquisition channels: direct marketing and partnerships

Alternative lenders have effectively served various untapped markets, and have done this by creating business models where they outsource non-core functions and focus on excelling at those capabilities that will create a strong value proposition and bring the best possible user experience to their customers

As alternative lenders manage competing priorities to control spending and increase origination, they continually optimize client acquisition spend. Addressing specific customer segments requires an efficient targeting of prospective customers, particularly if the underwriting process has high rejection rates, which is more than 90% in the case of consumer loans.

There are two distinct marketing channels that are predominant across most alternative lenders: direct marketing and partnerships.

Direct marketing: This channel entails direct mail, online marketing, social media and sponsorships. In a business model that mostly leverages online components, direct physical mail is one of the few exceptions and is justified by its efficiency. Lending Club mails preapproved offers, which ultimately get approved on 50% of the cases. However, this method is far from arcane; the direct mail channel is supported by strong marketing analytics, which in cases like Prosper's, is entirely proprietary and optimizes marketing spend on a monthly basis. The overall goal is for alternative lenders to efficiently attract a broad eligible borrower set that is not necessarily just focused on the millennial segment.

Partnerships: Strategic partnerships are the fastest growing channels for the space, generating a strong source of referrals, with traditional banks as the most prominent example. Partnerships with JPMorgan Chase & Co. and Intuit drive more than 80% of the referral customer volume for OnDeck. (Incentives for banks will be addressed at a later section.) Partnerships further enhance the efficiency of alternative lenders' own acquisition channels. A co-branded email between an alternative lender and a bank targeting a prospective customer is three times more effective than a stand-alone email from the same alternative lender. Universal or well-known traditional banks are not the only segment that alternative lenders target for future partnerships. Firms such as Kabbage and OnDeck have indicated they are continually speaking to 18 to 25 community, regional and superregional banks about potential partnerships.

The unpaid avenue, such as organic web search, is also a strategy. Referrals are common among alternative lenders. Applicants rejected from one platform will be suggested to access others, as is the case with customers who apply for Lending Club loans and receive recommendations to apply for a loan at Avant, which targets subprime borrowers.

This model is supported by the user experience, resulting in more than 50% repeat customers. High repeat customers have helped to lower acquisition costs for the firm.

Alternative lenders face challenges in maximizing leads without sacrificing time and credit quality, as these competing tensions need to be optimized continuously to preserve credit and further improve underwriting standards.

For an alternative lender perspective, partnerships help acquire the right customers more cost effectively, but they may dilute the alternative lender's brand in the process. The challenge lies in finding the right balance and remaining top of mind to the customer.

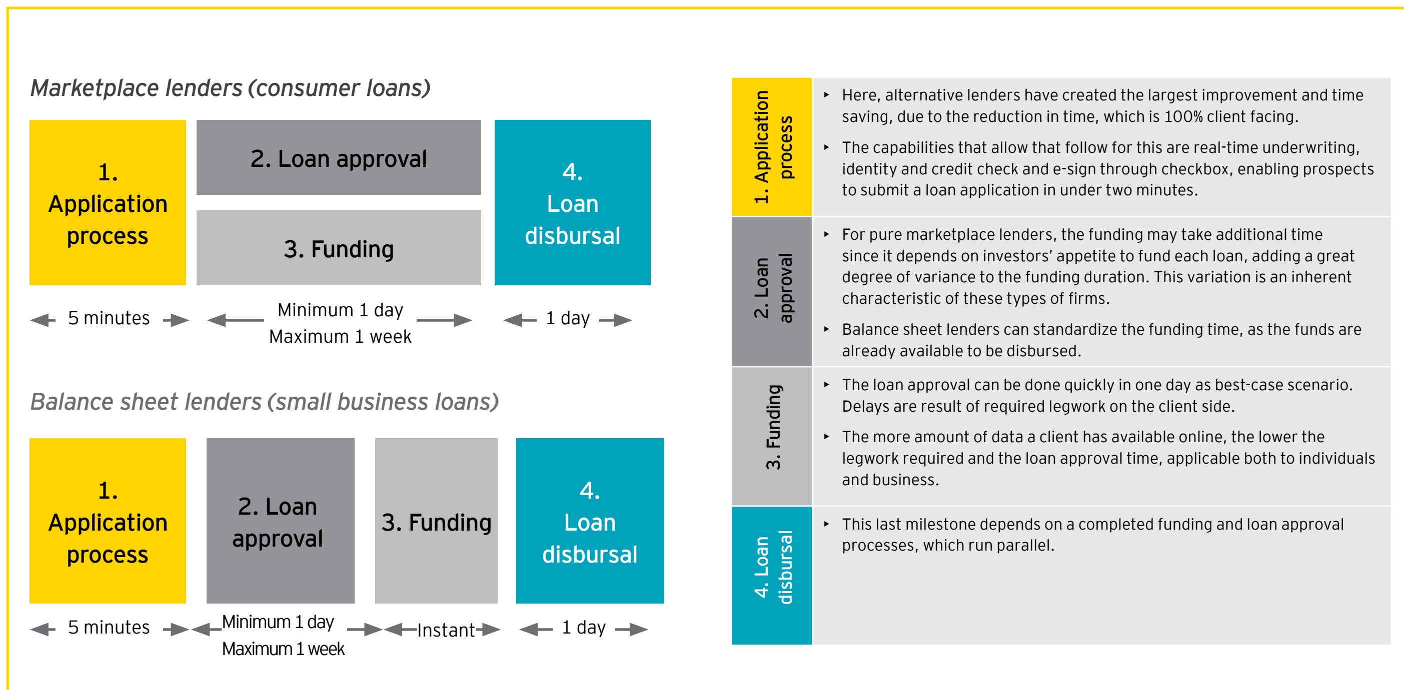
Loan origination process

Alternative lending platforms provider users with a quick and seamless experience – a core element of their value proposition – allowing prospects to get a loan through a fast, paperless experience.

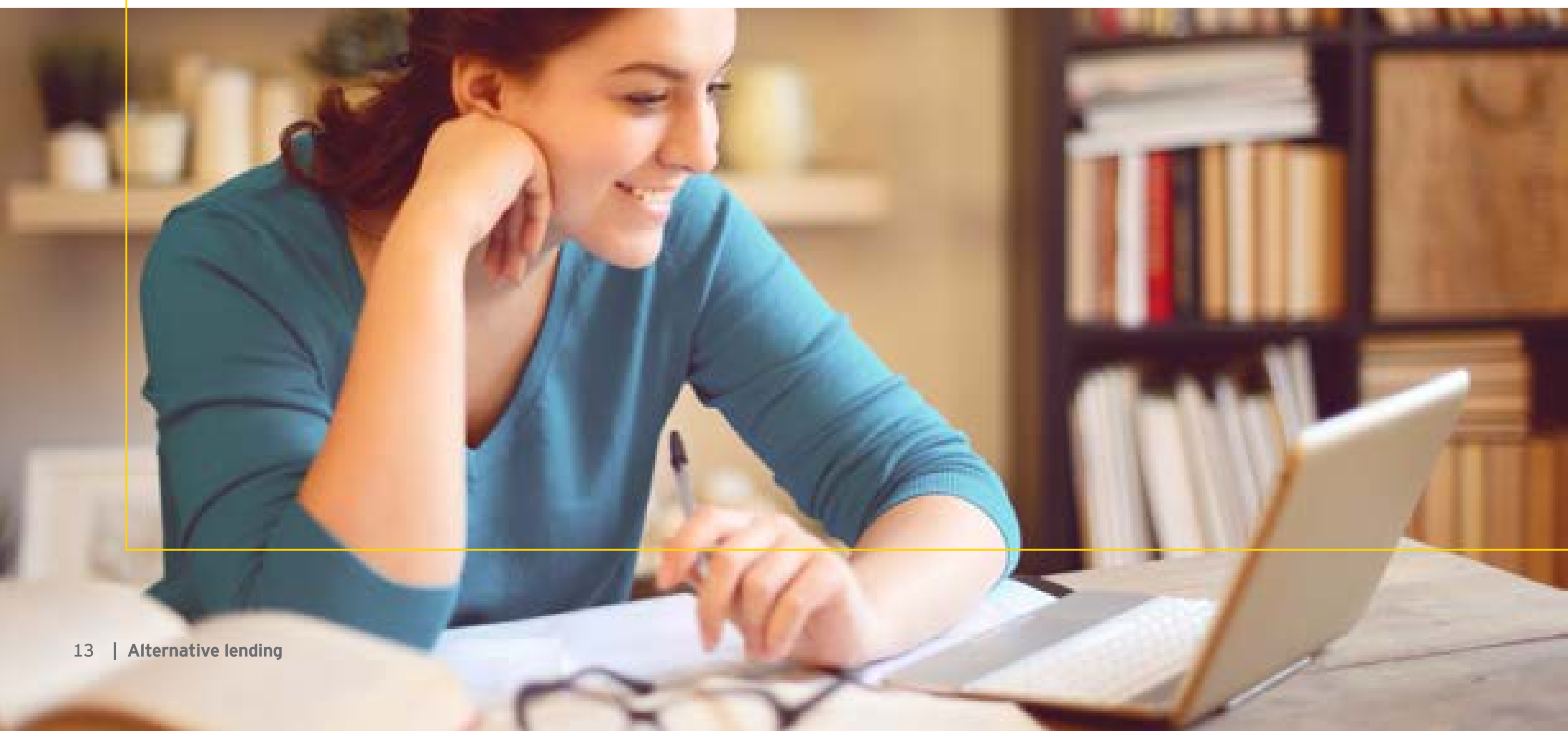
The system design results in quick funding (within five days) in most successful cases, which can be as quick as 24 hours for more traditional, plain vanilla loans. Kabbage is marketing to consumers its ability to achieve "seven minutes to money." However, for marketplace lenders, there may be a high variance to this duration, as the process may take up to 14 days[2] for different segments of its customers.

The process has four distinct components: the customer submitting the application, the platform's approval, funding of the loan and the ultimate loan disbursal.

Figure 5: Loan origination process



2. Lending Club Borrower Agreement, www.lendingclub.com/info/borrower-agreement.action, accessed July 2016.



1. Application process

Alternative lenders have created a two-step model for individual and SME borrowers: a preliminary soft credit check that seeks an initial amount of client information and results in an estimated loan amount and rate. Clients who accept and are satisfied with the proposed amount and rate will go through a credit check (affecting their credit score) and see the final loan offer. The process relies heavily on proprietary real-time underwriting and identity checking capabilities to create a seamless experience, which takes between 5 to 10 minutes.

The platform then assigns a grade to the loan, and in the case of marketplace lenders, publishes it so investors can fund it based on their risk appetite.

2. Loan approval

The loan approval process, aside from the underwriting component during the application (see "Underwriting" section below for underwriting details), relies mostly on the availability of information and documentation the client must provide to validate their financial situation.

At this stage, clients must have their bank accounts linked, which means providing the bank's account and routing number or providing access through aggregators by entering username and password. Depending on the firm, this may be requested up front in the application; however, no loans are approved without linking the account, as this is the means to disburse the loan and deduct monthly payments. If the linking of the bank account is done without third-party aggregators, a confirmation step (validating a trial deposit in the bank account) adds one day to the process.

In the case of businesses, their creditworthiness is assessed based on non-financial business data supplemented with non-traditional data points such as reputation, business volume, seasonality, and inflows and outflows. This also includes social media data and Amazon. According to the platforms, businesses that have a strong social media footprint and a high number of customers through this channel are less likely to default or commit fraud. Shipment, accounting and business cash flow, through linkage of UPS, QuickBooks™ and PayPal, are additional examples of the information that firms like Kabbage access by having loan applicants connect their business accounts to the loan applications.

Income validation is necessary for loan approval in loans to individuals. For several customers, this happens in an automated fashion: customers employed at large firms have their income validated quickly and easily. However, this is not the case for approximately 50% of loan applicants. Thus, alternative lenders need to contact employers via phone to validate salary or request proof of income from those individuals who lack a regular income stream.

The overall loan approval process typically takes 24 hours or less for consumer and SME customers, and may extend to 48 hours for student loans, which require additional documentation for review. The mortgage loan process has enormous opportunities for improvement, as it can take between 25 and 30 days.[3]

3. SoFi Company Demo, Aimee Young, 2015 Lend Academy Conference, New York, US.

3. Funding

The funding step is the reason for the variation in the length of the origination process. For balance sheet lenders, the funding process takes under a day as these firms have the available funds in place for every loan they approve. On the other hand, marketplace lenders depend on investor appetite to fund the loans.

Lending Club states that 1% of the loans do not get completely funded, but it is worth examining listings to see how long it can take for different loans. For a Lending Club listing of little more than 1,800 loans,[4] 25% of borrowers had listed their loans more than a week ago and had not funded 60% of the loan. The funding process can be largely disparate for different customers applying to the same marketplace lender, as the time in which the loan is funded will vary depending on the client. A loan must be funded (approximately 60%) within 30 days for it to be issued to a borrower. If the loan does not reach the 60% funding threshold, Lending Club will offer the funded amount and the option to list a new application for the remaining unfunded amount. Once the funds are available, the disbursal relies on having a client's bank account linked to deposit the funds.

The loan approval and funding process must be initiated simultaneously in order to reduce a customer's wait time. If funding is obtained faster than the loan approval, there is waiting time for the client until disbursement. Given the variable length of both the funding and loan approval process, either step can be part of the critical path depending on the client's situation.

4. Loan disbursal

Loan disbursal, which is the final step, simply means making the funds accessible to the client. Since clients' bank accounts have been linked in prior steps, there are no additional steps other than transferring the money to the client.

Underwriting

Prosper President Ron Suber has called underwriting the "secret sauce" for alternative lenders. Though the recipe remains a secret, it is possible to identify a set of enhancements being made to the underwriting process.

Objective

While traditional banks' underwriting rules seek to approve loans that will not risk the FDIC insured deposits funding them, the objective for alternative lenders is to create an asset class with predictable returns. Alternative lenders will accept riskier loans than banks, offering higher returns at the risk of higher defaults. However, the decision process must still confirm adherence to strict underwriting standards in order to effectively predict default rates, to make sure investors know what they are investing in.

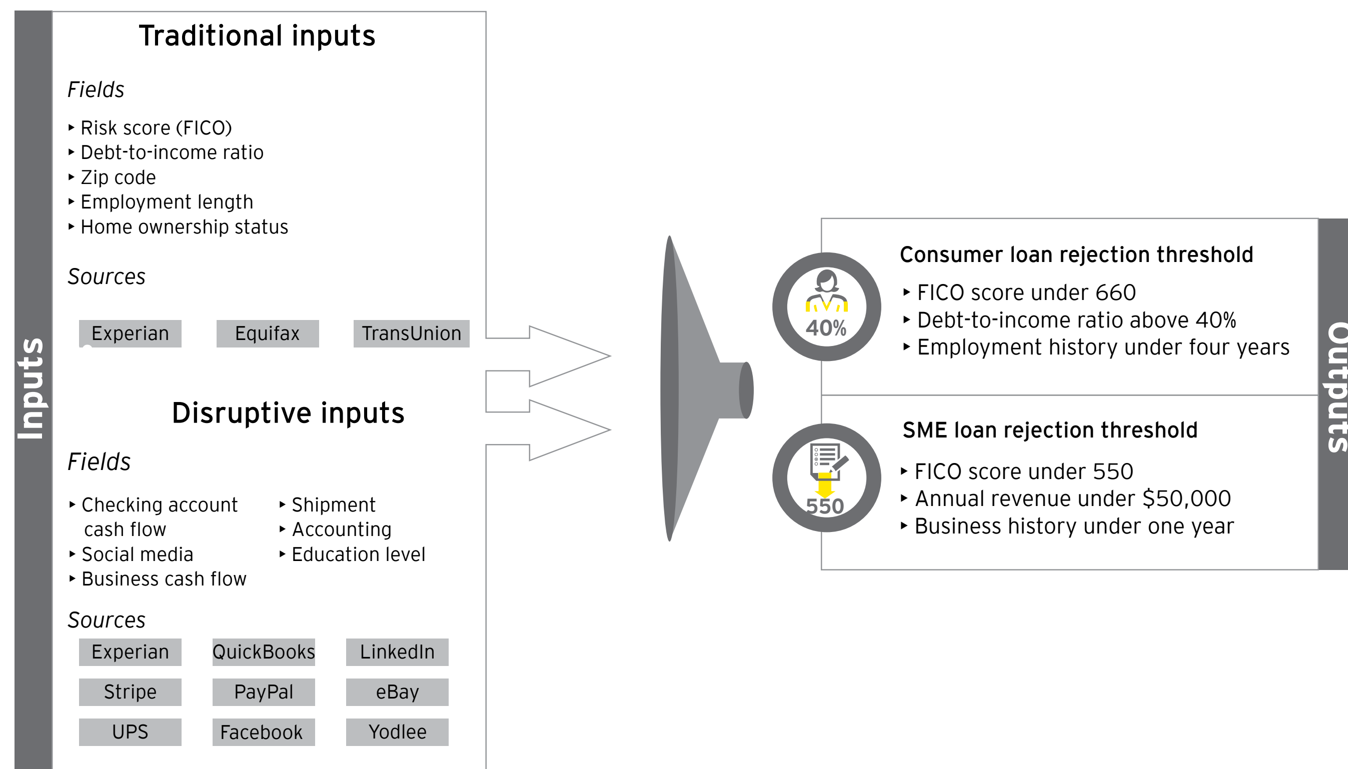
Partnerships between alternative lenders and banks help make this evident. Using the alternative lender's underwriting system, loans are issued usually under the bank's brand. However, the bank does not house all loans on its balance sheet, only those up to a probability of default that they are willing to keep, while the alternative lender will offer the rest to investors. Lending Club states they approve loans such that in a worst-case scenario crisis, similar to 2008–2009, investors will obtain net zero returns. The firm does not approve borrowers with FICO score under 660. In spite of riskier borrowers, rejection rates amounted to more than 90% in 2015, which has been growing due to an increased number of applications with low FICO scores.

Process

In terms of the underwriting process, real-time underwriting is an essential element of these firms' value proposition. For SMEs, this is highly relevant: a loan issued today can be more valuable than a loan with a better rate issued in a week, taking into consideration the time value of money. Real-time underwriting minimizes fraud by leveraging third-party providers that deliver customer identification information through live data sources. Even in the case of partnerships, the platforms do not share the details behind the underwriting, as this is one of the key areas of competitive advantage.

4. EY Analysis, based on Lending Club loan listings, www.lendingclub.com/browse/browse.action accessed on May 5 2016.

Figure 6. Sample data attributes used for loan underwriting



Sources:

1. EY analysis based on LendingClub 2015 loan data, ***Lending Club website***, www.lendingclub.com/info/download-data.action, accessed July 2016.

2. Priyanka Prakash, "Kabbage vs. OnDeck Capital vs. PayPal — Who Offers the Best Short-Term Loans for Small Businesses?", ***FitSmallBusiness website***, http://fitsmallbusiness.com/kabbage-vs-on-deck-captial-vs-paypal/, accessed May 2016.

Inputs

The process inputs vary across products. Alternative lenders have started to use as much as 50 data points when modeling consumer loans, with firms that offer loans to SMEs using the largest number of inputs. Kabbage allows SMEs to link all of their sales data, business payments and analytics vendor information from sources such as Amazon, eBay, Square and PayPal, which creates a live connection of historical information about the firm seeking a loan. OnDeck leverages more than 2,000 data points to assess their clients' creditworthiness. In the case of student loans, lenders evaluate up front the degrees and universities of their loan applicants (and validate them), to try to predict near-zero default rates.

Of the various data inputs, several are the subject of controversy. In the first place, the general perception that social media can be extensively used to assess a client's risk is not always the case. SMEs may leverage data from businesses, but no firms in the consumer loans space currently do this in the US, as social media attributes do not provide the predictability needed to be included in underwriting models.

Another controversial item is the use of FICO scores. Some firms will use it and others don't, and both sides will share the same argument: their models are data driven, and the inclusion of (or lack of) FICO as an input to their underwriting model is a result of testing that input's predictive ability. Whether they use FICO or not, the difference to traditional banks is not just standardizing information into one indicator, but leveraging the extent of additional information that is useful to enhance predictability.

Lastly, there are inputs that cannot be used as firms would be incurring in discriminatory practices. Even though women are more likely to repay their debt, this cannot be used as a variable to assess default rates, in the same way that race, age, national origin and marital status cannot be used. However, alternative lenders can get away with one type of discrimination that banks cannot; since they do not leverage depositor money to issue loans, they do not fall under FDIC and Community Reinvestment Act jurisdiction, which bans discriminatory practices against low income areas.

Resources

Data scientists are designing and building statistical Bayesian models for credit decisions, in which the default probability for each given client is determined. These lending strategies and models are continuously developed and tested. Firms will have data science teams, developing models for acquisition to attract the right loan applicants, which will ultimately funnel through their underwriting models. These processes are designed in parallel, as targeting the wrong applicants who would ultimately not be approved by the underwriting process would result in inefficient marketing spend.

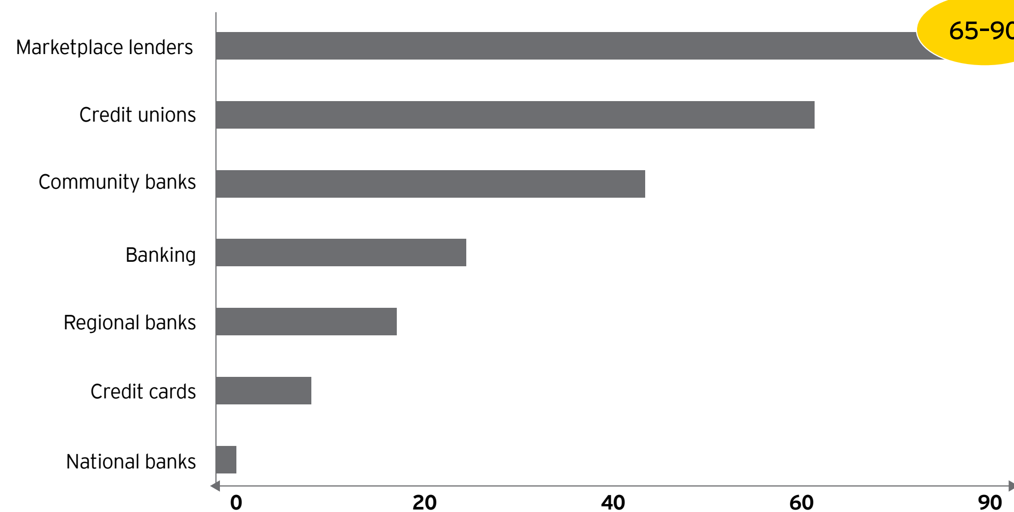
In all cases, the models will be proprietary. Firms may outsource the means of obtaining additional data and information associated to the loan applicants, but there is a clear incentive to run the underwriting models as it is a core competency.

Alternative lenders' underwriting quality, risk parameters and predictability indicators will continue to be scrutinized as the sector matures. Furthermore, their underwriting models continue to be a matter of public discussion when loans are securitized (see investor section).

Client support

Alternative lenders benefit from being able to provide a great customer experience, partially by issuing loans in minutes. They, however, also focus on providing excellent customer support, as evidenced by the high net promoter scores for marketplace lenders compared to the other financial services firms. Below are six dimensions employed by alternative lenders to create a superior customer experience.

Figure 7. Net Promoter Score



Source: EY research

1. **A Silicon Valley approach to client support** — Alternative lenders consider lending an engineering problem. Lending Club's call center reps are colocated with developers at their San Francisco office. This agile method confirms that customer issues are heard, and process or technology improvements (that may include software enhancements) are addressed in real time. The support staff also manages/documents incidents relating to application failures and works closely with development teams to resolve issues. If a customer experiences a technical glitch when signing into their account at an alternative lender, the customer chats with a representative, who indicates he or she will connect with the engineering team to address the issue. Within 24 hours, without any client follow-up, the representative contacts the customer to inform him or her that the issue is resolved. This real example makes evident the expediency with which changes are made, and what customers are growing to expect.
2. **Highly engaged and empowered employees** — Firms seek empathetic and knowledgeable graduates from top-tier schools to provide customer support. Lending Club's entire support staff hold four-year degrees, while CommonBond employs Ivy League graduates who have high empathy scores. The coaching process for new hires spans three months, and all staff members have remote access capabilities in the event they cannot work on-site.
3. **Specialists own and manage different parts of the service value chain** — OnDeck underwriters typically reach out to current and prospective borrowers regarding specific questions, concerns or issues during the origination process. Teams can be highly engaged with customers as needed. Account managers oversee the products' educational aspects and provide additional assistance to rejected customers. In addition, staffs at firms such as Lending Club are appropriately trained to oversee varying responsibilities. The company shifts its workers to address issues such as high loan defaults and encourage cross-pollination to be cost effective. Furthermore, Lending Club has a member support team that cross-trains staff on collection capabilities. Thus, in a downward economic cycle, the firm requires minimal ramp-up time to manage loan collections while other alternative lenders may outsource this capability to a third party.
4. **An experience even rejected applicants can recommend** — Alternative lenders have high rejection rates, which has the logical consequence of unsatisfied prospects. These firms cannot afford the cost of negative publicity. To solve for this, OnDeck has assigned decline counselors who provide detailed explanations behind the rejection coupled with educational content and recommendations to increase an applicant's future borrowing chances. CommonBond also notes that whenever there is a client complaint or loan decline, the customer support team immediately addresses any issues and/or provides a timely detailed response that results in positive customer feedback.
5. **Provide customer-centric services beyond issuing loans** — SoFi has gone beyond its initial offering of loans to provide automated financial advice, creating its own robo-advisor. Prosper bought BillGuard, a "financial wellness app," and rebranded it to Prosper Daily. It assists clients with budgeting, tracking spending and credit monitoring on a monthly basis. Both are offered free, and these services can be looked at from a client support lens.
6. **Creating and supporting a community** — Closely tied to a customer-centric focus, creating and supporting a community is a way to drive stronger engagement from clients. SoFi targets MBA graduates from top-tier business schools and further seeks to tackle the issue of high tuition rates among students through its "social networking program." The program seeks to help match customers with high-profile network connections for career coaching interview consultation or job placement assistance should a SoFi borrower lose his or her employment. Funding Circle provides a "How to grow your business" series to prospective customers. The above strategies seek to help borrowers, and in turn, minimize loan default risk for the lender. Beyond supporting the community, the industry also looks to provide meaningful relationships through its social missions. CommonBond promotes a one-for-one model for education where for each degree funded on the company's platform, the alternative lender funds a full year of tuition for an abroad student in need, incentivizing both clients and employees.

3B.

Investor considerations for a new asset class

The new asset class: current state

Momentum continues to build in the alternative lending space for both borrowers and investors alike. It is becoming possible for platforms to achieve previously unmatched supply and demand, creating value for investors. The exceptional growth of originations since 2013 is due, in large part, to a massive influx of institutional investor capital, with $1.5 billion worth of securitized loans sold to investors in the first quarter of 2016[5].

This trend raises the question of whether retail investing in alternative lending may also be a significant part of a viable investor model. Despite the technical implications associated with investing in what is a young and unique asset class, and the recent pullbacks in institutional capital, our insights reveal that the evolving operational environment is paving the way for wealth managers to potentially differentiate themselves by incorporating alternative lending investing in their clients' portfolios.

5. "Why Lending Club's move is a risky one," Jeremy Quittner, http://www.inc.com/jeremy-quittner/lending-club-move-to-bonds-may-be-too-late-to-bolster-share-price.html, accessed August 2016.

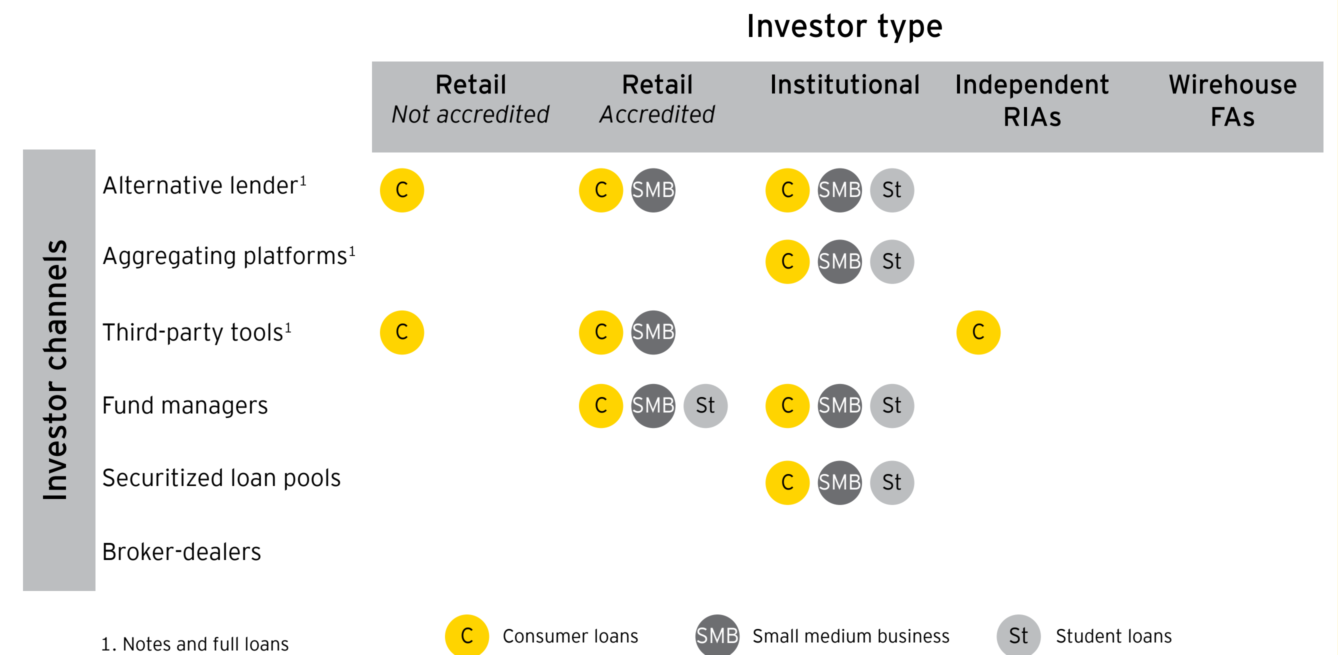
Though industry leaders opened their platforms a decade ago, alternative lending is still considered a new asset class. Industry leaders contend that the asset class should be a piece of an investor's fixed income allocation; nevertheless, traditional wealth managers still consider alternative lending an alternative investment due to the speculative, less liquid nature of the investment class. The asset class is evolving; whereas it started as a direct peer-to-peer marketplace, lenders have made investment offerings more robust. With improved investor access, liquidity and an established risk-return tradeoff, alternative lending is poised to become a mature asset class.

The investor channels add to the complexity of marketplace loans, as the unique nature of the direct platform channel further differentiates the asset class from the traditional fixed income space. First, the various methods to invest in the asset class are outlined below.

The marketplace lending industry was built on the concept of direct platform investing: peer-to-peer lending offered retail investors a universe of loans, which was both constrained by the lending platform and unconstrained by any other traditional metric. Higher yields have been one of the strongest arguments for this asset class, and industry leaders also point to the consumer loan vintages that remained profitable through the last recession. Though consumer loans are the only sub-asset class old enough to have been tested by a complete credit cycle, SME and student loan lenders still need to prove that their models can also sustain performance through recessions.

Moreover, early adopters self-selected loans in a highly manual experience, filtering and investing in more than 100 individual notes. These direct platform portfolios, while fully tailored to the individual investor, were time intensive to create and manage. As the asset class has grown, alternative lending investor platforms have evolved more robust offerings, including expanded securitized bond offerings.

Figure 8. Access to investor channels



Investor channels \ Investor type	Retail *Not accredited*	Retail *Accredited*	Institutional	Independent RIAs	Wirehouse FAs
Alternative lender[1]	C	C SMB	C SMB St		
Aggregating platforms[1]			C SMB St		
Third-party tools[1]	C	C SMB		C	
Fund managers		C SMB St	C SMB St		
Securitized loan pools			C SMB St		
Broker-dealers					

1. Notes and full loans

C Consumer loans; SMB Small medium business; St Student loans

Investor liquidity continues to limit investment in this asset class for many investors. Although LendingClub and Prosper have partnered with FOLIOfn to create a secondary market for their notes, secondary trade volume for either platform is minimal and the lack of an industry-wide secondary market hinders the maturation of the asset class. While direct platform liquidity is limited, securitized products provide increased liquidity, but at the trade-off of reduced yield and transparency. Beyond providing investors the ability to offload investments or raise needed cash, increased loan liquidity will go a long way in strengthening market pricing of alternative debt and increasing investment from traditional investors wary of the asset class.

While securitized product offerings provide increased liquidity and transactional ease, there is a trade-off of reduced transparency and increased fees for investors. Though the product pool is growing with more hedge funds and closed-end funds becoming available, access to the existing universe of securitized products is predominantly restricted to

accredited or qualified investors, leaving limited access for retail investors.

As previously noted, securitized marketplace loans offer increased liquidity, but the costs of bundling alternative debt in the early stages of this asset class still have a substantial impact on investor yield. However, the fourth quarter of 2015 saw over 30% of alternative lending securitization to date and a "five times increase in issuance from the corresponding quarter in 2014."[6] As securitization continues to grow, funding costs should decrease and the yield spread between direct platform and securitized investing should narrow.

Securitizations peaked during 2014, representing up to 18% of all funding, but have decreased in 2015 as a percentage of all issued loans, as alternative lenders try to diversify the source of funds.

6. "PeerIQ Marketplace Lending Securitization Tracker: 4Q 2015," ***PeerIQ website***, www.peeriq.com/peeriq-marketplace-lending-securitization-tracker-4q2015/, accessed July 2016.

With the securitization process have come agency ratings, not exempt from controversy, when Moody's downgraded Prosper securitizations in early 2016. While rating agencies claimed that credit downgrades are likely due to delinquency growth and higher charge-offs, alternative lending analytics providers, such as MonJa, have noted that loss curves remain consistent to prior years, showing no reason for ratings agencies to downgrade. Similar discussions arise when alternative lenders raise borrower interest rates, likely suggesting potential defaults.

Big data

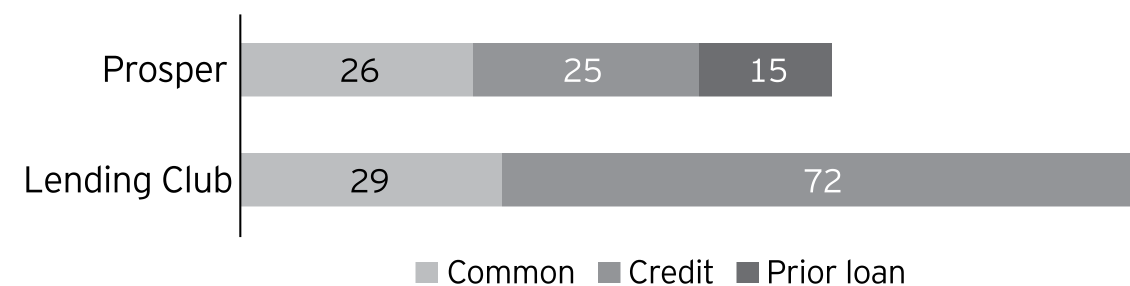
As an asset class, alternative lending is novel for its embrace of big data that enables high transparency, including the ability for investors to easily access underlying loan metrics, and dissect pools of funds to customize their portfolio. For a young asset class with a limited track record, the confluence of a transparent data set and modern analytical engines provides savvy investors the ability to evaluate and legitimize the alternative lenders' self-established ratings.

This volume of information, coupled with a continuously evolving underwriting process, was seized upon by early opportunistic investors. What started as advanced filtering (e.g., savvy investors realized that for identically graded loans repeat borrowers were getting lower default rates and higher ROI) has evolved into a secondary credit model. The early market inefficiencies are being commoditized by third-party service providers, as the requirements to crunch the amount of data available can be prohibitive to individual investors. Retail tools such as LendingRobot and NSR Invest have begun to make these secondary credit models available to retail investors, for a fee of 45 basis points to 60 basis points.

The big data element, though an advantage, can grow further in complexity if the investor chooses to invest in loans from different platforms. The analytical tools and automated investment rules need to be catered to each platform, as each lender offers a distinct set of data points. The complexity extends further with the diversification among asset classes, as SME loans offer significantly more data points than consumer loans.

The maturation of big data has fueled in great degree the opportunities for automated investment. With each note payment or maturation, the direct platform investor would need to evaluate and select the next investment pool. Without the analytical tools developed by institutional investors or the automated services, the average retail investor would be faced between choices of a time-consuming process of cherry-picking loans at a regular frequency or bearing the cash drag and associated diminishing return.

Figure 9. Investor data points for consumer loans



Operational considerations

Unlike other fixed income asset classes, investing in alternative lending requires investors to decide between purchasing notes directly from a lending platform or choosing from a limited, but growing, number of securitized offerings. The lack of both a mature secondary market and diverse product offerings creates an operational infrastructure need that continues to delay the adoption of marketplace lending by the traditional wealth management industry. Operational constraints become increasingly evident as investors pursue multiplatform and sub-asset class investment strategies.

While third-party providers (such as NSR Invest, LendingRobot and Orchard) offer services to close the operational gap for retail, institutional and wealth management investors, those services come at a cost.

Managing an alternative lending portfolio without third-party services at either the retail or institutional level across platforms requires extensive manual entry or expansive operational infrastructure. As each platform and sub-asset class provides unique loan data, both in format and information, investors must either create their own data standardization process or rely on third-party service providers to evaluate and manage their alternative lending portfolio.

Additionally, cross-platform investing complicates portfolio valuation, investment performance and integrated reporting. With a limited secondary market, the valuation and performance measuring for direct platform investors requires a standardized methodology for evaluating default risk for notes with late payments. Individual and institutional investors can choose between a trade-off of their own time or fees for third-party services. Financial advisors managing a book of business are limited by the scalability of the direct platform investing process without using another service and passing the cost through to their clients.

While the operational considerations noted here are just as prevalent for investment managers, the further development of securitized products will mitigate the limitations of direct platform scalability for financial advisors. The injection of traditional wealth management assets into the alternative lending asset class requires infrastructure development and greater product diversity.

4 Challenges the industry faces

Ability to scale

Currently, a favorable interest rate environment, strong demand for loans and the digital platform is supporting a high rate of originations with most of the focus being on client service. As the industry matures, it will encounter a down-market and delinquencies, for which there needs to be a strong infrastructure for critical practices such loan collections and practices around delinquency-related practices for 30-, 60- and 90-day delays and loan charge-offs.

Internal controls and oversight

In May 2016, it was revealed that Lending Club employees had changed information about the loans to make them look more attractive to investors, together the Lending Club's CEO's failure to disclose a personal investment in a firm that invested in Lending Club. This called for greater industry oversight, process and internal controls to guard against similar one-off incidents. Under no circumstances should core dates be changed. In an industry that heavily relies on investor confidence, incidents such as this one shake up the industry's stability and directly affect the level of investments to fund loans. As in any company, improper manipulation of information and conflicts of interest do not help bring general confidence to the perception around the overall industry; however, this incident cannot be analyzed as a systemic issue of the industry as a whole, as it occurred for a very small percentage of loans. Regardless, it was made public. Renaud Laplanche was fired from his position as CEO, and Lending Club moved to enforce strict controls to prevent similar issues in the future.

On the other hand, the perception that this industry is underregulated is founded in a global exercised by all alternative lenders. Because these platforms are not banks, they don't have capital and FDIC requirements that need to be maintained by banks. More recently, there has been increased scrutiny of these platforms from the different regulatory bodies. The U.S. Department of the Treasury released a white paper in April 2016, "Opportunities and Challenges in Online Marketplace Lending," calling for greater regulatory oversight of marketplace lenders.[7] Key concerns include the risk and use of data and modeling techniques that may impede fair lending with limited SME safeguards.

The increased regulation at the state and federal level will also mandate practices to avoid fraud as the industry matures. Checking for, monitoring and preventing fraud is a big challenge for the digital lending firms. Since the transactions are conducted online, it is possible for certain applicants to "game the system" and put up a false profile with the appropriate credentials to get a facility or borrow credentials through identity theft. As the digital firms mature, the appropriate controls need to be in place to prevent against fraud. A growing number of alternative lenders are engaging third-party firms to conduct due diligence on different components that formulate borrower fraud. However, this is not a fraud-proof business; it's more about mitigating risk versus aspiring for a 100% fraud-proof portfolio. The large digital firms reported less than 1% fraud as a total of the portfolio. As the firms get bigger and the need for simplification becomes a greater priority, it is essential to confirm that there are no holes in the system to prevent fraud and manage and escalate it as soon as it is observed. In addition to the digital capabilities around fraud prevention, there is also a human component around checking and monitoring for fraud that needs to be conducted by the platforms. All these functions will need to be performed at a level where they can scale up with the increased demand.

Volatile investor confidence

Now more than ever, the digital lending firms are facing a high degree of skepticism in the investor space and a direct impact of that is drying up of funding from certain key investor types. This causes an imbalance, and the firms need to think about how best to maintain adequate investor funding as well as cultivate a diverse source of funding sources to confirm that disenchantment from one group does not affect the business operations. Starting with peer-to-peer lending, this business has come a long way to now having banks, private equity firms, institutional investors and family offices as investor types. Individual retail investors are still interested in this space; however, the firms tend to prefer the large institutional grade investors due to a larger loan volume commitment.

The volatile investor appetite is inherent to the business model. Drawing large proportions of institutional investment will facilitate the growth but also pose risk to a steady and predictable loan growth, making the case for increased retail funding.

7. U.S. Department of the Treasury, "Opportunities and Challenges in Online Marketplace Lending," 10 May 2016, www.treasury.gov/connect/blog/Documents/Opportunities_and_Challenges_in_Online_Marketplace_Lending_white_paper.pdf.

5 Why financial institutions should be interested

Enhancing the lending client experience

To date, a number of traditional banks have looked into the alternative lending space to expand existing lending capabilities through partnerships. JPMorgan Chase & Co.'s partnership with OnDeck and Santander's partnering with Kabbage are some of the most salient examples of established financial institutions partnering with alternative lenders. Traditional banks partnering with alternative lenders evidences the enhanced experience that the latter offer. The process becomes entirely digital, reducing the time of approval and funding from one month down to one a day.

Retention through addressing holistic financial needs

Though most incursions by traditional firms in the alternative lending space are an expansion of existing capabilities, we believe there is great potential for players not centered on lending capabilities to enter the space.

There is an opportunity for retirement providers and wealth managers, which have traditionally maintained a higher focus on the investment side of their clients' balance sheets, to build a holistic financial services offering to their clients. Student loans or mortgages would enhance retention due to their long-term nature, and consolidate a financial relationship of customers with the firms that offer these products. Alternative lenders have evidenced that they can provide a superior user experience to borrowers, as top banks such as JPMorgan Chase & Co. have chosen to establish partnerships with them.

Expanding the customer base

As mentioned in previous sections, alternative lenders cater to riskier clients. Banks will be interested in partnerships, as they will be able to maintain deposits and other relationships with clients who it might otherwise not give loans to. The expectation is that as these clients build their credit history and grow their businesses with alternative lenders, they will eventually become bank borrowers.

From a generational perspective, there is a potential value in reaching out to new demographics. The largest firms in the alternative lending space (or even robo-advisors) have not emphasized their focus on millennials, nor have them as a majority of clients. Prosper's average customer is in their late 30s or early 40s, in what is the younger segment of the Gen X generation; however, SoFi, CommonBond and Upstart, focusing on student loans, have millennials at the center of their target. Today, the millennial debt is 70% larger than the same generation's financial assets. Addressing this segment current liability needs is the right step to building a relationship with a generation that will be receiving the largest wealth transfer. Banks must not lose sight of this opportunity, and the correct way of targeting it.

A fixed income investment alternative

Understanding the overall interest in providing an alternative lending source for clients to cover their liabilities, it is evident that there is an additional benefit for full-service financial firms to provide an opportunity for investors to buy, sell and trade securitized alternative lending debt. Particularly in the United States, the baby boomer population as of 2015 has 74.5 million individuals who are not only the recipients of more than $8.4 trillion in assets from inheritance but also themselves are aging. As these individuals enter retirement, and with global fixed income market approaching $100 trillion in assets, investors will continuously seek consistent, interest-bearing investment opportunities. In the short term, the performance benefits are outweighed by the operational challenges of investing in the space, at least on a large scale and for multiple clients simultaneously, in the case of financial advisors.

However, an early focus in the space can set up the groundwork for building the capabilities needed to manage data-intensive asset classes. Current challenges around impact investing are the aggregation and consolidation of disperse data points to easily filter for client-required themes. The SME loans asset class is ripe for opportunities in this space, as the data availability can allow for such segmentations.

Assessing the alternative lending space — and how to enter

Once firms determine that they are entering the alternative lending space, there are multiple elements to assess. As we have described in the previous sections, alternative lenders differentiate across a set of lending capabilities. Firms should assess their current capabilities relative to these firms and see what needs improvement.

There must also be a clear understanding of the product type each firm wants to develop. The way the alternative lending industry has evolved, most players have focused solely on a specific product type (either consumer loans, SME loans or student loans), or at least have most of their experience around a specific product.

For wealth management firms or retirement providers, it would most likely require a substantially incremental effort to build lending capabilities from scratch, depending on the level of maturity. Partnerships or acquisitions would likely be the suitable solution for these firms.

We believe that partnerships have been the means for banks to get up to speed with the enhanced lending experience. Banks must build or acquire these capabilities in the short or medium term if they want to keep their lending businesses relevant. By simply relying on partnerships to enhance their lending business, they will become dependent on other firms to do what is at the core of the lending business, which is underwriting. Cheap capital should not be the main differentiator for banks to strive in the lending market, as that competency may be easily provided by firms beyond the financial services industry. Banks should build capabilities to fight against the vision that some alternative lenders believe in: that brands and not banks will be the lenders of the future. The only bank that has built this capability from scratch is Goldman Sachs, with Marcus, their online lending platform. This is part of the company's push into consumer banking, leveraging digital channels, without developing a branch network. Capital for this comes from the acquisition of a $16 billion book of deposits from GE Capital.

6 What does the future hold?

The alternative lending industry, while making rapid strides in recent years, is still in its nascent stages of growth. While alternative lenders have been innovative disruptors and provide an alternative to traditional consumer lenders, there are key growth headwinds that the industry will continue to face as players look to establish themselves. The exponential growth rates have fueled interest from borrowers, investors and regulators alike. As we look out into the future of this industry, we see several key trends emerging.

Consolidation within a fragmented industry

There are more than 1,300 alternative lenders competing for 1% market share while there are 6,500 banks competing for the remaining 99% of the market[8]. Differentiation is a key to client acquisition for online lenders. Yet in the crowded market, that very differentiation will be drowned out. Several smaller players will run out of steam and venture capital funding, leaving a few dominant players playing in their niche product markets.

Increase in buyouts and partnerships with banks

Incumbents will take increasing notice and respond. Some will build capabilities on their own but a lot will take the buy or partnership route. This will reinforce the symbiotic relationship between traditional and alternative lenders. Banks need an alternate channel to grow a client base that is not yet primed for large loan sizes or need a quick origination turnaround. Alternative lenders need a referral and lead-generation channel and are looking for additional revenue streams by serving as a technology provider (LaaS) to traditional players.

Increase in regulatory scrutiny

Recent headline-making events point to a compliance surveillance gaps that are bound to attract increased attention of regulators.

While it is true that alternative lenders do need to comply with state and federal regulations, they have not been a focus of regulatory litigation despite notions of lax compliance standards and subprime lending practices. Regulatory scrutiny will further drive compliance costs eroding the already low margins — through increased hiring of personnel and use of surveillance tools to flag violations in time. Fulfillment of reporting requirements and disclosures will serve as an additional overhead.

Emergence of alternative lenders as a distinct asset class

While almost all players are actively looking to diversify sources of financing, most funding is still heavily concentrated with institutional investors. The segment of marketplace lenders is making smaller denomination notes and certificates to attract smaller retail investors but have had varied degrees of success based on their marketing efforts. Creation of alternative secondary market will increase liquidity and provide easier access to retail investors. Wealth mangers and broker-dealers are likely to become a major distribution channel for this asset class.

Like in most industries, alternative lending will evolve through its share of challenges and growth. The spotlight will soon shift from revenue growth to profitability. Continuous capital financing, which will become increasingly tied to market volatility, is needed to maintain the loan volume pipeline. But most importantly, the question that industry leaders should seek to answer will be: how do we increase lead conversion rates through the acquisition funnel?

8. Chris Myers, "For Alternative Lenders To Be Successful, Differentiation Is Key," ***Forbes***, www.forbes.com/sites/chrismyers/2015/10/15/for-alternative-lenders-to-be-successful-differentiation-is-key/#5f6aeacc207e, accessed May 2016.

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