CHAPTER ¹

A New Take on Credit and Lending

The Global Financial Crisis saw the first decline in household debt in countries like the United States and the United Kingdom in over a decade, but in the past months we've started to see the lending business warm up again, getting closer to its pre-Financial Crisis levels.

When it comes to loan origination, traditional lenders increasingly are finding difficulty in competing with digital services and platforms that are providing more information and options in a more dynamic manner. Approval times have been slashed, built on newly designed processes with far less friction than the typical lender's loan application. As mistrust of the traditional banking system has increased and as lending has become more expensive, entrepreneurs have been turning to tools of the digital age to offer new solutions to those such as the unbanked, or to those looking for more transparent or cost effective options.

Lending has been around for a *very* long time. In fact, lending predates formal currency and the formalized banking system by thousands of years.

Archeological digs over the past 150 years or so have found literally hundreds of thousands of these tablets from as far back as 3000 BC. These tablets reveal that silver and barley (and sometimes gold as well) were used as the primary currencies and stores of wealth at the time. Mesopotamian merchants and lenders granted loans of silver and barley, at rates of interest fixed by law¹ to avoid usury. The yearly interest on loans of silver was regulated at 20 percent and on loans of barley at 33.3 percent.

¹The Mesopotamian *ana ittisu*, dated 3000 BC, and the *codes of Esnunna* and *Hammurabi*, both dated 1800 BC, gave legal guidelines on *usury* and lending practices.

Close to 4,000 years later, we're still using this same basic construct for lending purposes—a *principal*, a *term*, and an *interest rate*.

Access to lending has today become cheap and ubiquitous. Credit in the form of auto loans, student loans, payday loans, mortgages, and credit cards has sprung up across the developed world in increasing variety. Microcredit and lending systems, most recently popularized by the likes of Grameen Bank² in Bangladesh, and new online social platforms, such as Kiva.org,³ have given broader access to credit in communities that have traditionally not had access to such.

Our dependence on credit and the way we use credit has also changed in recent years. In the early 1980s, U.S. household debt as a share of income was around 60 percent. By the time of the 2008 financial crisis, that share had grown to exceed 100 percent. In fact, at its peak just prior to the financial crisis, U.S. household debt as a share of income had ballooned to almost 140 percent, but in the United Kingdom that figure was almost 170 percent of household income. Today, U.S. household *credit card debit alone* averages \$15,185 per household, but that is down from around \$19,000 in mid-2008 (Figure 1.1).

The good news (for consumers) is that after the financial crisis we're using debt less in countries like the United States and the United Kingdom. In fact, we've seen a roughly 20 percent decrease in household debt as a percentage of income since the financial crisis, bringing

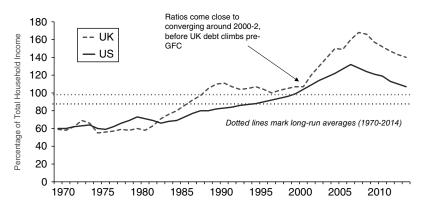


FIGURE 1.1 UK & US Household Debt as a % of Total Income *Source:* Federal Reserve, BLS, Office of National Statistics (UK).

²www.grameen-info.org.

³About Kiva via Kiva.org.

use of household debt back to around 2002 levels. The bad news is that with default rates skyrocketing during the financial crisis, this reduction is less about people saving money, and more about the fact that defaults increased dramatically.

At the heart of this increasing debt load we see in developed economies is a system that is built around lack of transparency on the real cost of lending, and lack of visibility on your money.

In the 1960s, when debt utilization was low, the bank account of the day was a Passbook, and there were no ATMs, credit cards, or debit cards. If you wanted to spend money, you had to take your passbook down to the branch, withdraw cash, and you would see very obviously how that withdrawal affected your overall financial position. You also couldn't generally spend more money than you had in your bank account. Overdrafts were uncommon, checks would bounce if you didn't have enough cash in your account, and the most common form of financing was a home mortgage (not a credit card).

Today, our use of credit cards and debit cards has actually decreased visibility on our velocity of spending. For the 68 percent of American households that live paycheck-to-paycheck,⁴ this can be problematic. Try as we might to keep a rough estimate of how we spend our money on a day-to-day basis, most of us are just not that accurate in keeping track of our running bank balance. Inevitably, then, consumers end up in a store shopping for the week's groceries, they pull out that debit card, and the transaction is declined because they've simply spent more money than they were aware of. Or, worse, they suddenly are in overdraft and don't find out until they next go to the ATM and find their account \$300 in the red due to overdraft fees.

The way we use credit in our lives is going to have to change. Visibility on the real-cost of debt, whether student loans, mortgages, credit cards, or things like medical loans in the United States, is going to face demand for greater transparency when it comes to consumer awareness on the real costs involved. At the same time, credit decisioning is going to go through a rapid change in the next decade as most of these decisions become real-time—no longer based on some application form you fill out sitting in a branch, but triggered contextually and based on a risk methodology built more from consumer behavior than historical default.

⁴American Payroll Association Survey, September 2012 (see Jim Forsyth, "More Than Two-Thirds in U.S. Live Paycheck to Paycheck: Survey," Reuters News, September 19, 2012).

WHEN YOUR CREDIT SCORE BECOMES MORE IMPORTANT THAN ACTUAL RISK

In 2010, I moved to the United States, and despite a healthy income profile,⁵ a spotless credit history outside of the United States, a healthy net cash position, a strong investment portfolio, and minimal ongoing credit exposure, I still couldn't get basic credit for love or money.

The problem is that the U.S. system has become so dependent on credit scores that good risk decisions can no longer be made without reference to that score. In the minds of many, credit scores appear to have become more about punishing borrowers for perceived bad behavior than actually providing access to credit.⁶ Most credit scores often lag⁷ 30 to 60 days behind consumer behavior (rather than accurately predicting the likelihood of default as they are supposed to), and consumers often see a markedly different credit score than what lenders see.⁸

With my income and risk profile I was a very safe bet for any lender or credit facility, but because I hadn't meticulously crafted a credit score history, I was a *nonentity* as far as lenders were concerned—and that translated to a false negative, a presumed "guilty," because I had what is known in the industry as a *thin credit file*. If a bank had examined my behavior, they would have seen that each month I save, and I spend considerably less money than I earn—and therefore my ability to service ongoing debt is very high. Additionally, my income has been improving consistently over the last four to five years, so that trend should mean that my ability to service debt is actually improving. None of that mattered. The logic of a sound credit decision based on actual risk had been replaced by another mechanism—a standardized score that was not a good predictor of risk without at least a two-to-three-year history or investment in building up that score specifically.

Now it is a fair argument that in a system that demands real-time or rapid access to credit facilities, perhaps even in-store at the time of a purchase, you need some sort of automated system that assesses credit risk. In the absence of a better system, maybe credit scores or credit agencies are the best approach we have? That might have been true back in the

⁵You only need to earn \$300,000 a year, according to the *New York Times* interactive tool, to be in the "top 1 percent."

⁶"Store Purchases Could Punish Credit Holders," WNBF News, August 19, 2009, www.wmbfnews.com/story/10671306/store-purchases-could-punish-credit-holders. ⁷See FICO: www.myfico.com/crediteducation/questions/why-scores-change.aspx.

⁸ "Consumers' Real Problem with Credit Scores," *Wall Street Journal*, September 25, 2012.

1980s, but today the U.S. Public Interest Research Group has reported that the current system is generating erroneous credit reports 79 percent of the time.⁹ In addition, the system is expensive, results in poor default management, and is designed primarily to protect the lenders, rather than positively facilitate the borrowers, even when they have a low or moderate credit risk profile. In the end, the best credit scores go to good, regular users of credit, rather than customers who choose to take credit only when they can't avoid it.

One accepted measure of overall credit risk management performance for lending institutions today is *default rate*, more specifically expressed as a *charge-off rate*. During the Global Financial Crisis (also known as the "Great Recession" or "GFC") banks like Bank of America (BAC) saw default rates on mortgages skyrocket to 24 percent in 2010¹⁰ and credit card defaults of 13.82 percent in 2009.¹¹ Today BAC's default rate on mortgages stands at a nominal 6.7 percent,¹² and credit card defaults have also declined nationally. The Federal Reserve puts charge-off rates on mortgages/real-estate loans at 2.32 percent in Q1 of 2013, and 3.8 percent on credit cards.¹³ Lending Club, the largest *peer-to-peer* (P2P) lender in the United States, has an effective default rate of 3 percent on its current portfolio, which is extremely competitive based on the current market.¹⁴

In the past two to three years, P2P lending has improved its viability as a new asset class and maintained respectable default rates. Lending Club has now surpassed \$3 billion in total loans (Figure 1.2) and that has more than doubled the \$1.2 billion in total loans facilitated that they recorded in just January 2013.¹⁵ Considering they just passed \$500m in loans back in March 2012, that is a phenomenally successful growth curve. Lending Club maintains an average annual interest rate of 13.34 percent, compared to the national 14.96 percent average APR on credit cards.¹⁶ As of January 1, 2013, Lending Club had produced average total returns of 8.8 percent

⁹U.S. Public Interest Research Group study as reported in "Oversight of Credit Agencies Long Overdue," Huffington Post, November 2012.

¹⁰FDIC 2010 Statistics, in "Default Loan Percentages Top 25 Largest U.S. Banks," JMAC Funding—The Hard Money Pros, June 2, 2010.

¹¹ "Bank of America Shuns Card Debt," Bloomberg, August 24, 2009.

¹² "Mortgage Default Rate Spikes in June," The Street, June 2013.

¹³"Federal Reserve Charge-Off and Delinquency Rates on Loans and Leases at Commercial Banks, 2013," Board of Governors of the Federal Reserve System, November 15, 2013.

¹⁴"Default Rates at Lending Club & Prosper," LendingMemo.com, July 25, 2013. ¹⁵Lending Club statistics.

¹⁶ "National Average Credit Card APR Rates (U.S. Domestic)," CreditCards.com.

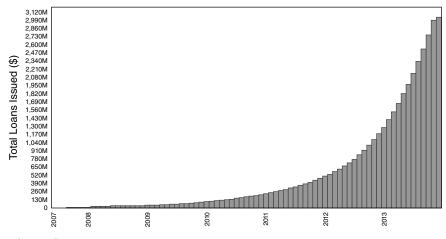


FIGURE 1.2 Total Loan Issuance (LendingClub.com)

on "savings" over the previous 21 months of operation. During the same timeframe, the S&P 500 has had 10 negative quarters, and yielded average total returns of 4.1 percent.

For the high-credit-quality borrowers we serve, our risk-based pricing model often represents hundreds or even thousands of dollars in savings over traditional bank credit cards, which would charge them the same high rates as everyone else. Our rapid growth is being driven by those high-credit-quality borrowers who have been underserved by the traditional model.

-Renaud Laplanche, CEO, Lending Club¹⁷

P2P propositions in other markets are rapidly growing, too. Zopa in the United Kingdom has lent over £400m to date, and the total U.K. P2P industry now is approaching £800m (including the likes of Ratesetter and Funding Circle). But perhaps more interesting, Zopa's growth is increasing with growth of 60 percent+ year on year (YoY) and a recent run-rate of 90 percent YoY growth over the last 2 months, with £144m of their current portfolio having been lent in the last 12 months.¹⁸ Zopa's defaults are at 0.5 percent and with average loan rates of 6.7 percent,¹⁹ which represents best-in-industry

¹⁷Banking4Tomorrow.com.

¹⁸Zopa UK.

¹⁹ "Can You Trust Peer-to-Peer Lending?" The Telegraph (UK), March 3, 2013.

performance, and are around half the default rate of the top-performing banks in the United Kingdom.²⁰

P2P lending now represents roughly 3 percent of the U.K. retail lending market (non-mortgage lending).²¹

TAKING A FRESH LOOK AT LENDING

Interviewing Giles Andrews, CEO and cofounder of Zopa, was a fantastic way to dive into some detail on why P2P is performing so well compared to traditional credit and lending methodologies, and why their default rates are a fraction of the big banks in the United Kingdom, particularly in Zopa's case.

- Brett: Giles, let me ask you, first of all, to tell us a bit about Zopa. What is Zopa? When did you start the business? What was the objective of Zopa, and where are you today?
- Giles: Zopa was the first peer-to-peer lending business in the world. We launched it in March 2005. Peer-to-peer lending is a bit of a mouthful, but what we do is really simple. We connect people who have some spare money with people who want to borrow it. And, by doing so, cut out banks in the middle, so that both parties get a better deal. We had a simple aim, which was to provide greater efficiency in what we saw as a very inefficient financial sector—by providing better value to consumers on both the saving and the borrowing side of the trade.
- **Brett:** You were the first in the space, so what led you to believe there was demand for a fundamentally different approach to lending in this respect?
- Giles: I think the first thing we thought about was a question: "Why is it that consumers get a much worse deal out of financial services than big corporates do?" And our conclusion was, "Because a market had evolved (called the *bond market*), which distanced mediated banks, which provided greater efficiency and provided big corporates

²⁰For the same period, one of the best performing U.K. banks, HSBC, recorded a default rate of 0.9 percent, almost twice that of Zopa's (*Source:* HSBC Annual Reports).

²¹See "Retail Lending in the United Kingdom," MarketLine Report, October 2012.

Part of it is simply better modeling, better use of data, and some use of alternative data. We still use most of the traditional credit industry data...but I think we buy more of it, and we use it more intelligently. We've also begun to use some sources of alternative data.

-Giles Andrews, CEO, Zopa

with better values. Large companies don't go to their bank to borrow money; they simply issue debt in the bond market. We wondered why that couldn't happen on a consumer level as well. The data exists, but marketplaces depend on trusted third-party data, and there is a lot of really useful consumer data, which allows informing positions. We thought we could replicate the marketplace model, but for consumers.

- **Brett:** On the matter of the lending model you've got, one of the things you and I have talked about in the past is how you assess risk. One of the things I've always been fascinated by is your robustness from a default perspective. After all, you're one of the best-performing institutions in the U.K. market, in respect to defaults in nonperforming loans.
- Giles: And I think we've gotten better since we last spoke, Brett. We have the best-performing loan book in the United Kingdom. We have had default rates of below .8 percent in the last eight years. If you put that into context on an annualized basis, that means that credit losses are well below half a percent a year. And that plays against banks that are somewhere between 3 and 5 percent a year. We are in fact better (in terms of our default performance). I think part of that is from building credit models at a time when the world was increasingly over-indebted and worrying a lot about affordability, which might sound obvious now, in 2013, given the crisis we've been through. But in 2005, it didn't seem obvious—certainly not to banks that were still lending money to people on the basis of their previous track record without really wondering whether the loans were sustainable. Part of it is having the good fortune of building a credit model at a time when it was obvious to us that there was a problem looming.

We were not clever enough to see the subprime crisis that evolved two or three years later. But, we certainly did see that consumers were over-indebted. Part of it is simply better modeling, better use of data, and *some* use of alternative data. We still use most of the traditional credit industry data, and we still find that by and large to be the most predictive, so we are using similar data to banks. But I think we buy more of it, and we use it more intelligently. We have also begun to use some sources of alternative data. The other part of it is that with a peer-to-peer model, the fact that people borrow money from other people seems to make them behave better in that relative circle of influence. There's some evidence that consumers prioritize our debts, in some cases, over others because there are other humans at the end of the loans.

- Brett: Very interesting psychology! So Giles, essentially, Zopa sounds like a social network in respect to the way it operates—a community of borrowers and lenders that you bring together. How much does the nature of social networking and community building factor into the success of Zopa from a business perspective?
- Giles: It is really important to us to have an active community of engaged lenders. It might sound funny, but the community is really helpful as a sort of customer service tool. People actually respond really well to being given information by other customers. Often, they respond better to that than if it were given from the company itself. Putting all of your customer communications into discussion forums that live inside your website, on Twitter feeds, and on Facebook and things like that, and being prepared to share your customer service queries, says a lot about the transparency of your business and the fact that it is happy to have its dirty linen aired in public.

That is critical in the way the community has been a trust-builder. I think it would be fantastic to be able to leverage other peoples' social networks as a customer recruitment tool. We haven't really found any evidence of that happening. My conclusion is that people don't really want to talk about money via social networks. They're called social networks for a reason; they're not business networks.

- Brett: You mean they're not going to share on Twitter, "Whoo-hoo! I just took a Zopa loan!"?
- Giles: "That shiny car outside, I actually borrowed money to buy it." No, they are less likely to talk about that. Lenders are happier to talk about it because they feel that they are doing something clever. They are happy to share their insights on that and (beneficially for us) they are even happier to share their insights with other people.
- **Brett:** Even with a good credit history, a good credit rating, doing all the right things in a tough economy, it is hard to lend money. Giles, are you guys going to be the knight on the white horse who comes in and just totally fixes the credit industry and maybe replaces the banks in terms of things like personal loans and debt consolidation?

- Giles: I can think of two reasons why we will *not* replace banks. First, Zopa (and I could say the same about the peer-to-peer lending businesses in the United States) does not operate typically as a lender of last resort. Typically, we do not lend money to people who otherwise would not get finance. Second, we do use the data that banks use to analyze whether they should lend people money more intelligently. If you do qualify for a loan, you'll get a loan that's much cheaper. I think the challenge for anyone lending money is using the data intelligently and being able to form a view of individuals that they not only have the wherewithal to repay the money, but also their previous track record has demonstrated an aptitude toward repaying money.
- **Brett:** Banks are selective about *when* they choose to take the story behind a person's credit history into consideration.
- Giles: And they have capital constraints. It is very difficult for me sitting in London to pass direct comment on that, but I can go on to the more general question about where we and businesses like us go.

By focusing on a narrow sector of banking, Zopa and other peer-to-peer lending businesses are not looking to replace banks in their entirety; we are looking to do a slice of banking more efficiently and better. By offering personal loans, which have a repayment history, we can create an opposite result, appealing to savers. The loan begets the saving product, because we can offer a predictable return over the long term. It doesn't mean we can easily offer credit cards and current accounts, because we couldn't finance a balance that was going up and down, and our lenders demand regular and fixed rates of return. But, within the savings and loan industry, we can take a dramatic piece of banking away. And I think it's a piece of banking that they are particularly bothered about. Banks are more interested in their core products, providing mortgages, current accounts, and perhaps doing some big-company business lending, than they are in lending smaller amounts of money to consumers to buy cars.

- **Brett:** Getting into this issue of being a "bank replacement," one of the aspects you mentioned is your saving rates are better and your loan rates are lower. How do you do that, given the traditional model of lending? How do you make money? Where's the margin?
- Giles: The simple answer is that we are extremely efficient. We're an online direct business without overhead and big branches and all that kind of stuff. The business model is simply more efficient. A way to think about it is to say that banks have a spread and that the bank spread is the difference between what they pay their

savers and the cost of the money that they bring in. What they charge their *borrowers* is the income that they generate from their savings. Bank spreads in the United Kingdom are over 10 percent now. They're wider than they have been in living memory. And my guess is that they are pretty similar in the United States.

Our model replaces the bank spread with our fees and the bad debts that result from the loan book. If you add all that together, in our case, the equivalent spread for us is about 3 percent. Three percent replaces the typical bank's 10 percent. It's a good deal.

Brett: That's still a pretty good margin.

Giles: And we can make money at those 3-percent-fee levels.

I'll talk about what we can learn from P2P and the approach of *neo-lenders* like Zopa, Lending Club, and Prosper shortly. Now, let's focus on a completely different approach to credit risk assessment.

A DIFFERENT TYPE OF CREDIT ASSESSMENT BASED ON COMMUNITY

In *Bank 3.0*, I wrote about the psychology of banking in the U.S. market, where there are more chartered banks than in any other country anywhere in the world. Part of the reason for the broad acceptance of the community banking model was the view that large banks, what we'd call the *too-big-to-fail banks* today, were essentially "foreign models" of banking.

In the 1930s and 1940s in the United States, for example, there was broad industry condemnation of "branch banking" as it pertained to the destruction of individualism and community banking practices in favor of cookie-cutter branch banking approaches built on efficiency, sales, and transaction banking. These so-called "foreign systems" of branch banking were labeled "monopolistic, undemocratic and with tinges of fascism" and as "a destroyer of individualism."²² This also explains why the United States has so very many institutions compared with other developed economies, as U.S. regulators historically sought to institutionalize community support and make it harder for monopoly approaches.

-Bank 3.0, Chapter 4, "Can the Branch Be Saved?"

²²American Banker Journal, Mar. 23, 1939, p. 2.

Historically, one of the real advantages of community banking was the ability of the community banker, who actually knew your name and your family, to make a qualitative assessment on your risk-worthiness. This type of personalized model of banking is hard to beat, but these days, realistically, this type of service and customer connection is extremely rare.

As banks grew and as branch managers had less and less autonomy, the ability to assess risk was optimized down to a set of algorithms and rules, a black-box credit risk model where they turn the handle based on a data set—and the black-box spits out a result—*approved* or *declined*.

As we get richer data sets and richer understanding on consumer behavior, what we're going to see is more of a return to the type of data that a community banker would have instinctively drawn upon in making a credit decision locally, but applied in smarter decision matrixes. In that respect, drawing upon community is going to be one of the ways institutions can reduce risk. If your friends are willing to vouch for you, that should count for something, shouldn't it?

That is in part what is behind the innovative approach to lending that Lenddo uses in both acquiring and assessing new customers. To find out more, I talked to Jeff Stewart, CEO of Lenddo, about their approach to credit assessment and microfinance.

- **Brett:** Jeff, you are based in the United States, in New York, but most of your business occurs outside of the United States. Tell us a little bit more about Lenddo, how you started the business, where you are doing your lending, and what is the basis of the business.
- Jeff: Lenddo helps people prove their identity and trustworthiness so that they can access financial services in emerging markets. We got into this business because we had started several companies and we had employees all over the world, and they kept asking us for loans, which didn't make a lot of sense to us because we tend to hire people who are very employable, very hardworking. And they just kept asking for loans. So, as we dug into this issue, we discovered that there are about 1.2 billion people moving into the emerging market middle class who are generally underappreciated by the local financial institutions, and underbanked. We figured this seemed like something we should be able to fix.

As we dug deeper, we stumbled over something that changed our lives, which would be the concept of *microfinance*. And what really grabbed our attention with microfinance, which targets a different group at the bottom of the pyramid, was that microfinance had figured out how to involve the community so that people repaid. The community benefited from the repayment, and the whole process was just incredibly efficient.

We spent the better part of a year interviewing experts in microfinance—behavioral economists and anthropologists—to really understand the magic of microfinance and why was it so successful. What we learned was that we could duplicate this online. The entire hypothesis behind Lenddo²³ is that you don't have just Internet friends; your online social footprint represents a real social graph, a physical/real social network. And just like you can use microfinance at the bottom of the pyramid to create a social environment where you're very efficient in deploying capital, you can replicate that for the middle class and empower them to access financial services at a lower cost.

- **Brett:** The conventional wisdom might be, if you asked me as a banker, how I would feel lending in an emerging market, I would feel pretty tentative, saying, "Well, these are low-income people, there's not much margin in it, and it's likely to be very risky." But, what are you telling me about the way you handle risk and default rates? Are you saying that you have quite low risks and low default rates because of the community element, specifically how you use intelligence from social networks?
- Jeff: We have very low default rates because of the community element, but also because of whom we are lending to. This demographic is the future of the planet. This is the emerging-market middle class. This is where most of the wealth on the planet is being created.

To put it in perspective, in the Philippines, where we launched first over two years ago, the unemployment rate among business process outsourcing employees, or call center workers, was zero percent. You literally can walk outside and get another job across the street. These are college-educated people in white-collar jobs. Think about the people who are processing insurance claims, the people who are answering customer support calls for your Dell computers. They are very employable, and their incomes are rising. Our typical member makes between 400 and 450 dollars a month for white-collar employment; that's up by double-digit percentages in the last year or two.

- Brett: What's the average loan size that you're servicing?
- Jeff: Our average loan in Asia is \$450, and our average loan in Latin America is about \$650.

²³See www.lenddo.com.

Brett: It seems to correlate with a monthly salary.

- Jeff: Exactly, although the loans are anywhere from 1 month to 6 or 12 months. We lend about a month's pay.
- Brett: Giles, let me ask you, what is the average loan size Zopa is doing in the United Kingdom, just to get some comparison with Lenddo here?
- Giles: Just under 5,000 pounds.
- **Brett:** Very interesting. Five thousand pounds is probably going to be pretty close to a monthly salary for a professional in the United Kingdom as well. It's interesting that there's a correlation with the emerging markets there on average loan size as it relates to monthly salary.

Jeff, how much of the lending you guys do is to small businesses trying to get started in these emerging markets?

Jeff: Our loans are for licensing purposes, so, education is the largest use. Access to smartphones is another big category. Access to healthcare is usually for other members of the family, not the actual borrower, say a sister or an aunt. That said, the group we're lending to is very entrepreneurial. But what we are *not* doing is assessing the business itself.

If they are buying inventory when they are home with their family out in the countryside and then bringing it and selling it to their friends in the city, we don't judge the business itself. We judge the *character* of the person. This gets back to how lending worked for thousands of years. It was based on the character of a person. It was based on their reputation in the community. And, in small business lending, you hit a threshold where, all of a sudden, the business model itself—the business plan—doesn't matter a lot. But, as J. P. Morgan once pointed out when he was asked, "What's more important, loan to asset or loan to income?" it is the character of the man. For any business the character of the man is important, but for small businesses, it really is everything.

I think where you see involving community in the underwriting process making a big impact is in the small business space. And you see it in microfinance, too.

Brett: What about in the United Kingdom, Giles? From your experience with Zopa, how many of your lenders are people who are trying to finance and start up a small business and are using Zopa as a platform for raising some financing?

Giles: Our lending base is quite keen to lend to small businesses, so we send out a questionnaire often because currently they are lending only to consumers; their response was that they were keen to lend to businesses because they felt it was worthwhile and useful.

We're dipping our toes in the water because we are actually also working with the government as Funding Circle are, and we are launching a project to lend money to sole traders. We already lend to sole traders, but we don't lend to them if they are seeking to use the money for their business. We would evaluate a sole trader—anything from a window cleaner, to a hairdresser, to a barrister—there are three-and-a-half million sole traders in the United Kingdom—and, if they applied for a loan for consumer purposes, we would assess them. We would look into their self-employment record in the same way we might look at someone's employment record. But we would actually be declining them if they said they would want to invest the money in their business because we've found that added an extra level of risk.

Now we are working on launching a new product, which will be to sole traders for business purposes. The reason we are using sole traders is because we can put them through the same set of credit models as we do our existing consumers.

- **Brett:** What I'm wondering, Giles, is in the United Kingdom you've probably seen the government has its "funding for lending" scheme where they are giving money to the banks to give to small businesses. But, of course, they've given the money to the bank, and the bank, broadly speaking, has just kept it. Could it be that peer-to-peer offers really a much more direct channel for government to stimulate the economy?
- Giles: It absolutely could. They've made it clear that if we could make it work, then they'll continue to fund it. I've heard the same from my friends at Funding Circle, that the government is there to support it. There is a degree of exasperation in their eyes that they know what is happening to money that they are giving to banks. It's hardly being lent in residential mortgages. Or, it's sitting, mending their balance sheets.
- Brett: Jeff, How does this community mobilize in places like Indonesia, or the Philippines, where Facebook penetration is very high? How do you mobilize the community support element of this for Lenddo?

- Jeff: It's very simple. In order to get a loan, you need to have people in your community endorse you. What we found is that who, within your community, is willing to endorse you and what communities you're a part of factor highly in predicting repayment. What happens is some of the people who help you join to get a loan end up wanting a loan also. It just keeps growing. We started with just 100 people whom we knew and trusted, and then that went to a thousand and then 10,000, and then a hundred thousand. It just keeps growing.
- Brett: So it's an acquisition channel as well, the community that you exist in.
- Jeff: Absolutely! We were just talking with one of our customers, and he was saying how his friends didn't believe that he had received money over the Internet, and that he couldn't convince any of his friends to apply also. It wasn't until their friends had three or four other friends who had a loan that they finally gave it a try. It just keeps on growing. Because it is a social product, and you have to have your friends on it to get any benefit out of it, we don't see it slowing down any time soon.

THROUGH THE LOOKING GLASS: LENDING 3.0?

In looking at the business of lending, one key area that was covered with Jeff and Giles was how credit assessment and business models would emerge based on new data models and different views of risk and opportunity. Particularly, I wanted to look out a bit further, perhaps 5 to 10 years in the future, to see where this might go.

Brett: Just thinking about this business moving forward, we've taken the business of lending, and we've got a different look at risk, we've got different scoring and assessment systems, which appear to be very efficient with low default rates, and so on, and we've got community involvement that is being used for acquisition in the emerging markets.

Giles, where do you think this is going to go in 10 years' time, as we continue to disrupt the way people borrow money, and even save money, because that's sort of the vehicle we are seeing here as well? Where do you see the future of this business going and how you carve out a niche that sits on the side of the banking sector, and do you see that this becomes more of a viable alternative, particularly with less friction in lending, and how people have access to credit? Giles: You're exactly right to use the word *niche*. What's so powerful about models like ours is that we take a small bit of banking and do it better. That allows us to be much more efficient and operate with much less friction, as you say. I can see businesses like ours, peer-to-peer lending, taking the majority of lending business from banks. I really mean that. We could take most of it from them. I think that that as a sort of example could happen in all sorts of bits of banking.

There are lots of silos of banking that aren't really relevant to any other bit of banking, such as invoice discounting. Factoring is another example of a bit of banking that doesn't really depend on any other type of banking. These new models could simply do it better. Banks have been struggling for many years with this inefficient model for parts of the business. The kind of stuff that you have been writing about in terms of disruptive change, they've struggled against for a long time. They are the last industry to be disrupted, but I think it's finally happening now. And it'll happen, not because a universal model will come along and do it better; it'll happen because lots of small, nimble players will do little bits of it better. And they won't be left with very much interesting.

- Brett: Jeff, you've created a niche market with Lenddo because this is a market that wasn't necessarily there before, or a segment that wasn't being served. Where do you see this going over the next 10 years in terms of your own business, but also the business of lending money in the emerging markets?
- Jeff: I agree this is all about change. I think you're going to see software, and technology, and social networks essentially eliminate the traditional need for financial services. You're going to see the industry reshaped similar to the way Napster reshaped music, or

There's more processing power on your cell phone than probably most financial institutions in the world had in the mid-1980s.

-Jeff Stewart, Lenddo

Skype reshaped telecommunications; and the reason is that the processing power, and the data, and the connectivity completely changed the dynamic.

You don't need a big trust intermediary when your community can vouch for you. And they can with the click of a button. You don't need a mainframe sitting in Citibank's headquarters to process that and figure out what makes sense. There's more processing power on your cell phone than probably most financial institutions in the world had in the mid-1980s. It's just a completely different landscape, and I agree that it's going to change.

I disagree, however, that it's going to be a bunch of little players. I actually think that consumer finance is about twice the size of media in this country. And, when I say media, I'm talking about Facebook and Google and magazines and television. Consumer finance is bigger that all of that.

Brett: One of the things that stands out to me is if you look at a product like a personal loan, what you are really looking at is a tool that facilitates buying a car, buying a home, or perhaps starting a business. What banks have been able to do previously is stop someone from doing that activity until they jump through the application-form hoops and qualify for the specific lending facility or loan that enables this other activity.

With those tools you talked about, Jeff, the data analytics, the real-time capability, isn't there going to be a tendency to reduce closing times, and that risk assessment, so that you can get a loan in real time, where you need it—exactly when you need it—rather than the loan having a distinct product "event" or separate application process in itself?

Wouldn't it be more logical to embed the financing decision in the customer journey around those other things we do, like starting a business or buying a home?

- Jeff: Absolutely. I think that what technology enables you to do is quantify your trustworthiness (in real time), and use credit and other financial services as needed. This is what's right for the consumer, not what's right for the lending institution.
- Giles: I think Jeff's exactly right. It's all about the consumer. So, the financial institutions haven't thought about the consumer; and what businesses like ours do is put the consumer first. We'll build the experience the consumer wants, and that may be real time or it may not. That's not the issue. The issue is doing it on the consumer's terms.

THE KEY LESSONS

Despite the fact that Zopa and Lenddo are two very different businesses, there are some reoccurring themes in the messages we heard in these interviews.

First, to be better at the business of lending, the trick is not necessarily to do it the way banks are doing it.

Both Zopa and Lenddo show that they are both more efficient at their core business than comparable banks, and that their risk of default is generally lower. While they work at lower margins than the big financial institutions, their dramatically lower cost base, lower cost of acquisition, lower costs of distribution, and more accurate risk assessment models mean that banks can't compete on the same basis.

A new generation of lenders is doing it better, cheaper, and safer than the guys who, theoretically at least, invented commercial lending.

Second, both Zopa and Lenddo started with a customer problem that needed solving, rather than what lending business are we building, or what products should we offer?

The problem with lending today, both from a risk assessment process and from a customer engagement perspective, is that the lending event, particularly in respect to the application process, is abrasive. Customers in general aren't having a fun time with the whole process of credit, but they need credit to facilitate their life, whether it is buying a home or a car, or the credit card on that overseas trip.

Lenddo looked at an emerging market that is going to be sized in the hundreds of billions of dollars in a decade or so and realized that the market was massively underserved, but also that a traditional credit assessment methodology wouldn't work. The data was not available, but even if it was, banks at this stage would be staying away from the emerging middle class in emerging markets. It's just too risky to take a traditional approach—in fact, it is downright inconceivable.

By the time this market is mature enough for the big boys to play, players like Lenddo will have a distinct operational advantage—not to mention community trustworthiness—that will be almost impossible to catch up with without spending millions of dollars on brand building.

In Zopa's case, much of its success is in the data. Zopa has access to the same data banks do, but as Giles said in the interview, they use more of it, and are better at analyzing the data—so much so that their default rates are almost half that of HSBC, which was the best-performing bank in the U.K. market in this regard over the past few years. This means that they can operate on margins and spreads of 3 percent, instead of the 10 percent that the commercial banks are operating on in the United Kingdom currently.

If you are an institutional investor like a pension fund or insurer looking at a low-risk business to invest your money to get higher interest rates than a CD or fixed deposit, but lower risk than the volatility of the stock market, players like Zopa are looking very good, much better than the bundled loan portfolios that the TBTFs²⁴ are offering.

²⁴Too big to fail.

The other aspect of this that we explored, looking 5 to 10 years out, is purely great CX (*customer experience*). We've seen approval times on lending products slashed over the last couple of decades. In-store financing approval can be done in real time in many developed economies, but with the emergence of the smartphone and mobile tablets, it is quite conceivable that consumers standing with a realtor at a property sale, or standing in a car dealership haggling over the new car, will want a financing preapproval decision in real time, if not immediate access to the funds. Banks that insist on an "event" where risk assessment is done off the back of a paper application form simply won't make the grade. Banks that automate this process off the existing credit scoring system alone will find default rates climb. Something more is needed—something smarter.

This is where *Big Data and analytics* come into the lending game, but also some more unconventional thinking. Lenddo demonstrated a community vouching system where you don't get access to credit unless your friends are willing to vouch for you. If you default on your loan and it is likely to affect your vouching influence in the future, and possible access to credit, then you're going to be very careful about those friends you actually vouch for. In emerging markets, this type of system would be far more efficient than trying to build up enough data to create a traditional FICO credit score²⁵ for example. It's like my circle of friends who all know those of our friends in common who are unlikely to ever pay back that \$500 they might borrow to fix their car.

Disruptors in the lending space, like disruptors utilizing technology or changing consumer behavior and habits, generally will be going after:

- Friction in the current system or process, such as lengthy approval times, complex application processes, and lack of transparency.
- Better risk models based on new ways of looking at risk, including more accurate models based on consumer behavior, which give better visibility on the likelihood of default, than models based mostly on lagging indicators such as those most popular today. This is going to be a multibillion-dollar business in the lending space in just a few years, rapidly replacing the old credit scoring models with much better predictive data. The investments being made in this space right now are very interesting.
- Cheaper, more scalable acquisition models based on community influence, circles of trust, and lower costs. According to NYLX data (www .nylx.com), average brokerage fees in the United States are around

²⁵FICO is the primary provider of credit scores in the United States, also known as "Fair Isaac," after founders Bill Fair and Earl Isaac.

\$2,480, and larger mortgage players are paying \$800–\$1,200 per funded loan to buy a qualified lead.²⁶ These acquisition costs have been slashed by more than half historically for online pure-play businesses, but for businesses like Zopa and Lenddo, their costs are significantly lower than that still.

There's another element that is not yet being explored, but is likely to be a significant play, and we didn't see it with either Lenddo or Zopa as yet, but I suspect that Lenddo in particular could easily adapt on this front. That is better risk management when there is an existing loan in place.

Looking at lending defaults today, the process is pretty costly to chase down a delinquent borrower, and success remains relatively low. There is an escalation in customer service costs, then possible debt recovery action, and finally legal action. All of these hammer margins, leading to inevitable *charge-offs*, as the industry calls them. However, if banks could use technology to flag a customer when they might be about to make a decision that would increase their risk of default, and they could coach them out of a bad decision that will increase risk, then this could be better than the typical type of aggressive action that takes place in a default situation—after the fact. Call it *preventative risk management*, not punitive action.

The potential of managing risk by managing or modifying customer behavior is an area we can only really look at with the technology and data we have available today. This has the potential of being a game changer in the business of lending.

The other area on the data front is the preapproval capability and the ability to assess or anticipate when a customer might need a financing facility. The ability to match the need for a loan, with a preapproved facility, is going to be a huge boon to lenders in the near term. Those triggers for a lending event—whether it is walking into a car dealership, Google searches on your smartphone related to a home purchase, or your daughter's eighteenth birthday, high school graduation, and her acceptance into a major college—all of this data will lead to the ability to fulfill a customers' need for credit more efficiently, maybe even before they know they need credit.

Lenders of the future like Zopa and Lenddo think very differently about the opportunity of lending, and the problem of risk, and on that basis they're doing it faster, better, and cheaper than the incumbents.

They certainly qualify as Breaking Banks alumni.

²⁶See Quora Answer: http://qr.ae/NZySm.

PARTICIPANT PROFILES

Jeff Stewart has been a serial entrepreneur ever since he started his first lemonade stand at the age of 10. Jeff is founder and CEO of Lenddo, the world's first online community that empowers the emerging middle class to use their online social connections to build their creditworthiness and access local financial services. Over the past 15 years, Jeff has started over half a dozen technology companies that span four continents and employ over 1,000 people. These companies include Urgent Group, a venture development firm, and Urgent Ventures LLC, which co-invests in angel-stage tech startups. Another company that Jeff founded, Mimeo.com, has been recognized twice by Inc. 500's list of fastest growing companies, Red Herring 100's list of private companies that drive technology, and Deloitte's Technology Fast 500.

Giles Andrews was one of the founders of Zopa, the world's first P2P business, and is now its CEO. I loved his bio from his site Zopa.co.uk, so I have republished it here:

I'm Giles. I was one of the founders of the business but would get into terrible trouble if I tried to suggest it was my idea!

I now run the place, which basically involves finding great people who can run it much better without me. And that lets me get on with promoting Zopa externally, dealing with the media and lobbying, my latest hobby horse. Oh, and buying the drinks on a Friday night, or is that just a clever wheeze by everyone showing that they do in fact run the place?

Outside Zopa, I have an unhealthy interest in things fueled by petrol and two little monsters who will I hope grow up thinking P2P lending is as normal as we do going to the ATM.