The HOURGLASS EFFECT

A Decade of Displacement

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> *"I came to Hollywood, and within a decade, I was one of the biggest action stars of all time."*
>
> **— ARNOLD SCHWARZENEGGER**

It's amazing what can be accomplished in ten years. In just ten years, an idea can start out as a few scribbles on a napkin and grow into a business that threatens an entire industry. In just ten years a market leader can gradually lose ground and one day wake up to find themselves an essentially irrelevant player in a space they once dominated. Ten years is a long time when measured in business years (or an eon when measured in internet years).

While it's often the case that new market leaders are crowned when the incumbents are asleep at the wheel or become too bureaucratic to innovate, there are also times when new business models thrive because the stars align in just the right way. External forces can cause existing market players to act in a particular manner while these same forces might affect new players very differently and even act as a tailwind. And if you add talent and capital to the right business model at the right time when the forces are aligned properly, a dominant model can emerge very quickly. In many ways the story of the personal loans players in the last ten years in the US is just this, a perfect storm from a business perspective. The hourglass was turned over ten years ago and ever since assets have been descending from the Banks' balance sheets to the open arms of the next generation players.

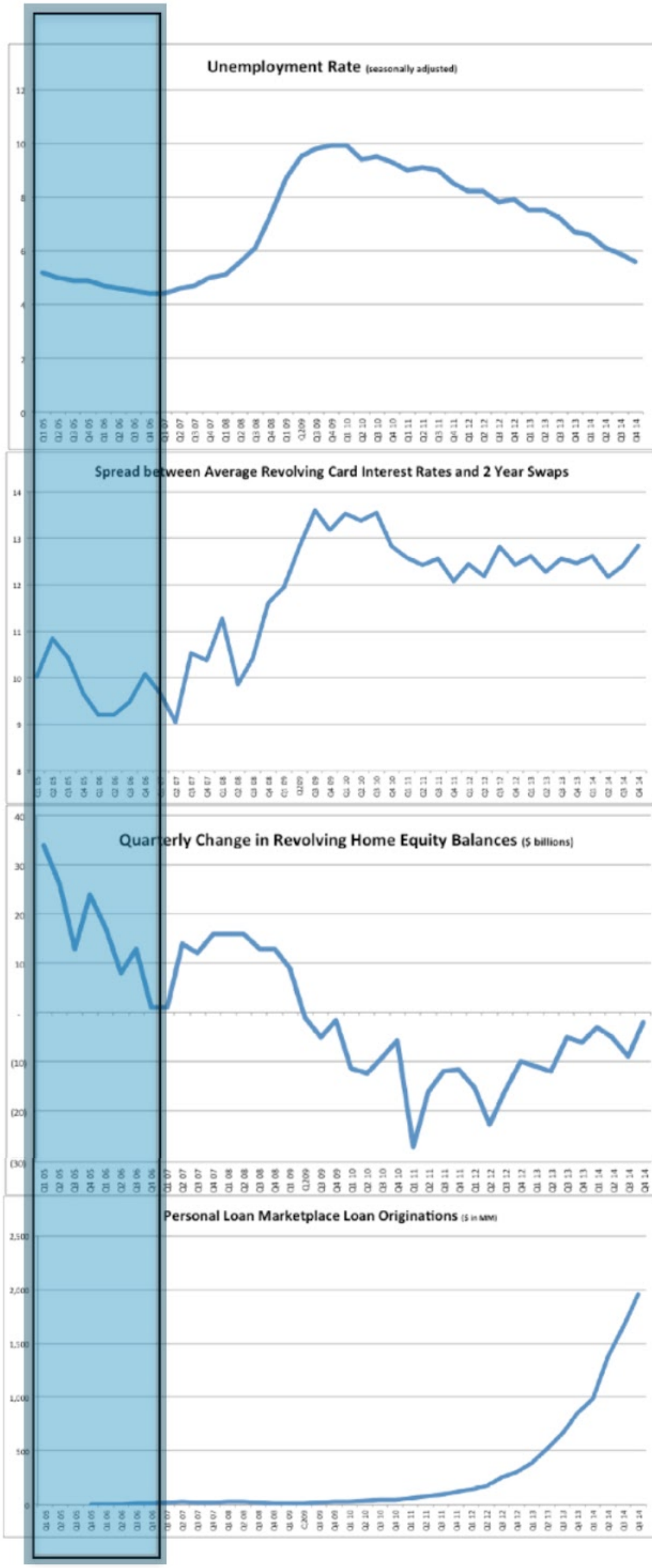
So why look back ten years? The answer is simple --- in January 2005 I had just switched jobs within Capital One to take over the personal loans business. Ten years is a look back to a period that I know and remember well. The business was throwing off decent bottom line profit numbers but it was struggling to grow. And at a company like Capital One, growth is life. If the business couldn't grow, and quickly, then it didn't have a home under the Capital One umbrella. The business was fundamentally in need of an overhaul. One year later the business was originating hundred of millions in new assets a month and generating solid returns for the company. Mission accomplished.

A few years later and a failed startup in the middle, I found myself joining back up with two former early renegades from my Capital One days. Nigel Morris was the co-founder, President and COO of Capital One (my personal mentor), and Caribou Honig had joined Capital One a few years after I did and spent the better part of a decade tackling difficult corporate challenges. The three of us naively formed QED Investors and put our own money to work as a "boutique" venture capital firm. Since then we've stumbled our way into building a portfolio of some pretty exciting financial services companies that includes Credit Karma, SoFi, Avant Credit, Braintree, LendUp, GreenSky, Remitly, and PeerTransfer. As crazy as it sounds, in our portfolio we now have more than 15 companies that originate or facilitate the origination of consumer and small business lending assets. And guess which company was the first? Prosper.

Hopefully this paper will be a helpful perspective for those who have arrived at the party recently and want to know more about the partygoers who have been around a while and where they're likely heading. The stakes are great, with Goldman Sachs estimating in a recent report that over $200B in assets are at risk of leaving the Banks in the Personal Loans vertical along with $4.6B in profit (source: GS Report - The Future of Finance Part 1 - The rise of the new Shadow Bank). And if I'm lucky, maybe a few of my predictions at the end of the paper will even prove out to come true.

Let the story begin.

The Boom Era



Unemployment Rate (seasonally adjusted)
Spread between Average Revolving Card Interest Rates and 2 Year Swaps
Quarterly Change in Revolving Home Equity Balances ($ billions)
Personal Loan Marketplace Loan Originations

THE BOOM ERA

2005-2006

"My motto is: More good times."

— JACK NICHOLSON

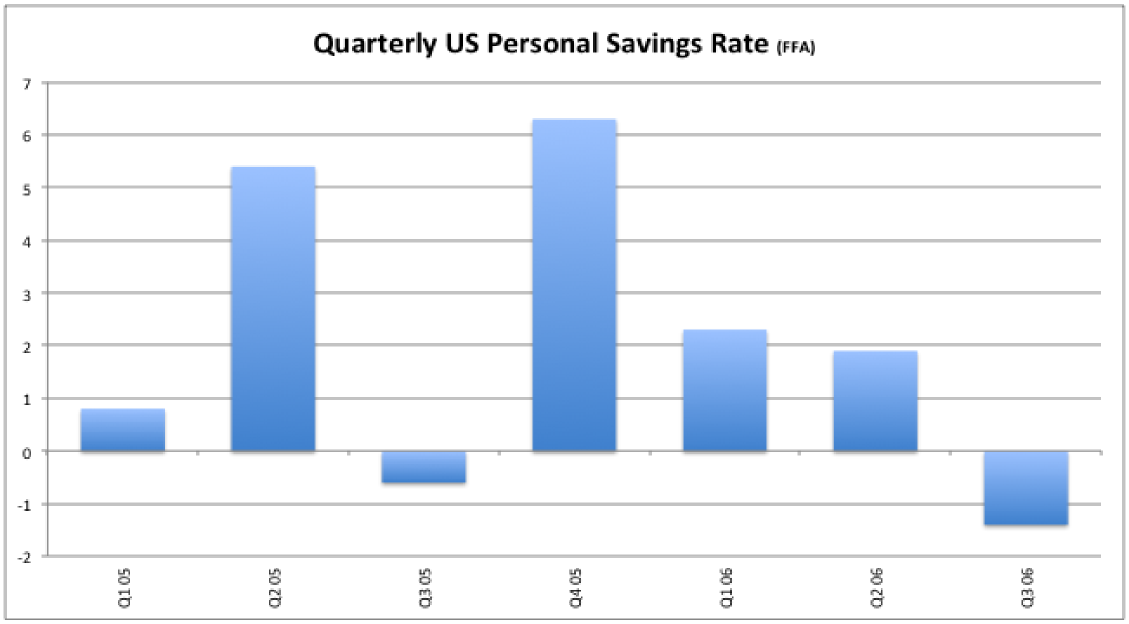
External Forces

Great Economy

Jack didn't star in any movies in 2005 nor did the Lakers win the NBA title, but as far as the economy was concerned, 2005 was a very good year. 2 million new jobs were created and unemployment rates fell from 5.4% to 4.9%. 2006 continued this trend with another 1.8 million new jobs created and the jobless rate fell to a very low 4.5%. The average household had been growing its net worth rapidly over the past few years, almost entirely due to a very significant run-up in the value of their homes. The Case-Shiller Index was up over 50% since 2000 so most homeowners were feeling good about their financial situations.

Consumer Levering Up

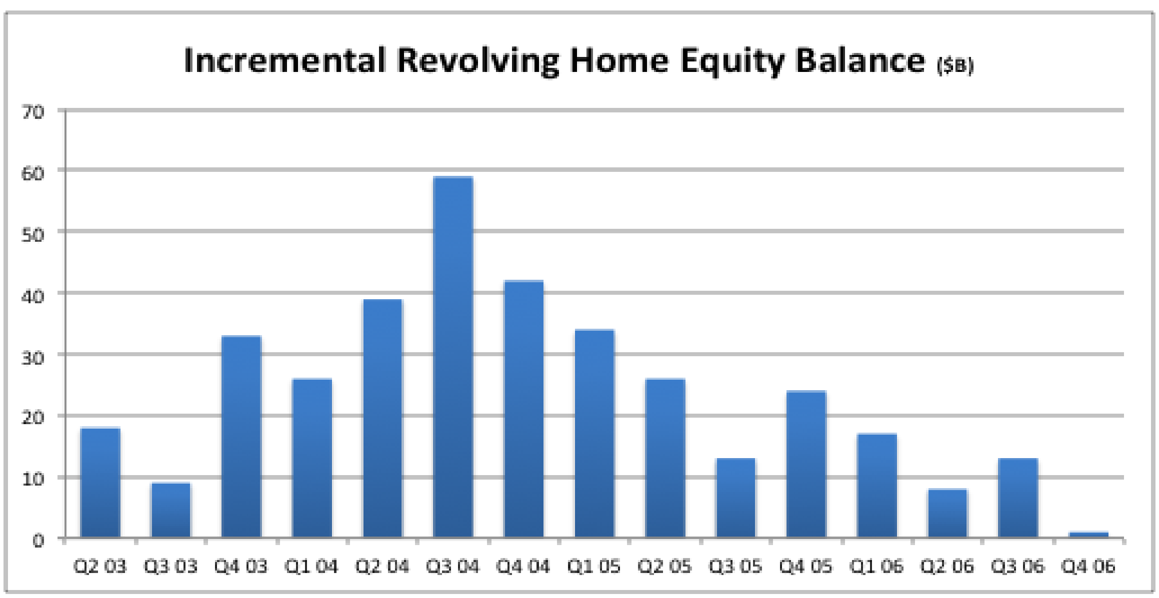
And like many periods of optimism, consumers spent like it was going to last forever. The average household spent 6.9% more in 2005 than they did in 2004 when they spent 6.3% more than in 2003. Credit card balances were on the rise and the personal savings rate was on the decline, hitting a decade plus low of negative 1.4% in the fourth quarter of 2006.



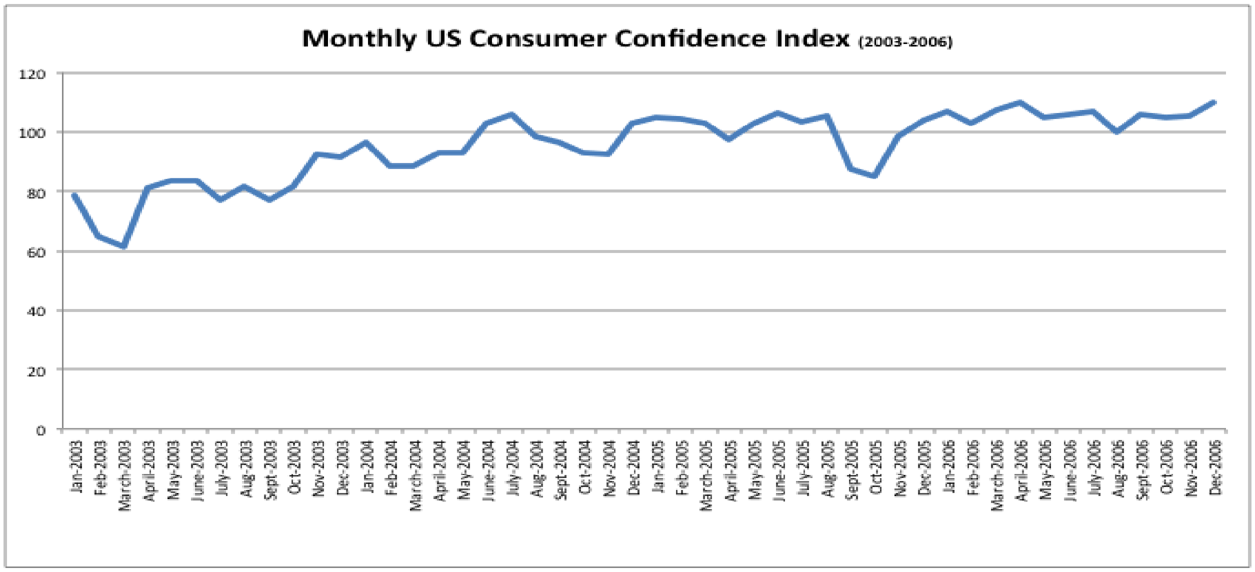
Source: US Bureau of Economic Analysis

Home As An ATM Machine

With all this newly found wealth trapped in the average consumer's home, the banking industry found a way to give consumers a way to access their equity through HELOCs and cash out refinance. Many consumers were refinancing their homes and banks were aggressively bundling HELOC products as part of the package. A checkbook or card was put in their hands that turned their house into an ATM. And guess what happened? The consumer started to withdraw money quickly. HELOC balances more than doubled between 2003 and 2006 with consumers taking an additional $350B of home equity and converting it to cash. Let the good times roll.



Source: Federal Reserve Bank of New York



Source: Federal Reserve Bank of St. Louis

Large Banks' Personal Loans Departments

Growth Mandate

While each and every Bank has its own strategy for success, their general plans look very much alike - bake buffers into the loss forecasts for every decision that extends credit. But even the most conservative of organizations valued growth and it was the job of the P&L owners to deliver. A good friend of mine that works at one of the top 5 Banks in the country told me that during this era the mantra of the Executives was "Earn your bonus one year at a time". The Powers-That-Be told them to chase asset growth so that's what they did.

Competition

The issue with growing an unsecured Personal Loans business during this period was that the product itself was potentially inherently inferior to the other choices that consumers had at their fingertips. When I took charge of Capital One's Personal Loans business in 2005 this was very true, and "fixing" it required a complete re-engineering of the product.

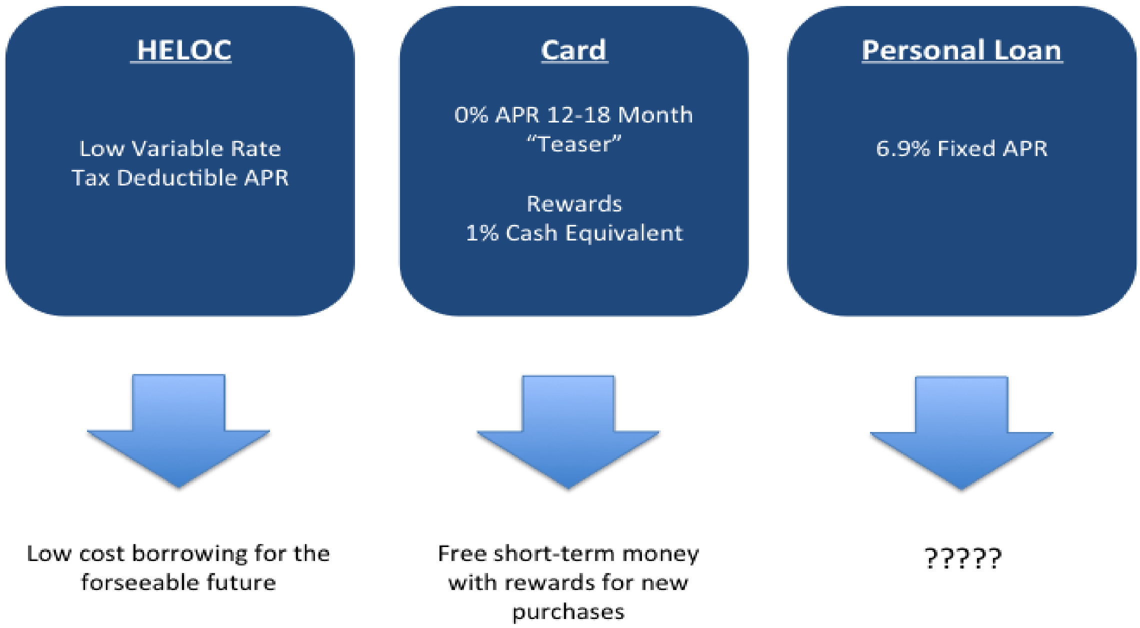
> *"Would a rational consumer pick our product?"*

The first question every Bank should have asked their Personal Loans business unit was: "If given perfect information about their choices, would a rational consumer pick our product?" The answer for most Banks at the time was a resounding "no". The typical product in the market was neither twixt nor tween and didn't seem to have a place in the consumer's eyes. HELOCs were the financial product of choice for large purchases as well as for consumers who wanted to consolidate their debt. House prices were consistently rising, the interest rates on

HELOCs were low and all the interest was tax deductible. What's not to like?

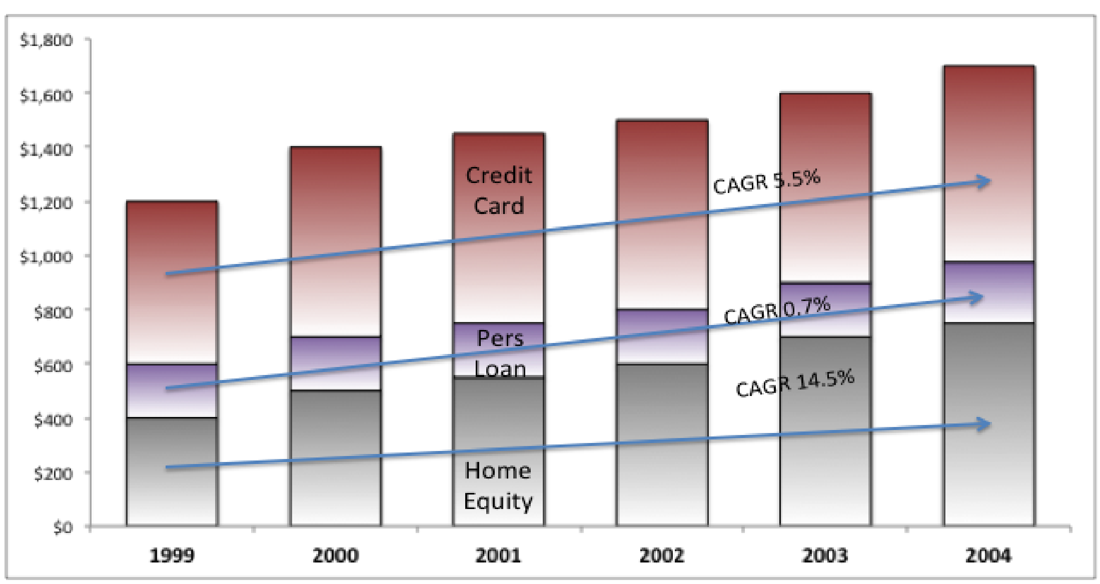
And to make matters worse, the credit card industry was aggressively trying to capture consumer spend through massively incentivized balance transfer offers and aggressive credit limit increases. Significant incremental buying power was put in the hands of the average consumer in an easy-to-use vehicle that accompanied them everywhere they went.

Prevalent Market Place Offerings



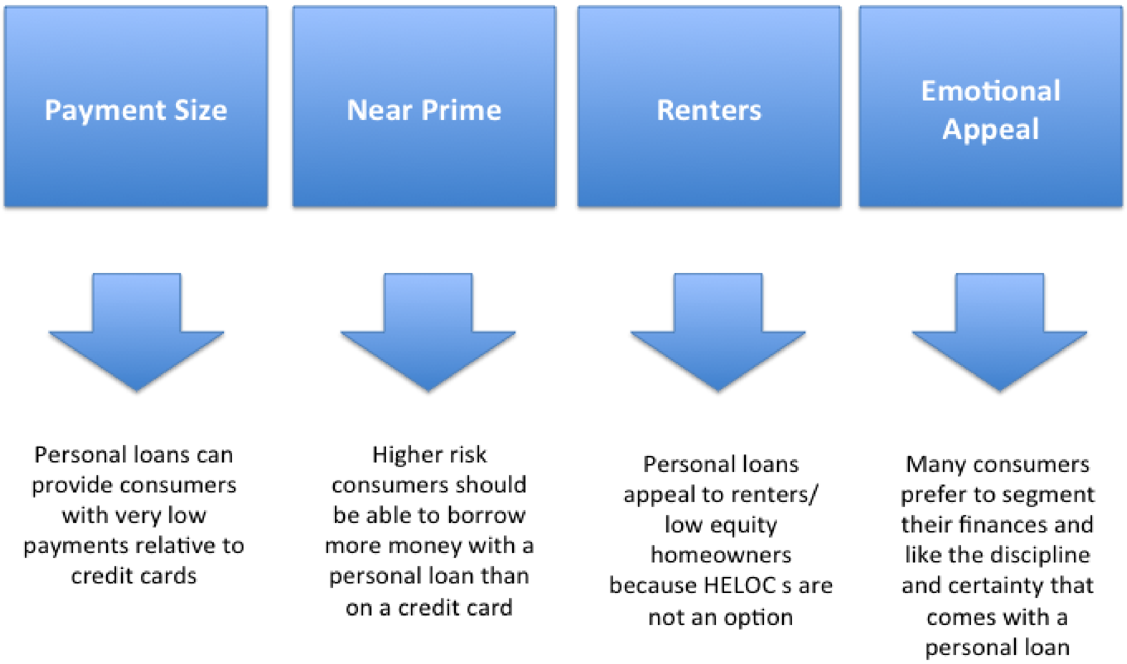
Credit Card, Home Equity and Personal Loan Market Size

O/S $B

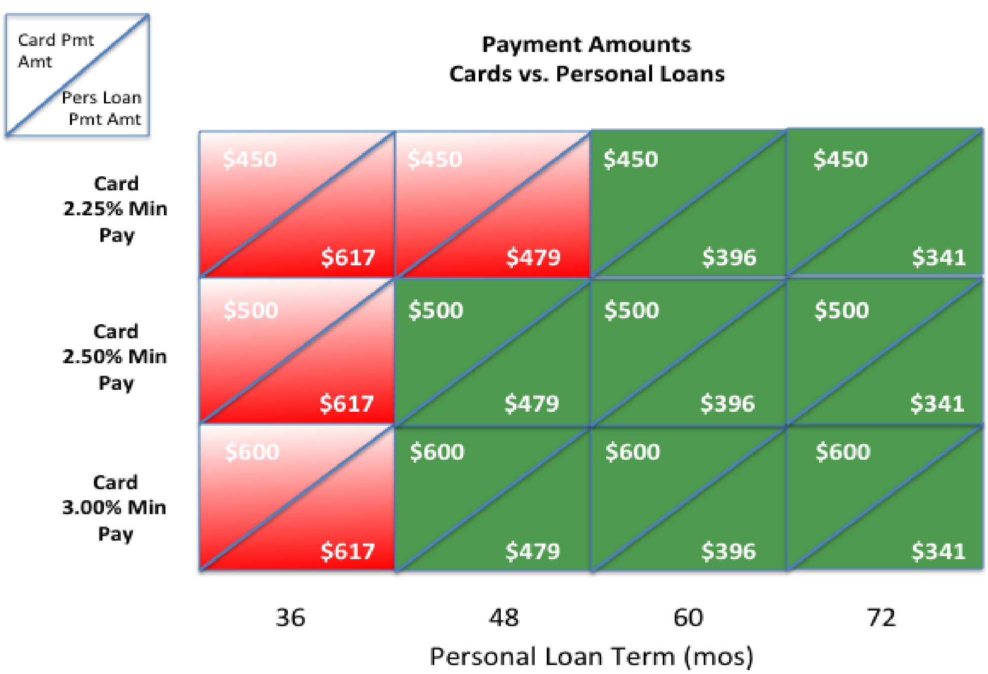


Source: QED Analysis, Federal Reserve Bank of New York

So where did the Personal Loan fit into the mix? This was a real challenge. Finding customers for whom it was a rational choice to pick a Personal Loan over their other choices wasn't easy, but the market was big and the segments did exist when one looked hard enough.



Personal Loans have lower payments than credit cards for longer term loans



Capital One was one of many Banks that re-imagined the business and found segments hungry for Personal Loans. The typical product in the market had no origination fee, credit availability up to $25,000, variable rates in the 5.9%-6.9% range, and in many cases terms as long as 6 years. 85% of the customers used the product for debt consolidation and the remainder funded large life-events such as vacations and weddings. At Capital One, growth went from very modest levels to hundreds of millions of dollars a month in new originations by the end of 2005. And the growth continued after I left. By the end of 2006 the portfolio had grown into the double digit billions and was rumored to be throwing off 2.5% unlevered returns with ROEs well in excess of 20%. The economics were compelling.

Book Now And Fix Later

Many other Banks had similar products to Capital One's in the marketplace, but Bank of America took an even more aggressive tack. They rolled out a revolving line of credit under an assumption that they had more pricing flexibility given it was open-ended vs. closed-ended credit. Re-pricing rule breakers in open-ended credit products was the norm, so the Bank of America team decided they could "book it now and fix it later". The pedal went to the metal and by the end of 2006, it was rumored in the industry that they had amassed greater than a $25B book of business. There was an obvious 800 pound gorilla in the industry and its name was Bank of America.

Prosper and Lending Club

Launch Of An Idea

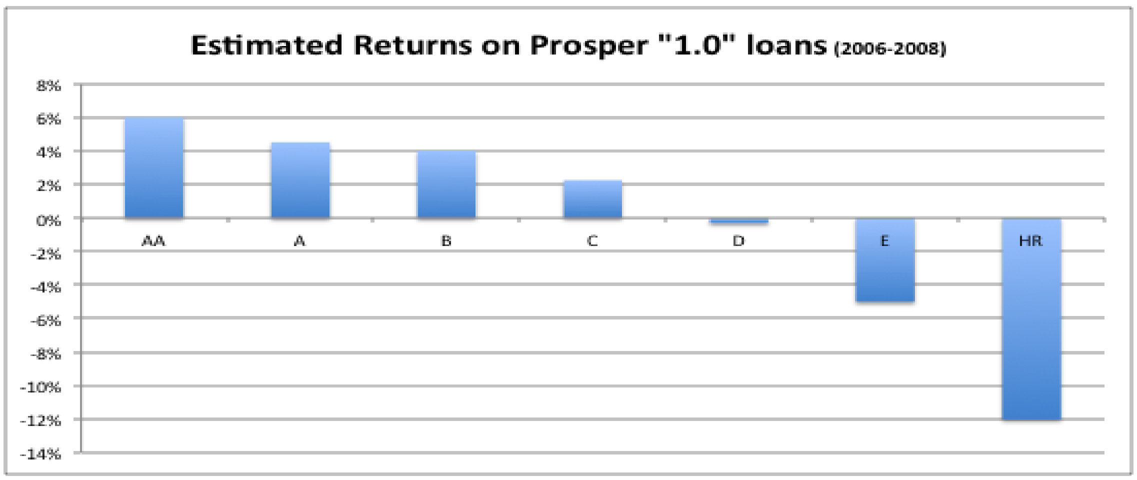
Founded by Chris Larsen after his successful exit of E-Loan (he was its co-Founder), Prosper was the original peer-to-peer lending institution in the US and made its first loan in February of 2006. The idea was simple yet profound. Create a marketplace where individuals could fund fractional pieces of other individuals' loan requests. This model would theoretically bring borrowers great rates and would allow lenders to earn a return in excess of their other market options. Anti-Bank positioning. Seamless internet application process. Jack meet Jill. The common man wins. The phrase "peer-to-peer lending" was coined and the market has never looked back since.

Wild West

But with any new idea comes growing pains, and in the case of Prosper, the early model wasn't quite right. Prosper initial launched as an eBay style auction marketplace where loan rates were determined by the participants using a Dutch auction system. The responsibility for setting price was squarely placed on the shoulders of the lenders which was problematic because the lenders were individuals with very little understanding of credit risk or yield management.

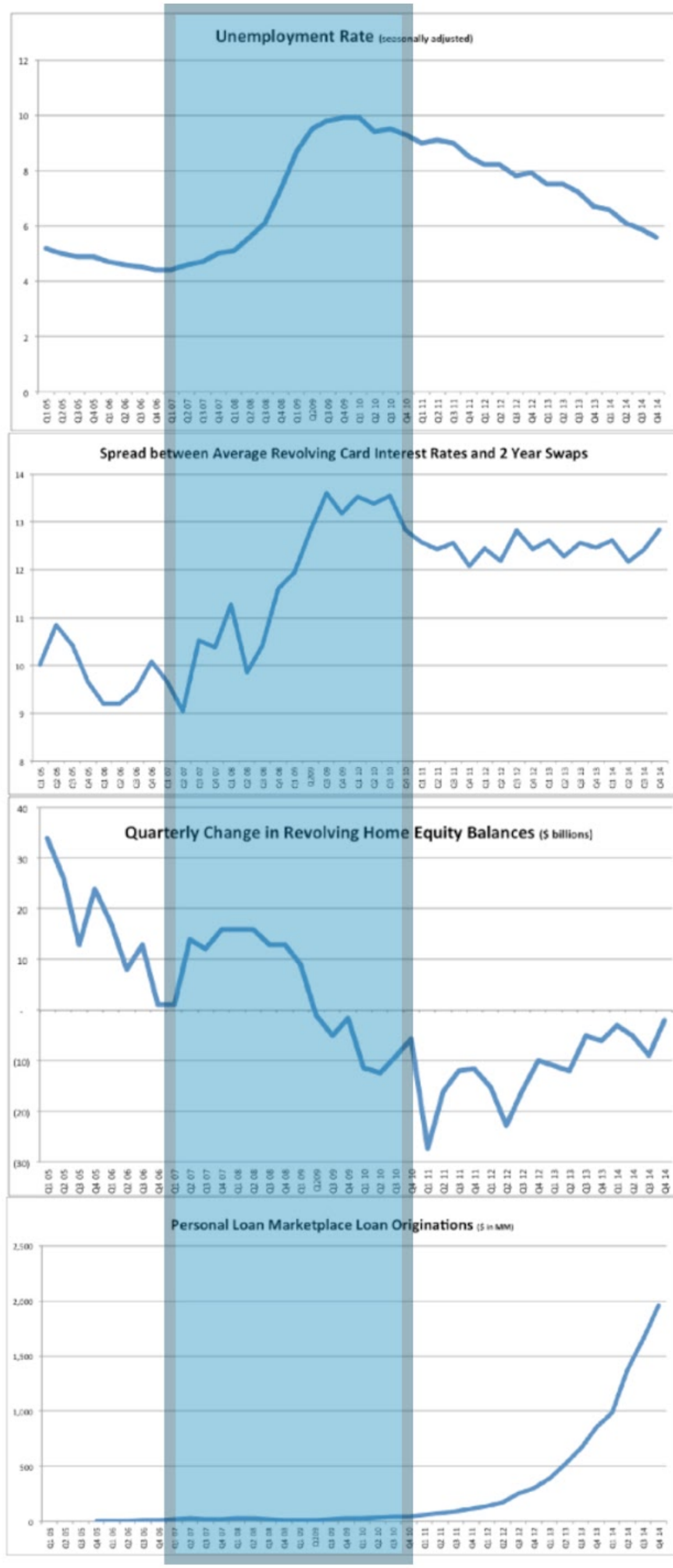
It was also unclear as to which regulatory body had responsibility for overseeing Prosper's business. Was Prosper a Bank/Financial Institution? Was Prosper selling Securities? Was Prosper merely an unregulated marketplace? This uncertainty made many investors skeptical of the model and was compounded by significant negative feedback about how uninformed lenders were driving down the rates to levels that no traditional lender would touch. And this feedback was spot on. The loans made in this era proved to be quite poor and many lenders ended up with negative returns as a result. In fact, one online analytic website estimates that the net return from all loans from this early Prosper period was negative 4.67%.

Source: (http://www.nickelsteamroller.com/#!/page/prosper_1_0)



Source: LendAcademy

The Bust Era


Unemployment Rate (seasonally adjusted)
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THE BUST ERA

2007-2010

"Usually the best ideas come from having to fix a really hard problem."

— JESSE SCHELL

External Forces

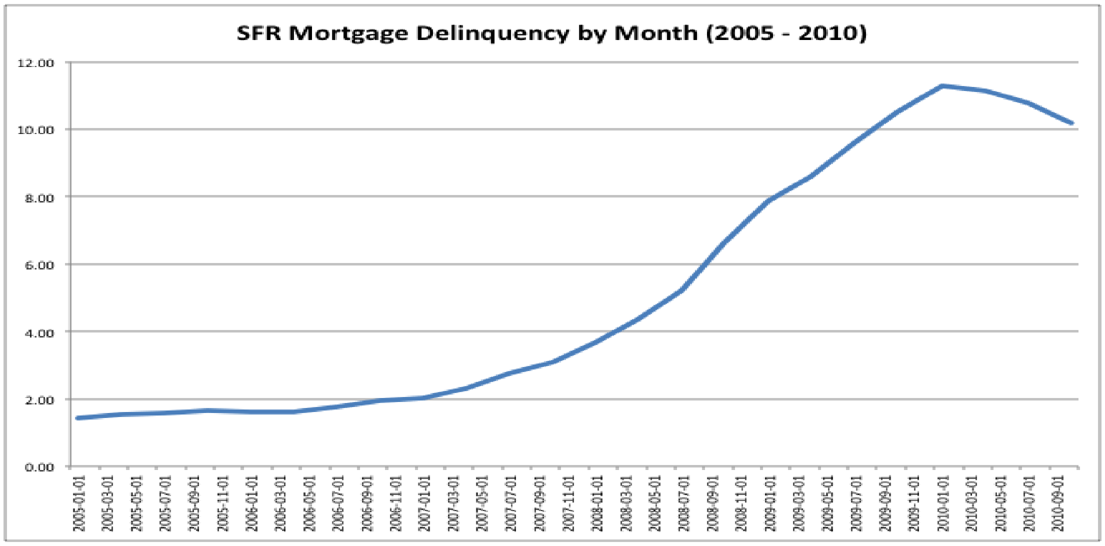
Great Recession

What goes up must come down, and in the case of the US economy it came down hard in a few short years. The unemployment rate started to creep upward in 2007 to 5.0% but rocketed to 7.2% by the end of 2008 with no end in sight. Even with massive Federal intervention, the unemployment rate hit 10.2% in October of 2009, the highest rate it had been in a quarter of a century.

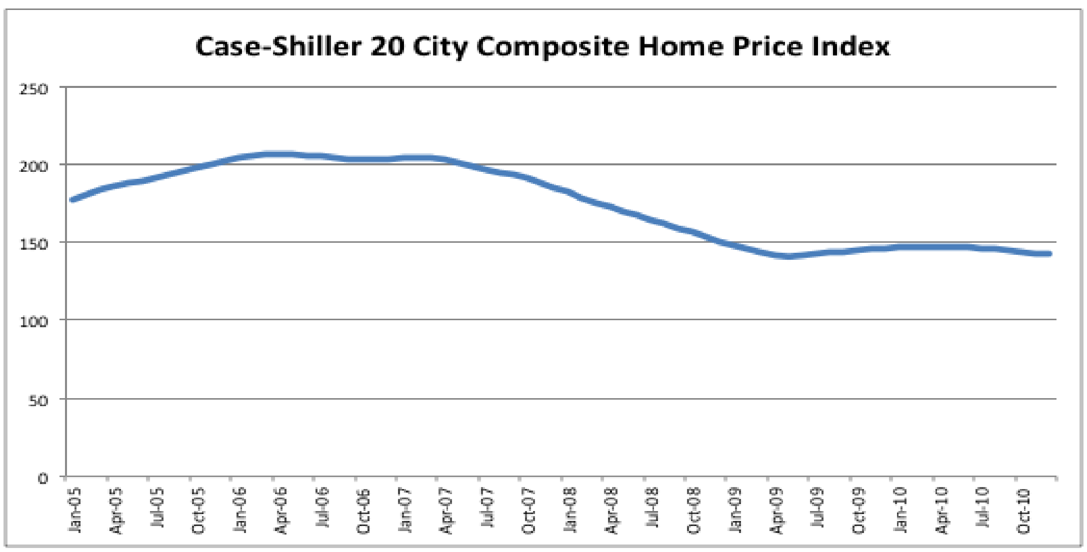
While jobless rates were increasing, it had also become clear by mid-2007 that a substantial percentage of homeowners were struggling to make payments on their mortgages. Delinquency rates were on the rise and consumers started to realize that the net worth gains they had experienced over the past decade weren't real. Nearly $500B of "subprime" mortgage securities were devalued significantly and the equity markets were in turmoil.

Government Intervention

Because the problems were so severe and so many "average Americans" were affected by the economic crisis, it's not a surprise that the natural reaction of politicians and journalists was to try to find the culprit. Fingers were pointed and the Banking system as a whole was under siege. Lehman Brothers declared bankruptcy, the biggest filing in history, and the collapse and sale of Bear Stearns to JP Morgan was a prelude to the global financial crisis.



Source: Federal Reserve Bank of St. Louis (FRED database)



Source: Federal Reserve Bank of St. Louis

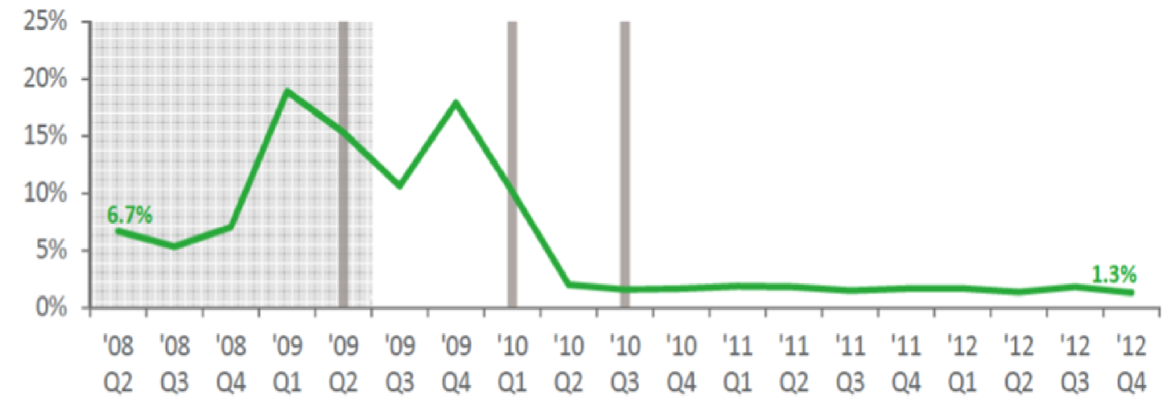
Government Intervention

But the problems of Lehman Brothers and Bear Stearns were merely the tip of the iceberg. The Government seized control of Fannie Mae and Freddie Mac and then stepped in with the American Recovery and Reinvestment Act of 2009 in an attempt to get the economy back on solid footing, but the extreme nature of the crisis caused Regulators and Politicians to examine the "sins of the Banking world" and craft what they believed would be more permanent fixes.

CARD Act

The CARD act presented issuers with a final "bite at the apple" and many chose to reprice the accounts of their existing customer base – regardless of the underlying credit quality. Even superprime borrowers saw their average credit card APR increase almost 300 basis points in an overall low interest rate environment.

FIGURE 7: INCIDENCE RATE OF UPWARDS APR REPRICING (ACTIVE ACCOUNTS)



Source: CFPB's Credit Card Database sourced via CARD act study, September 2013

Dodd-Frank Act

In fact the crisis was so severe that a Congress deeply divided along partisan lines came together to enact the most sweeping piece of financial legislation since the Great Depression – The Dodd-Frank Act (DFA), so named after its two main congressional sponsors, Senator Chris Dodd and Representative Barney Frank. While the legislation touched essentially every corner of the American financial system, three main changes are worth noting that each had an impact on the lending industry.

First, one of the key tenets of DFA was to establish the Financial Stability Oversight Counsel (FSOC) to preside over firms that were deemed "too big to fail". The FSOC was established to prevent situations like the AIG meltdown because of how intertwined the entire system was with risks that no one seemed to think much about until a crisis was at hand.

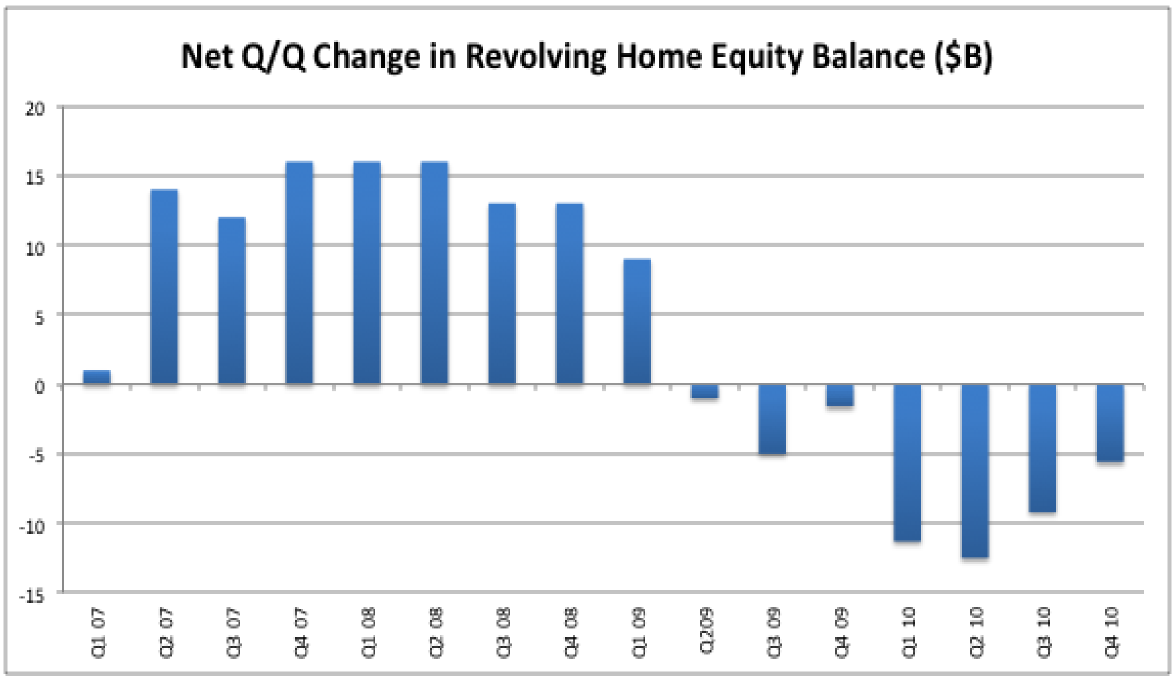
Second, another key and highly contentious aspect of the law was the establishment of the Consumer Financial Protection Bureau (CFPB) to house consumer facing banking regulation for both Banks and non-Banks under one roof. This had traditionally been the domain of regulators like the OCC and the OTS but now fell under a new, very active organization. The first two years of the CFPB were focused on writing the wholesale changes to the mortgage rules but one only needs to look at the credit card industry to see the CFPB's impact via the hundreds of millions of dollars in restitution and fines levied against issuers for their sale of add-on products through 3rd party outsourcing.

Lastly, the DFA touched on capital reform. In conjunction with the implementation of Basel III rules, the capital required to be held by Banking institutions had a severe impact on their return hurdles as well as their internal transfer rates of funding.

The net result was to force the Banking system into a defensive mode with many Executives in the largest Banking organizations spending the majority of their days with Regulators. In 2013, Reuters reported that JPMorgan Chase was planning to spend over $4 billion and focus 5,000 FTE on risk and compliance issues. The Banks were effectively put on notice and they had no choice but to listen.

HELOC Collapses

The significant reduction in home values caused Banks to re-assess the outstanding credit that had been extended to homeowners in the form of HELOCs. Most unused lines were frozen and by late 2008 most consumers were put into "paydown" mode. The net result was a reduction in HELOC balances of nearly $50B by the end of 2010 and almost four times that by the end of 2013.



Source: Federal Reserve bank of New York

Large Banks' Personal Loans Departments

Having been responsible for the loss forecasting team at a large Banking institution, I can personally say that it might be one of the most difficult and most thankless jobs on the face of the planet. Business units are more than happy to take credit for any improvements to the credit loss numbers but will act very defensively (and sometimes with anger) when the projections show major increases. The reason for this goes beyond the immediate P&L impact and beyond worrying about one's annual bonus.

Ugly Forecast

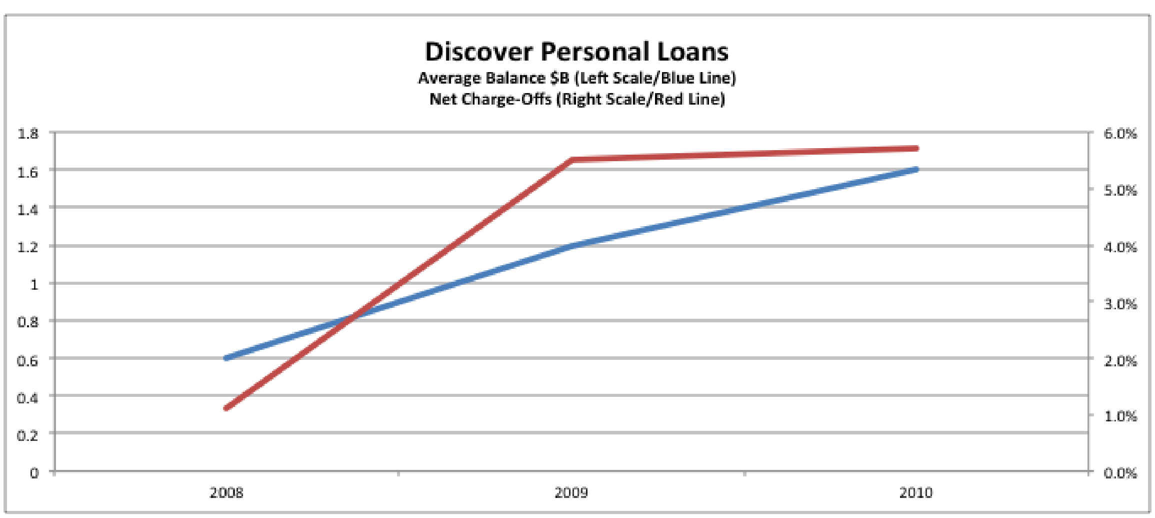
It stems from the fact that any new assumptions in the forward looking credit loss forecast don't take long before they're baked into the loss curves that drive marketing and booking decisions. Significant negative changes could actually cause one's entire "raison d'etre" to be challenged. If a business slowed down or stopped booking new customers it wasn't long before Executives were fired, staff reallocated and the existing portfolio ultimately absorbed by a still-functioning unit.

And in 2007 and 2008, the loan loss forecasts of the personal loans businesses at most major institutions were being revised upwards monotonically every single month. It was only a matter of time before the loss forecast teams decided to make a large adjustment to the forecast instead of ratcheting it upwards a little every month. ***And when it happened, it was an extinction event***.

Extinction Event

The personal loans product has a distinct disadvantage over many other financial products in that it has no future utility. You live in your house. You drive your car to work. You can use a credit card for new consumption and delayed payment. This means that in a Maslovian sense the personal loans product is not in a privileged place in the payments hierarchy. In fact, it was at the bottom.

So when the loss curves were finally adjusted upwards to what was being seen in the market, the net result was 2-3X the losses that were originally projected when the loans were booked. One large institution with a $10B portfolio was looking at a $300MM net loss. Bank of America was the biggest player at the time due to their aggressive booking into their line of credit product, and rumors circulated that the loss rate on this portfolio was projected to peak in the "mid-teens", creating a multi-billion dollar projected loss for the firm. GE Capital had looked to sell its personal loans business in 2007 for "strategic fit" reasons and these plans had to be shelved given the market conditions.



Source: Discover Financial Services SEC filings

With the exception of Discover, practically overnight the personal loans business units at most major Banks were shuttered. Discover's portfolio was very small to begin with so it was just as easy to keep it alive as it was to shut it down. But at just about every other entity, the personal loans product was stripped from their web sites and collateral material was pulled from the branches. Since very little can be done to a closed-end loan product from an account management perspective the teams were deployed elsewhere. And Bank of America's strategy of "book now and fix it later" didn't work. The Regulators took a very strict and conservative view towards the actions that they would allow and as a result the re-pricing power that Bank of America thought they had didn't materialize. The comet hit the Earth and the dinosaurs were now extinct.

Prosper and Lending Club

Capital Raises

The question I ask to this day is "What would have happened if Prosper and Lending Club didn't raise large rounds when they did in 2007?" The timing of their raises is incredibly fortuitous because it gave them enough capital to survive an environment filled with turmoil. Prosper raised $12.5MM of venture capital in 2006 and an additional $20MM in June 2007. Lending Club raised a $2MM Angel round in May of 2007 and an additional $10.3MM that August.

If the same capital raises had been needed in 2008 they might not have happened. Any credible venture firm would have researched the landscape and seen that the Banks were busy shutting down their personal loans businesses and would have questioned the ability to attract lenders to the platforms at the peak of the crisis. The increases to these companies' loan loss reserves were very public and scary, and there was no credible argument that could be made that these platforms could "outperform" the giants from a risk modeling standpoint.

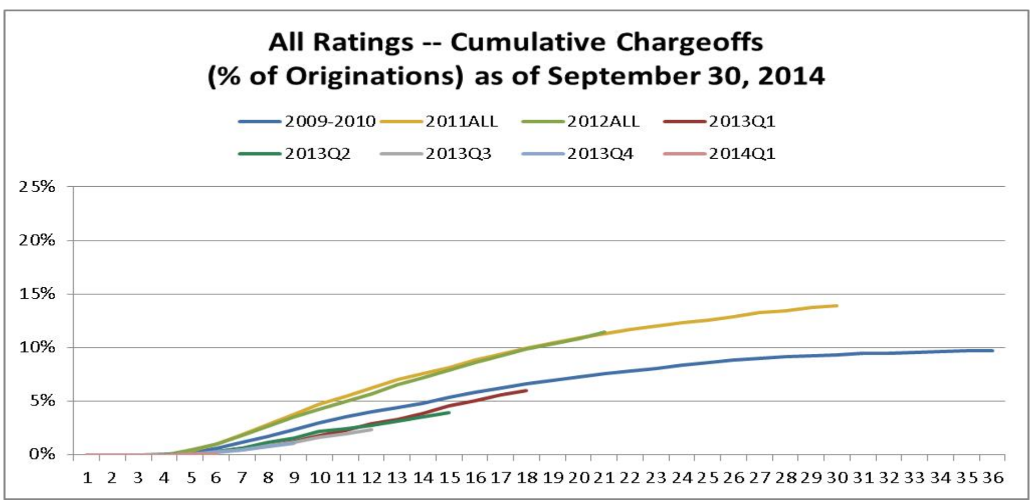
Governed By The SEC

And while it was very painful to the platforms and the Venture Investors backing the platforms, the timing of the SEC's intervention couldn't have been better. There was a debate throughout 2007 and 2008 regarding which agency was going to govern these new "Peer-to-peer" marketplaces and the ultimate answer was the SEC. Lending Club adopted their oversight much earlier than Prosper did, with Lending Club entering a quiet period from April of 2008 and resumed originations activities that October.

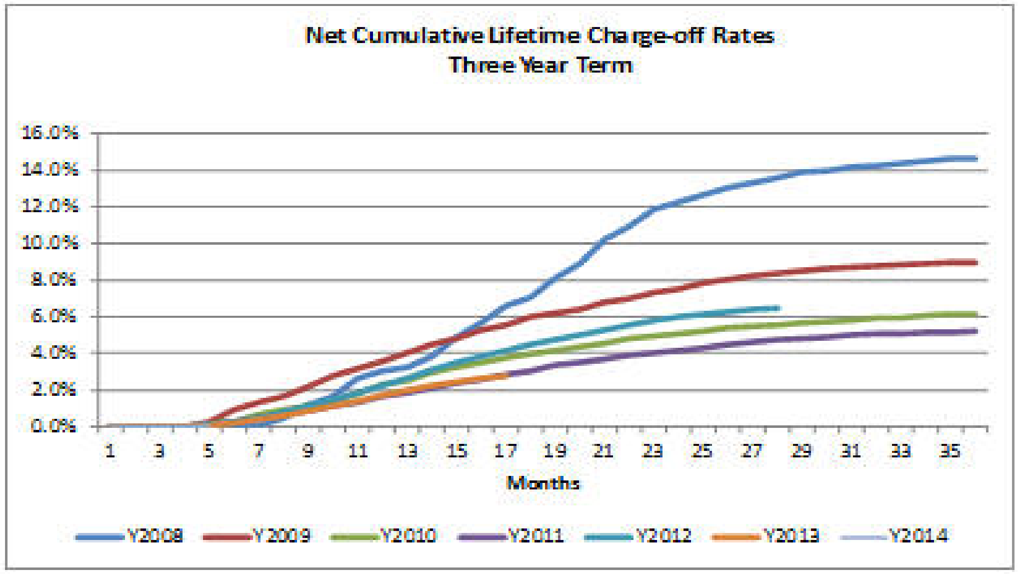
Prosper challenged the SEC for most of 2008 and was ultimately forced to change in November of 2008 when the SEC issued a Cease and Desist order against the company due to their supposed violation of the Securities Act of 1933. Prosper adjusted its business practices accordingly and in July of 2009 reopened its website for lending once again.

Source:
www.sfgate.com/business/article/Prosper-back-to-making-loans-still-battles-SEC-3262142.php

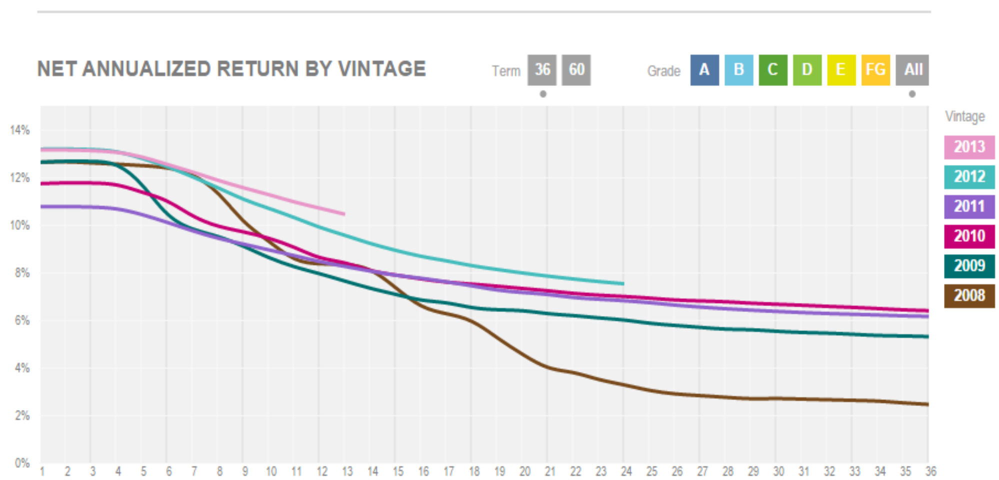
The reason why the timing of the SEC actions is important is subtle but profound. While both companies were busy spending money adapting to the SEC mandated business practices, the economy was going through its own changes. It was much easier to see where the economy was heading and where the trouble spots were by mid-2009 than it was in early 2008. Credit models could take this into account and Prosper and Lending Club could focus on the prospects in the marketplace that weren't under severe stress. Customers were underwriting themselves everyday through continuing to pay or not being able to/strategically choosing not to pay their bills, and as a result it became very easy to avoid the worst of the applicants. An artifact of this issue is that the performance of the small tranche of customers booked by Lending Club in 2008 is quite poor but by 2009, origination vintages improved dramatically. And, Prosper made the important decision to wind-down its Dutch auction process and play the critical role of setting rates and credit policy on behalf of its lenders. It shouldn't be a surprise that since then the performance of lenders on the platform has improved dramatically.



Source: Prosper Marketplace 10-Q, Q3 2014



Source: Lending Club 2014 form 10-K



Source: https://www.lendingclub.com/info/demand-and-credit-profile.action

Managing The Imbalance

While personal loans were a well-known and understood product category, the way Prosper and Lending Club were originating loans and their respective track records had yet to be proven. There needed to be a Promethean leap of faith by lenders that the "revised" risk adjusted returns represented by Prosper and Lending Club would come to be. Some early investors jumped on the band wagon, mostly hedge funds, and it was common for these investors to want the higher priced assets. Hedge Funds looking for yield saw the Prosper and Lending Club platforms as places to put money to work, especially in light of a sustained low interest rate environment.

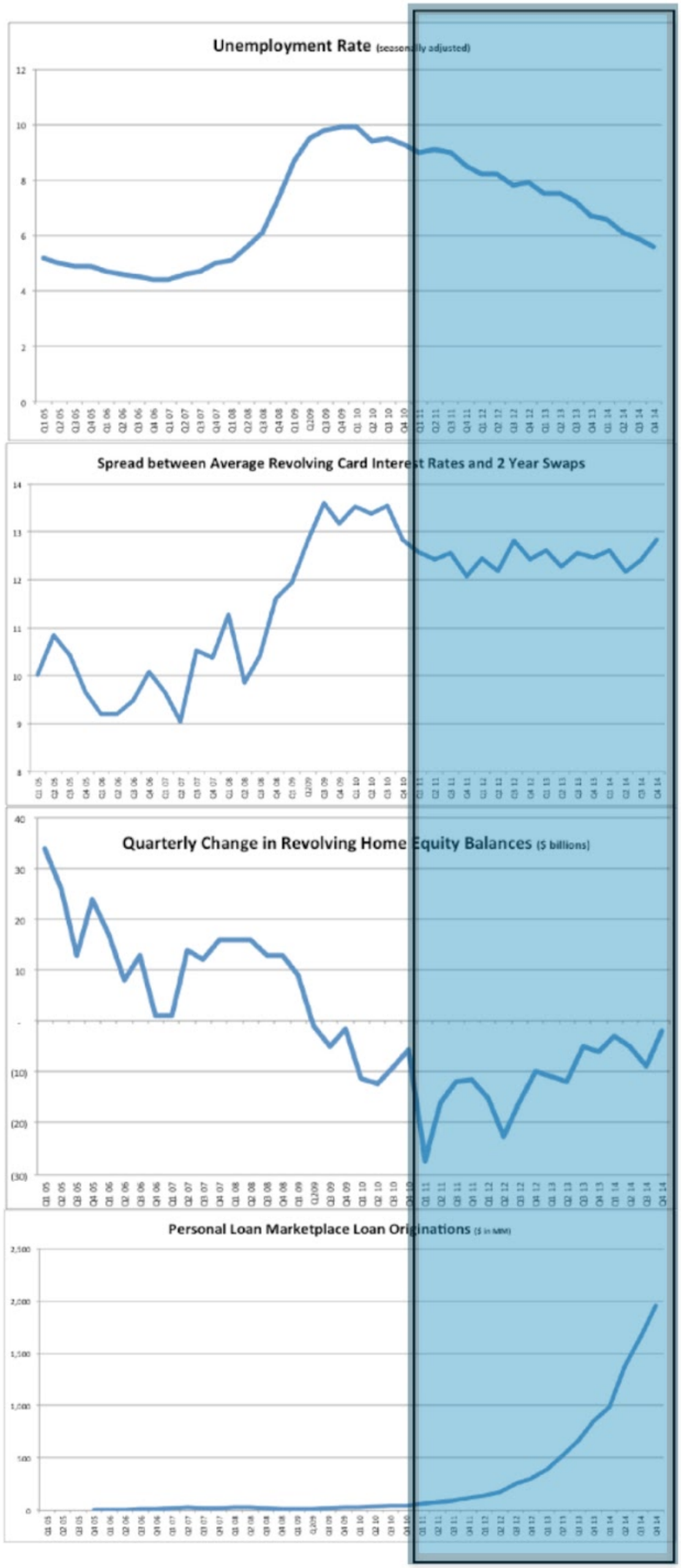
But an obvious issue emerged due to the fact that the core product offered by Prosper and Lending Club was a debt consolidation product. More than 75% of the borrowers wanted to pay off higher priced debt, much of which was recently repriced in the credit card space in advance of the CARD Act going into effect in early 2010. For a debt consolidation loan to be successfully marketed and closed, the pricing needed to be low, resulting in lower monthly payments for consumers. There were struggles on the funding side of the equation as well since return expectations of the hedge funds were in the low to mid-teens. Thus the platforms had a structural disconnect. Prosper felt this profoundly with many of the low risk loans on the platform not clearing. Lending Club had similar problems but not as pronounced. It was fairly typical during this period for Prosper or Lending Club to offer additional incentives to their lenders in an attempt to entice them to purchase certain securities. The platforms would continue to have problems on many fronts if they couldn't solve the market imbalance issue. The marketing efficiency was low, volume was low, platform revenue was low, and profitability was nowhere in sight.

But with time came results. Prosper and Lending Club's credit policy, pricing and marketing skills continued to improve. They were able to start sharing the early investor return results and they looked very promising. By the end of 2010 there was mounting interest in the category by some of the early institutional capital adopters but neither platform had yet to achieve enough scale to attract the deeper and lower cost pockets of capital.

"But with time came results"

Both businesses were burning cash at a fairly alarming rate relative to their results. Exiting 2010 Lending Club was originating $35.7 million of quarterly volume and Prosper $8.4 million. But the Venture Capital community continued to write checks and Lending Club was able to raise another $40MM in 2009 and 2010 and Prosper nearly $18MM over the same period. A lot of money had gone into these businesses and there were many believers with skin in the game that believed the Prosper and Lending Club models were destined to succeed.

The Recovery Era



THE RECOVERY ERA
2011-2014

"Recovery begins from the darkest moment."

— JOHN MAJOR

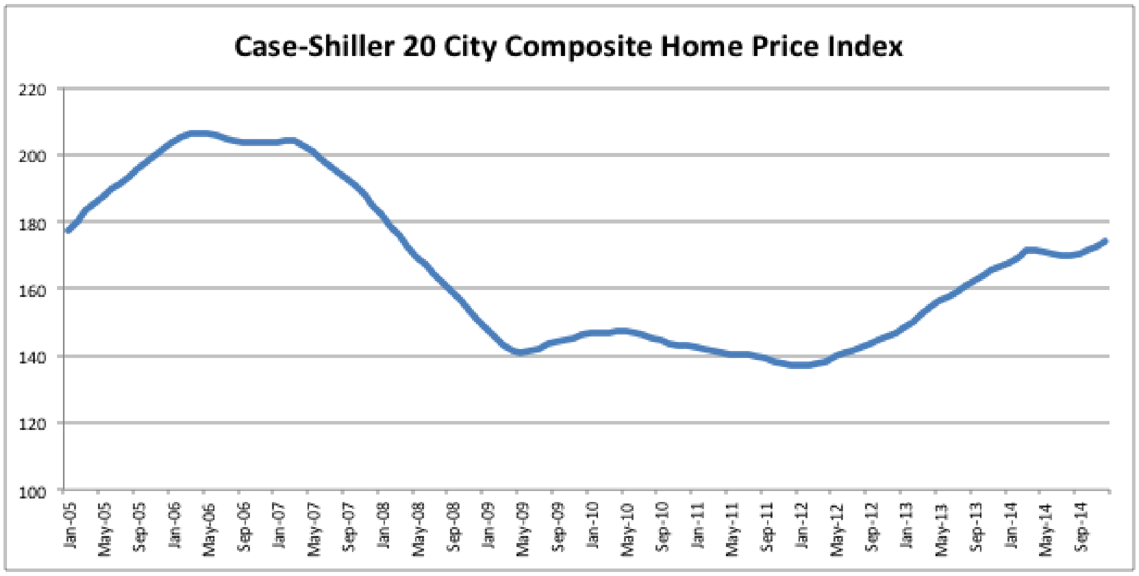
External Forces

House Prices Bounce Back

Slow and steady wins the race, and in the case of the US economy, by the end of 2014 the economy had bounced back to a pre-recession level of health. Unemployment rates slowly came down to near pre-recession levels. GDP recovered and stabilized at a steady 4% rate. The average US consumer's personal balance sheet started to improve with much credit owed to their pay-down and refinancing of existing debt.

Source: US Bureau of Economic Analysis

Home values also started to recover as the economy improved and the backlog of foreclosures started to work their way through the system. By no means was the mortgage crisis forgiven or forgotten, but the increase in home prices was a boost to general morale and a signal to the average consumer that the recovery was actually happening.

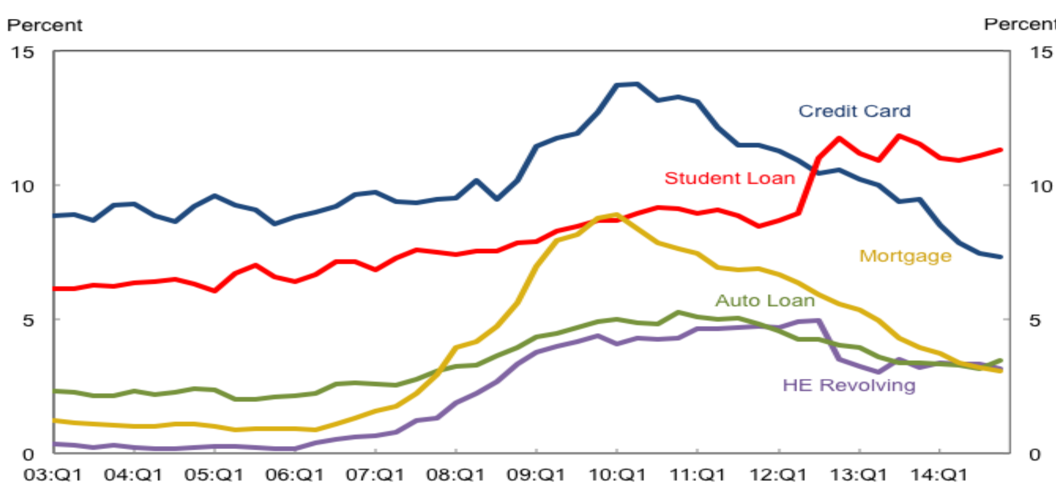


Source: Federal Reserve Bank of St. Louis

Household De-Levering

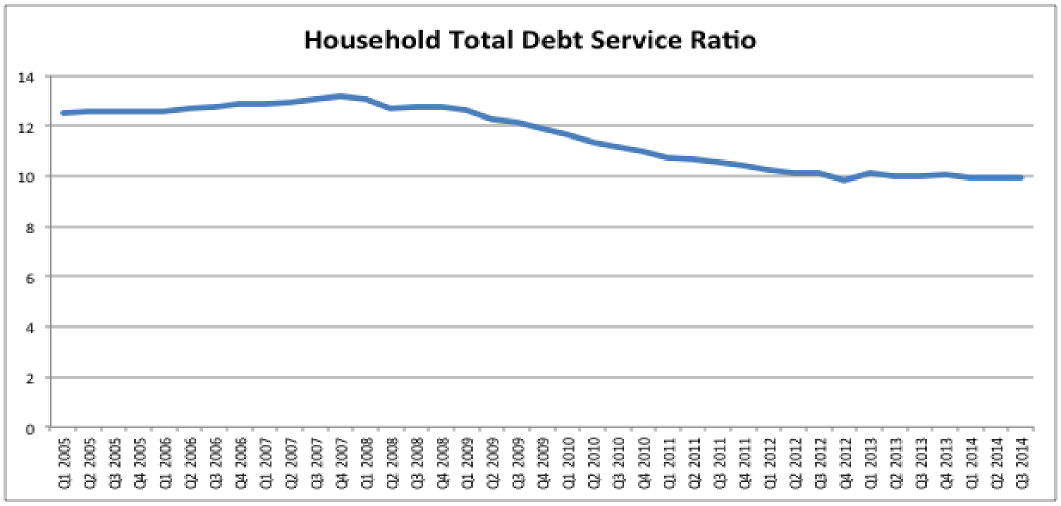
During this period of economic recovery the typical consumer behaved very rationally. It took years to clear out the sins of the mortgage industry, but it was clear that the "bad mortgages" were working their way through the system. Strategic defaults on houses with underwater equity positions were still fairly common and for the first time, auto loans swapped positions in the payment hierarchy with mortgages. Consumers realized they could live in their car but they couldn't drive their house to work.

Percent of Balance 90+ Days Delinquent by Loan Type



Source: FRBNY Consumer Credit Panel/Equifax

And with the backdrop of a low and still falling interest rate environment, consumers started looking for ways to refinance their debt. A period of significant deleveraging began and by the beginning of 2013 the typical consumer had given themselves an effective raise by lowering the cost of their existing debt.



Source: http://www.federalreserve.gov/releases/housedebt/

Large Banks' Personal Loans Departments

Analysis Reveals Insights

The old saying "everything that goes up must come down" proved to once again be true. With a reduction in unemployment rates and a de-levering of the average American's personal balance sheet, losses started to decline in every major loan product in every major Bank. Deep analysis was done within the Banks on the damage done by the Great Recession and where the various portfolios performed better and worse. The conclusions of these studies were quite interesting and shaped the strategies of the major players to this day.

The first insight was very specific to the personal loans product line, and although the magnitude of this finding was different by institution the conclusion were the same. Basically, when looked at through a rear-view mirror, the personal loans businesses were shut down when the forward looking loss forecast hit its peak. The actual losses incurred on the various portfolios were lower than forecasted by a very large margin. For instance, the $300MM projected net loss on one Bank's portfolio ended up being very close to $0. The portfolio performed at a break-even level instead of delivering the forecasted drag that caused a panic at the time.

The second insight applied to unsecured personal credit products and was most pronounced within the Big Banks' credit card portfolios. The insight was that customers with lower DTI ratios performed much better in the recession than those with higher DTIs. Many of these customers were traditional transactors on credit cards and weren't the debt-laden revolvers that the card companies chased after aggressively in the 1990s and 2000s. This might sound like a "no duh" conclusion, but it has profound implications. It means that the Regulators may have been right in their conclusion that underwriting at the Big Banks had gotten sloppy and that specific calculations that ensured borrowers had the Ability to Repay were needed. When some of the large players sought growth in the 2005/2006 timeframe, it came at the expense of good, solid underwriting. Almost all of the marginal growth proved to be toxic while the clean, high credit quality, low DTI populations did just fine.

Why Take The Risk?

So the obvious question is "Why not restart the business given these conclusions?" The answer is one that only those of us who have lived in a Bank can understand. The answer has many parts that include brilliant truths such as: "Banks have long organizational memories", "Who's crazy enough to be a champion?", and "Accumulated technology dust."

First, big corporations really do have very long organizational memories especially when it comes to failures. Everybody remembers how much money Joe or Mary wasted trying to get a new product into the marketplace. Failures are held against Executives for a long time and can cause them to re-badge with another company. As a result, working at any big company has and always will be an exercise in building up favors and calling them in later. If an Executive can build a track record of success, he or she can take a little more risk and try something that may fail. So the formula for career progression is to fail on small projects and succeed on big ones. And for any individual in an organization the definition of a big project is one that your boss's boss is holding your boss accountable for. Or it's one that requires a large budget or many scarce resources. Or it's one that requires restarting something that was painfully shut down and written off.

> *"What Executive would take the risk?"*

So what executive in his or her right mind would take the risk to start back up a business line that was shuttered due to large write downs on paper? It would have to be someone who has built up massive trust within the organization and who was able to make the case that the re-start was more important to the organization than other "mission critical" projects. And to re-start a business line that had been completely turned off for a number of years would require a dusting off of old technology (much of which would require the signing of new 3rd party contracts), a complete overhaul of the loan docs and underwriting policies in order to be compliant with the new regulations, and a commandeering of critical staff and budget to get the first tests out the door.

I know executives at two Big Banks who tried. Not a surprise, they both failed. Not because the Banks couldn't compete against Prosper and Lending Club if they wanted to, but rather because they didn't see the point. The Banks had already dramatically shifted their spend and product mix to attract more transactors into their Credit Card divisions and all discussions of trying to increase concentration with customers who actually carried balances was deemed "crazy talk". One or two very small attempts were made to re-launch the product at these institutions but each time the resources were pulled when needed elsewhere and/or the budget was never made available to take the challenge seriously.

Face it, what's a few Billion dollars of loan balances to a top ten Bank? Rounding error. And that's what Prosper and Lending Club were seen as throughout this era. Even at a combined $5.1B of originations volume in 2014 they were seen as irrelevant.

Prosper and Lending Club

Divergence

While Prosper and Lending Club had very similar models at their core, the go-to-market strategy was very different between the companies. And while both ended up finding their way to a very healthy place in today's landscape, Prosper's path was much rockier along the journey. Both firms realized that while the peer-to-peer concept was a very pure and noble design, the reality was that institutional funds were needed to scale the business. And back in 2011, with respect to the battle of attracting institutional investors Lending Club was winning.

Lending Club's Executives and Board members made the bold call to form a subsidiary of Lending Club called LC Advisors, an SEC registered investment advisor that also acted as the general partner to two private investment funds. This vehicle was run by Lending Club and effectively became a bucket of funds that could be deployed to clear loans from their platform that otherwise might not get purchased. Many of Lending Club's investors put money directly into the fund and by April of 2012 it had over $100MM under management.

Meanwhile, Prosper was fighting hand-to-hand combat trying to get institutional investors to commit funds to the platform. One fund did commit $150MM to the platform in June of 2011 but this lender wasn't interested in buying the low risk paper and controlled how and when the funds were deployed. This created incredible leverage over Prosper and didn't solve their core issue of needing an investor who wanted the low risk paper that was at the core of a healthy debt consolidation business.

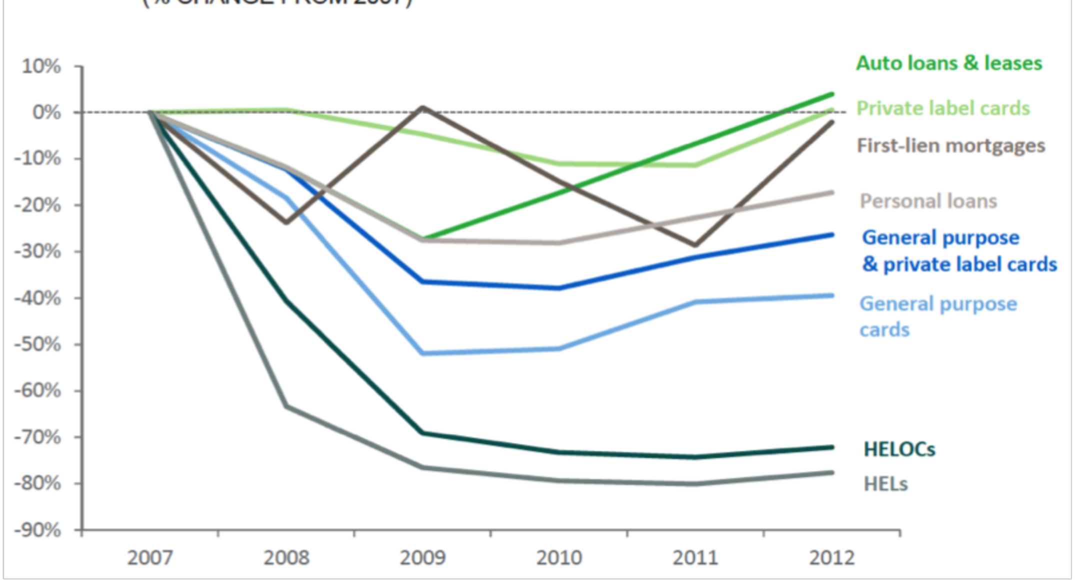
The two platforms quickly started to diverge in originations volume and by late 2012 it was clear that Prosper was in a distant 2nd position. If something didn't change the marketplace was going to have a single winner. Changes were made through a very drastic re-capitalization of the company that was also accompanied by new management. It didn't take long for them to right the ship and very quickly Prosper was back in the game.

Big Opportunity

While both companies were busy trying to figure out how to attract lender capital and prove that their models actually worked, the opportunity for their product and fit in the marketplace increased dramatically due to the actions of the Banks. Sometimes it's better to be lucky than good.

First, even though the equity in consumers' homes was starting to bounce back the Banks were still allergic to lending against it. In this environment, asking your Bank for a HELOC was futile even if you owned 30%, 40%, even 50% of your house. When they did say yes it was after an application process that felt like a proctology exam that ended with a fraction of the access that one originally wanted.

FIGURE 20: NEW ACCOUNT ORIGINATIONS BY PRODUCT
(% CHANGE FROM 2007)



Source: Oliver Wyman/Experian Market Intelligence Data sourced from CFPB CARD Act report

Second, every major credit card issuer slipped in one last change in terms before the CARD Act went into effect. Goldman Sachs estimates that $186B of balances were repriced which effectively made the Prosper and Lending Club products that much more relevant to these customers. Finding them online was easy through growing franchises like Credit Karma. Pre-screened direct mail was another obvious channel that helped increase loan volume and was very scalable. And since Prosper and Lending Club could truly save customers a significant amount of money, the platforms migrated the originations fees upward and customers didn't complain.

The combination of new and efficient channels, improved targeting capabilities, increased consumer appetite due to lack of options and increased fee income in the system "unlocked" the business. The platforms could originate a customer for 1.5%-2.0% of the face value of the loan and turn around and charge the customer a 4.5% origination fee. They then turned these loans over to investors looking for 6%-10% unlevered yields and captured a 1% servicing fee that was slightly profitable. The businesses entered a "just add water" phase where all that was needed was capital for marketing and loan purchasers on the back end who wanted the paper.

FIGURE 39: RETAIL APR FOR NEW GENERAL PURPOSE ACCOUNTS
(EXCLUDES PROMOTIONAL INTEREST RATES)

Source: CFPB's Credit Card Database sourced via CARD act study, September 2013

And then came 2013 and 2014, the years that Prosper and Lending Club truly accelerated. Because the yield on Prosper and Lending Club loans had been stable and strong for years, many large sources of capital started contacting the platforms to see if they could gain access to their originations volume. Public announcements about new strategic relationships seemed to be coming out frequently and those close to the platforms knew that there were dozens of sources of funding waiting in the wings that were disappointed they weren't being given access to forward flow originations volume.

Just Add Water Capital

Equity capital followed to fuel the originations appetite and the market cooperated --- Prosper and Lending Club were able to originate $2.3B in 2013 and $5.1B in 2014 combined. Some of the big announcements included:

- March 2013 – Santander entered into a receivables purchase agreement with Lending Club that allowed them to purchase up to 25% of their originations for the next three years
- May 2013 – Google Capital backs the majority of a $125MM equity round in Lending Club
- June 2013 – Titan Bank makes its first loan on the Lending Club Platform
- September 2013 – Prosper raises $25MM in equity and added BlackRock as a backer
- May 2014 – Francisco Partners led a $70MM equity round into Prosper
- May 2014 – Lending Club formed a Strategic Alliance with Union Bank to both buy loans from the Lending Club platforms and to offer new products to the Union Bank customer base

And it wasn't all about big Banks and Private Equity backing the platforms. The early institutional lenders on the platform also wanted originations volume and were willing to reduce their unlevered yield expectations to do such. To combat the lower yield they sought leverage from big Banks like Capital One and because the category had "arrived", the leverage did as well. 2:1 and 3:1 leverage ratios became available for hedge funds as did securitization of their portfolios which pushed their yields back into the teens. As a result, investment management firms like Eaglewood Capital Management, Colchis Capital, Ranger Capital Group and Prime Meridian Capital Management became steady buyers on the platforms.

By the end of 2014 it was clear that the smaller Banks saw Prosper and Lending Club as valuable partners rather than competitors. A few months into 2015 solidified this perspective with big announcements made by both platforms regarding relationships with consortiums of hundreds of Banks. Only the biggest Banks weren't playing ball, and with over $200B of assets in the marketplace at risk of displacement from the Banks to Prosper and Lending Club (according to Goldman Sachs Global Investment Research estimates), the hourglass was at no risk of being turned back over. Lending Club started trading on the New York Stock Exchange on December 11, 2014 and was so well received that their shares ended the day up 56% from its initial offering price. The platforms had arrived and were here to stay.

THE NEXT ERA

2015-????

"A hero is somebody who voluntarily walks into the unknown."

— TOM HANKS

My name isn't Zoltar and therefore I'm not very good at predicting the future. I could speculate about the interest rate environment or when the economy was going to turn and how these changes would have an impact on the players named in this paper. But, the usefulness of this exercise is questionable. Instead, I've decided to take a stab at answering the questions "What would it take for the Banks to fight back?" and "What would it take for the new Platforms to sustain their emerging leadership positions?" By no means am I suggesting that any of the scenarios I'm about to outline are in the works today, but rather that these are methods for the Banks and/or the Platforms to productively move forward from here.

Scenario #1: The Emergence of the SBU

It's becoming increasingly clear that many smaller banks and credit unions have embraced Prosper and Lending Club (and other specialty originations platforms) as their preferred method of originating yield producing lending assets. Most of these smaller organizations have internalized that the skills and systems needed to efficiently originate high quality lending assets are now beyond them and that the best way to build a solid portfolio is to partner with one of the new platforms to do it for them. Direct mail is a scale game that requires the hiring of analytic and creative marketing talent. Credit policy and product design are complex tasks that could crush a portfolio's profitability if done incorrectly. And the billing and collections efforts associated with a portfolio are true scale tasks. It was really a question of Partner or Die and they've smartly decided to Partner.

But, every skill needed to run a high quality, high growth personal loans business exists within the larger Banks. And while in an earlier section I discussed why most of the large Banks haven't re-started their personal loans businesses, there is a future that can be designed that has the Banks back on top. The cost of funds advantage they have over the new originations platforms is significant, but the corporate costs and decision making processes are drowning them.

The steps to turn this possibility into a reality are quite clear, so the question is "will they head down this path?" One simple articulation of the necessary steps:

1) Separate the personal loans business from the other lending businesses and run it as an SBU
2) Staff the SBU with dedicated talent in each of the major functional areas (credit, marketing, IT, compliance, finance, etc.) to simplify cost allocation and prioritization
3) As much as is possible, the systems being used to serve the SBU should be dedicated systems to simplify cost allocation and prioritization
4) Stop the transfer pricing madness that Banks typically thrust upon smaller business units and instead allocate corporate costs on an as-used basis
5) The personal loans SBU should be the profit center, not the Treasury department, so the cost of funds given to the SBU should reflect this

While each and every step seems simple on the surface, it ends up that they're quite complex to execute in the real world because Banks don't think this way. The ripple effect of having the personal loans business carved off would send shock waves through the larger organization and hence, it's more likely to be squashed than to succeed.

ODDS OF THIS SCENARIO OCCURRING: LOW

Scenario #2: One Bank Wakes Up

A beautiful thing about a marketplace with a handful of well capitalized players is that it only takes one deep pocketed player to rock the ecosystem. Imagine if one of the major Banks were to wake up and decide that they wanted to own the personal loans marketplace. And instead of building it from within with all the complexities I've outlined in Scenario #1, they decided to acquire their way to the leadership position.

The benefits of a major Bank buying one of the existing platforms is that they could naturally keep it separate from their core lending businesses. Instead of taking on the self-inflicted pain associated with the steps outlined in Scenario #1, a Bank could get to the same destination through an acquisition as long as they "do no harm" to the business. If the acquired platform were left alone except for those functions that BENEFIT the platform, the resulting business would be a force to be reckoned with. An articulation of this scenario:

1) A major Banking institution acquires a major personal loans originations platform
2) The acquired company is left alone with the exception of the capital markets/treasury, compliance and the finance functions
3) Up to the risk level the Bank wants, shut down all lenders on the platform and fund the assets using the already existing deposit base

The Bank would have to hold reserves against the assets but even with reserves in place the profitability and resulting ROE would be fantastic due to their extremely low cost of funds and high leverage ratios.

The challenges will be in justifying the acquisition cost of one of the big platforms as well as having the discipline to keep the acquired company as separate from the Bank as possible.

ODDS OF THIS SCENARIO OCCURRING: LOW TO MODERATE

Scenario #3: Status Quo

Newton's first law of motion is typically stated as: "An object at rest stays at rest and an object in motion stays in motion with the same speed and in the same direction unless acted upon by an unbalanced force." Inertia is a law of the Universe and happens to be one of the strongest forces in the business world as well. So a likely scenario worth discussing is that the Banks will continue to act the way they do today.

For the new Originations platforms to continue on their growth trajectory and solidify their place in the future as well managed, sustainable, safe and profitable businesses, there are a few steps that should be taken. There are no burning problems that the platforms need to address immediately, but over time it will become more and more necessary to address some critical gaps in the business models. A few of these gaps are:

1) The correlation coefficient of the lender capital on the platforms is strikingly close to 1. Diversification of lender capital is important because the platforms live and die based on the appetite of their lenders and if they all react identically to various future scenarios then the platform is at risk. Adding international Banks and more retail deposits to the mix are examples of steps that can be taken to diversify the lender base.
2) Diversification of asset classes is critical because the core debt consolidation product offering won't behave like it does forever.
3) Regulation is going to come and the Platforms will need to adjust accordingly. Nobody knows what the future holds with regards to the Regulation of Specialty Originators, but what is certain is that any new rules issued (if any) will have to be absorbed.
4) The credit policies of the platforms will have to adjust if and when consumers start to re-lever their personal balance sheets and the economy starts to turn. The recent performance results have been delivered with the backdrop of a very favorable set of economic conditions which have very little room to get better but a lot of room to get worse. In a recession, customers with high debt service burden ratios will perform worse than those with stable professions and moderate debt levels so the platforms will need to build the organizational muscle to infuse these insights into their policies.

If this scenario were to come true, the platforms would have near unlimited runway to steal existing mis-priced assets from the Banks and originate new consumption loans that otherwise would have been originated within the traditional Banking system. The platforms could march product category by product category as long as there were lenders looking for the returns that the products would throw off. Five or ten percent of a big number is still a big number which suggests there's room for a few giant winners to emerge while the Banks continue to do what they're comfortable doing today.

ODDS OF THIS SCENARIO OCCURRING: MODERATE

Scenario #4: Knife Fight

Everyone loves a good knife fight unless you're in the knife fight of course. And those of us who have operated businesses in hyper-competitive environments know that the chore of delivering profitable growth can feel like hand-to-hand combat at its worst.

In the case of the personal loans ecosystem, the makings of a major brawl are on the horizon. Venture Capital is (unfortunately) all about pattern recognition and nothing attracts capital faster than the success of multiple players in a gigantic sector. The multi-billion dollar market caps of Prosper and Lending Club have inspired many management teams to come together and the capital is flowing their way. Companies like Payoff, Marlette Funding, Upstart, Pave, Earnest, SoFi, Kabbage and Avant Credit are all originating Personal Loans, and although they have slightly different strategies and target customers there's enough overlap to worry about what happens next. What is clear is that without change the winners aren't the asset origination platforms but rather the owners of the channels that provide access to prospective customers.

The Post Office wins because every asset originator eventually figures out that targetable direct mail is an efficient and scalable channel. But response rates will drop as more mail shows up in credit worthy consumers' mailboxes so the originations companies lose.

Google wins because every asset originator eventually figures out that a well optimized keyword strategy has a meaningful place in their marketing plans. But with more competition comes a higher cost-per-click price which is fantastic for Google but very bad for the community of originators.

And Affiliate Partners like Credit Karma and Bankrate Monitor win because they own the eyeballs of, make recommendations to, and drive clicks from contextually relevant loan applicants. With more and more asset originators vying for real-estate on their sites the bounties for successful delivery of new customers should rise.

So while all these channel partners will do quite well in a hyper-competitive environment, the big question is what the asset originators can do to execute their very aggressive growth plans while keeping acquisition costs under control. A few answers come to mind:

1) Develop products that stand out in a competitive set of offers. "Me too" plays won't work well in crowded channels so differentiation will be a critical component of success.
2) Lock down unique sources of applicant volume. I can't overstate how important this will be to the long term success of the next-generation originations players. Privileged access to channels chock full of relevant high quality customers is a sustainable and winning strategy and one that will quickly turn into a "land grab".
3) Remove every source of inefficiency. Low cost players will have an unfair advantage over the newer, less efficient players and this advantage can be given back to the end consumer through price reductions. Price reductions almost always drive positive selection so becoming efficient is the same as boosting response and reducing losses.

The best of the next generation originations platforms will understand and deliver on the above as well as on all the issues outlined in the Status Quo scenario.

ODDS OF THIS SCENARIO OCCURRING: MODERATE TO HIGH

Scenario #5: Lending as a Service (LaaS)

It seems like every few years a new “fill in the blank” as a service model emerges. Everyone is now familiar with Software as a Service (SaaS) and Platform as a Service (PaaS) business models.

> *My big prediction for 2015 and beyond is that the lending industry is going to see and support the emergence of Lending as a Service business models.*

A few businesses already exist in the lending ecosystem that scratch the surface of what LaaS could eventually become. LendKey is currently helping hundreds of Community Banks and Credit Unions create and manage online lending programs. Insikt is hanging its shingle directly in this space and has declared on its website that “Inskit was born out of our realization that banks will not be the lenders of tomorrow - brands will. We’ve launched LaaS to power this transformation.” Lending Club recently formed a partnership with a national consortium of 200 Community Banks to enable co-branded offerings and various services through their platform. And only a few weeks after Lending Club’s announcement, Prosper made their own announcement about forming a similar partnership with a consortium of 160 Community Banks.

The reason why this is a major development is that it could end up being the glue that permanently binds the emerging originations platforms to the established Banking ecosystem. Platforms like Prosper and Lending Club will soon be recognized as foundational businesses (like the credit bureaus, Fair Isaac, ratings agencies, etc) that have the competencies and capabilities to enable the smaller Banks to compete with the larger Banks. And the number of entities that need these services is large. VERY large.

In the US alone, there are 13,000+ smaller Banks that are having difficulty generating high quality loan portfolios because today’s table stakes to play in the lending space are higher than ever before. The smaller Banks are great deposit gathering machines, but the skills required to gather deposits (i.e. - locating and managing 30X30 boxes on street corners that consumers walk into to hand you their money) are very different from those required to manage a lending business. These entities need world class capabilities in scoring, pricing, servicing, technology, compliance and capital markets. They also need a deep understanding of marketing and how to best reach their own customers with compelling and targeted offers. Lending as a Service providers can reinforce the Banks' foundations by helping them build and manage lending portfolios for a modest fee rather than asking them to build business muscles that they don't have.

And, there are many other benefits and services that are likely to emerge as the LaaS Platforms evolve such as:

- Banks will be able to market products into their existing customer base but retain only the assets they want. If they want to keep "A" and "B" credit loans, the LaaS platforms will be more than willing to clear the other loans with their deep base of institutional and retail investors.
- Non-Banks will be able to create loan products that serve their customers without needing to invest in the systems and personnel historically needed to power these programs. And, if these entities want to participate in the loan economics or subsidize their program in any way, the LaaS platforms will make this simple.
- Banks will be able to start/re-start their personal loans businesses using the experience and performance history of the LaaS platform they decide to partner with. The LaaS platforms will likely offer "generic" and "custom" risk solutions to their partners as well as the reporting and monitoring needed to maintain a healthy portfolio. Having access to years of performance data is invaluable and almost a reason in-and-of-itself for partnering with one of the more established platforms in the space.
- The LaaS platforms will be able to hire talent and invest in innovation at a pace far in excess of the traditional Banks. It's not unlikely that in a few years the resulting user experience and suite of tools will put users of the LaaS platforms at a competitive ***advantage*** over the Bank incumbents. In online and mobile channels and across every application and servicing process, consumers will show preference to the LaaS platforms' offerings because of their focus on meeting the needs of their customers.

Complete fragmentation and re-assembly of the lending value chain will be possible using a LaaS platform. Banks will be able to pick and choose which functions they want to manage internally and which ones they want to outsource. If they want to control marketing, great. if they want to use their own Bank Charter and product configuration, great. If they want to service their loan portfolio, great. But if they want a "lending in a box" solution this will also be available. Complete customization will be the new norm.

ODDS OF THIS SCENARIO OCCURRING: CERTAIN!

THE SANDS CONTINUE TO FALL

"Like sands through the hourglass,
so are the days of our lives"

– BILL HAYES

Change. It always comes down to change. Businesses either change or die and the Banks are being asked this question as we speak. Can they change how they operate or will they wake up one day and wonder why they're no longer on top? Billions of dollars of assets have shifted hands from the incumbents to the new kids on the block and billions more are at risk of doing the same. And while outsiders regularly ask if today's originations volumes might be nearing their apex, all it takes is a little peeling of the onion to realize that there are hundreds of billions of dollars still in play and likely heading down through the hourglass.

Some observers wonder if the new players are here to stay or if they're merely the most recent fashion trend that will cycle through its popularity and eventually disappear. I believe they're here to stay but only time will tell. The new players have invested in the technology and the core competencies needed to compete directly with the Banks. Their product offerings are really good and getting better as the sources of capital on the platforms diversify. And the portfolios they're generating are much more resilient than those assembled by the Banks in the mid 2000s. Quite a few unknowns still exist and these businesses have yet to weather a real storm, but on the surface they're positioning themselves well to be permanent fixtures in the Banking sector.

And while there are more than a few armchair Nostradamuses that are predicting some pretty dramatic outcomes for the Future of Banking (myself included), there are equally bold claims in every sector. I've heard a prediction that blindness will be wiped out in the next ten years. Some say that very soon we'll be printing our own shoes and clothing at home. And many experts predict that we'll be traveling in autonomous cars by the turn of the next decade. So what does the next ten years hold for the Lending sector? Who knows? See you in ten to find out!

ABOUT THE AUTHOR

Frank Rotman is a Founding Partner of QED Investors. His investments are typically focused on financial services and financial technology companies that are credit oriented or have data analytics foundations at their core. His portfolio of 20+ investments includes many of the emerging next-generation companies in the financial services eco-system such as Credit Karma, Prosper, Avant Credit, SoFi, GreenSky, LendUp and CAN Capital.

Look for further writings from Frank in his blog at www.fintechjunkie.com and learn more about QED Investors at www.qedinvestors.com.