Open Letter #2 to Prosper.com
From Fred93
05/05/2007

COLLECTIONS IS BROKEN

Prosper is a machine with many moving parts. For Prosper to succeed, all the parts have to function. On the surface, Prosper looks a lot like Ebay. Prosper is not Ebay. Unlike Ebay, your obligations extend long after the auction is complete. From the lender's perspective, you don't seem to understand your obligations. This is a huge frustration for lenders.

When I invest in a loan, my agreement with Prosper gives Prosper the exclusive right to service the loan. I have to pay a servicing fee, and Prosper has to service the loan. Along with those fees and rights comes an obligation.

Prosper has an *obligation* to service the loan, and to do this job professionally. When handling other people's assets, Prosper has a sacred obligation, a *fiduciary duty*.

When Prosper does a slack job, it reduces the value of my investment. Costs me money.

One part of your loan servicing obligation is collections.

There is a huge problem with Prosper's collections: You collect very little.

Collections is broken, and Prosper has taken no visible action to fix it.

Collections is just broken

Your best-performing collection agent, Penncro, is only converting (curing) 12% of Prosper's 1-month-late loans back to current. This is a scandalously low number. You guys have never commented[1], so I don't know whether you understand how bad this is, what is wrong, or whether you are going to take any actions to fix it. This has been going on a year now, so at the very least there ought to be some dialog.

I have a long thread about this on the prosper forum
http://forums.prosper.com/index.php?showtopic=6523

[1] There was a question from the audience about this during the collections panel at Prosper Days. The response from the panel was that they had no benchmark.

Is 12% a good number?

No! I believe that after loans go 1 month late, we should be converting 30% to 80% of these loans back to current.

To determine what cure rate was reasonable I searched for opinions among knowledgeable people. In each case they were people who knew about the unique characteristics of Prosper. Some of these conversations were private, but some I can share. I'll give you three examples.

First, Dave Nicholsen of Zopa provided some example roll rates in his blog. His numbers are:

> 1 month to 2 months: 50%
> 2 months to 3 months: 60%
> 3 months to 4 months: 75%

We can multiply those three numbers to get a roll rate from 1 month (when a Prosper loan is given to a collection agency) to 4 months (when Prosper theoretically declares default). 50% x 60% x 75% = 22.5%. That means he expects22.5% of 1 month late loans to default, and 77.5% of these loans to be cured!

77% is a lot bigger than the Prosper/Penncro 12% statistic.

Now you're probably angry that I used a number from your competitor, and you're probably thinking it doesn't apply to Prosper, because Zopa loans are mostly prime, so lets keep going. We'll see similar numbers from other sources.

While discussing this on the Prosper forum, a guy who owns a collection agency piped up with the following opinion.
motleygunner Posted: Aug-22-2006 06:56 PM
http://forums.prosper.com/index.php?showtopic=6523&view=findpost&p=70668

> I am a new Prosper member, and I own a collection agency. I can tell you two things. First, if those recovery numbers are accurate, they are horrible and I would fire any collector on my staff who had liquidation rates that low. To make matters worse, this is 30 day old paper, usually chargeoffs are placed at 90 days at the earliest. These agencies should be recovering 30-50% of this bad debt.

30-50% is a lot bigger than the Prosper/Penncro 12% statistic.

Finally, lets look to Prosper itself. While you have never shared what roll rates you think are appropriate, you did program into the "ROI calculation" on Prosper's performance page a set of roll rate assumptions which which you use to compute ROI when the selected data set is small. Here they are:

https://www.prosper.com/help/topics/lender-marketplace_performance_calculation.aspx

Substitute Roll Rate Assumptions

Days Past Due	AA	A	B	C	D	E	HR
31 to 60	15%	15%	20%	25%	30%	30%	35%
61 to 90	80%	80%	80%	80%	80%	85%	85%
91 to 120	85%	85%	85%	85%	85%	95%	95%
121 to 150	85%	85%	85%	85%	85%	95%	95%

At first blush there are a lot of numbers here. Lets reduce them. I multiplied the first three numbers in each column to get a roll rate from 30 days to 120 days for each credit grade. You didn't provide numbers for NC, so I used the numbers from the HR column. At this point I still had more numbers than I wanted. The 30 to 120 day roll rates ranged from 10.2% to 28.3%. To produce a number that would be comparable to the collection agency statistics, which apply to the entire Prosper portfolio, I decided to weight these roll rates by the relative proportion of 1+ late loans shown on Prosper's performance page.

	AA	A	B	C	D	E	HR	NC
31-120	10.2%	10.2%	13.6%	17.0%	20.4%	24.2%	28.3%	28.3%
weights	0.95%	2.43%	3.65%	6.89%	12.30%	24.73%	43.65%	5.41%

Late loans are of course heavily weighted toward the low grade end of the spectrum. When we apply these weights, we get a combined 30 day to 120 day roll rate of 24.4%. This means that someone at Prosper believes that of loans that go 30 days late (and therefore go to a collection agency) only 24.4% of them will proceed to 120 days late (and therefore default) and 75.6% of them should be cured. (Strangely similar to the result I got using Zopa Dave's numbers!)

75.6% is way larger than the 12% number we see in the Penncro/Prosper statistics.

In short, everywhere I looked, I got the same answer.

Now why is it this way?

<u>The fundamental problem is that the people charged with taking action are taking very little action</u>. There is no one getting judgements, liens, garnishments, etc. All we have is an autodialer calling a long list of delinquent borrowers endlessly, and one guy at Penncro picking up the phone when someone answers[2].

The present structure, which you have created, does not provide appropriate incentives to the collection agents.

All I have to do is a simple back-of-the envelope calculation of the collection agency's present compensation, and it is obvious that they can't afford to take serious action. It is no wonder therefore that serious action is not taken. There is a huge misalignment of

[2] From the description given by Steve Baranek of Penncro at Prosper Days.

interests. The default event means a heck of a lot more to me than it does to the guy who is making the decisions about how much effort to put into collecting. Therefore we must change the arrangements so that whoever does this work is properly incentivized.

Economists have a name for this: The Principal-Agent Problem.
http://en.wikipedia.org/wiki/Principal-agent_problem

I understand how to make it work when the lender has direct collection responsibility. In that situation his interests are perfectly aligned with himself. However we have a chain of TWO agents: first my loan servicing agent, Prosper, and then Prosper's collection agency Penncro. We have a three way alignment problem. I used to think Prosper would be incentivized by the need to protect your reputation. Hasn't happened.

The present collection fee arrangement is never going to produce the correct result. Gotta get the underlying financial incentives right for everyone.

Some Numbers From An Example Loan

To make this specific, lets talk about a delinquent $25,000 loan at 15% interest, in which I invested[3]. On 36 month amortization, the monthly payments are $866 .

Now consider a collection agency working by Prosper's rules. At the time the loan goes to the collection agency, it is one month late. That means two payments are due. The amount the agency is trying to collect is therefore 2 x $866 = $1,732.

In the first month, the agency gets 20% of the delinquent payments if it recovers the loan. 20% of $1,732 is $346.40 . Suppose the collector-guy knows that he generally recovers 12% of these Prosper loans, so when computing his expected revenue, the collector-guy has to multiply that $346.40 by 12%. That means he has $41.57 he can spend[4]. Whoopee!

Look at this from his point of view: Spend more than $41.57, on the average, and he loses money. That includes the salary of the phone talker collector guy, and his boss, and rent, and your lawyer, accountant, electric bill, profit, etc. To stay within budget, the collector guy can't spend many minutes on those daily phone calls, and he can't spend any minutes thinkin' in between them. He's gotta hit on something like 100 borrowers a day[5]. He's a low wage guy. Not a lot of training, except maybe a course in how to avoid violating federal laws while collecting. You just can't buy much with what you've got to work with here.

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[3] loan #825, made its last payment 9/10/06, now almost 7 months late, and in which I will I presume I will lose a bunch of money.

[4] Simplified calculation. I used the first month collection agent's fee, but multiplied it by the probability of success over several months. A more complete calculation would produce similar results.

[5] In his ProsperDays talk, Steve Baranek of Penncro said that the Prosper account was small enough that it was handled by less than one FTE (full time equivalent employee). Later in the talk he said Prosper had 200 accounts at Penncro. Prosper's performance web page shows that there were 398 loans 1+ months late on Feb 12, 2007, at the time of the Prosper Days 2007. I can't reconcile these numbers. Perhaps a lot of 1 month late loans had not yet been sent to the collection agency.

Consider a lender who owns this entire loan. If this lender did this work himself, he would have a very different sort of budget. To him recovery means he doesn't lose $25,000, so he can rationally spend a lot more. Spending more gives him a better chance, because he can do more things. Instead of just phone calls, he can try to get judgments, garnishments, etc. He can send a guy to knock on the door. Suppose that instead of 12%, these improvements might bring your probability up to 40%. How much can the lender afford to spend? Well here it gets a little complicated, because there's some probability of recovery even if he does nothing. Lets say that's 10%. The difference between 40% and 10% is 30%. So lets think in terms of taking an action that will improve by 30% the probability of avoiding a $25,000 loss.

30% of $25,000 is $7,500. So the lender can spend up to $7,500 and his expected outcome is improved. Hmm. Of course in the real world, things are more complicated than this. You may disagree with any of the numbers I have chosen, or want to add other effects to the calculation. But even if I'm off by a factor of 2 or 3 or 4 ...

$7,500 is a lot more than $41.57 .

Should I say that again?

$7,500 is a lot more than $41.57 .

We’re not within a factor of 10. We’re not even within a factor of 100! Oh my.

A rational lender in this situation might choose to spend some significant fraction of $7,500, perhaps $1,000 or $2,000 or maybe more on an investigator, a paralegal, or lawyer, or filing fees, perhaps a collector to visit the borrower in person. However, in the present system, Prosper’s collection agent can't make such decisions, at least not routinely, because he doesn't have the same sort of interest in the loan that the lender has. The lender is constrained by his agreements with Prosper, so he can't make these decisions. Damn. Nobody can act.

We have a big Principal-Agent problem.

An owner of debt has a much different incentive to collect than these agencies do. The agencies aren't applying a reasonable level of effort, because they have the wrong incentive. The owners (us lenders) have the incentive, but are prohibited from taking collection actions ourselves. Prosper is a strange beast in the middle with little incentive other than its long term reputation. (Prosper does have a very small direct financial incentive, because it only gets ongoing fees from loans that stay current, but this incentive is tiny, much like the collection agency's incentive, so it doesn't prod them to do the right thing.)

The solution to this problem must involve a massive realignment of incentives. Prosper has to have some serious stake in the success of loans, or at least act like it does. The present collection agency arrangement will never work.

With today's arrangement, nobody's gonna get a judgment on the $25,000 deadbeat until the loan is sold, and loans are not sold within a responsible time. Nobody's workin' to get the money back early enough so it will benefit me.

This is bogus.

In the Prosper Days collections panel, this issue was never discussed. This is the fundamental issue. The elephant in the room. We have to discuss it.

There's room for some sort of improvement in the structure here.

Almost a year ago I made the suggestion that Prosper should spiff the collection agencies[6]. (That is pay them an extra fee.) The idea was that improved collection results were vital to Prosper's success, so you had a vital interest. Don't know if this suggestion was ever relayed, or if Prosper has ever done that. I suspect not. I never got any feedback on the suggestion.

If we could fix the system to align interests better between the lender and whoever it is that makes the decisions about what to spend on collecting we could do a lot better.

Prosper: What are you going to do? Collections has to be fixed.

Debt Sales are Broken

You might think that the principal-agent problem would be resolved when delinquent loans are sold. The logic behind this thought is simple: After the sale, there is no longer a principal-agent problem. The (new) loan owner is (finally!) the same guy making the decisions about what collection actions to take.

You might also expect that in a competitive free market, the sale price of these loans would naturally share with the original lender the improved value that is possible once the new owner is capable of making rational decisions.

In practice, this isn’t working. You aren’t selling delinquent loans in a timely fashion. You haven’t created a competitive market for the delinquent loans.

Prosper, you told us you would sell loans when they are 4 months late, but you don’t. Loans sit around rotting for many months. Let me give you an example: Loan #1020.

[6] Telephone conversation with Prosper employee Karen Appleton.

05/08/2006 I bid
05/24/2006 Loan #1020 originated
06/24/2006 First payment was due.
07/24/2006 One month late
08/15/2006 Group leader made a small (less than 1 month) community payment
08/24/2006 Two months late
09/24/2006 Three months late
10/24/2006 Four months late
11/24/2006 Five months late
12/24/2006 Six months late
12/27/2006 some loans were sold, but this one was not. No one can tell me why not[7].
01/24/2007 Seven months late
02/24/2007 Eight months late
03/24/2007 Nine months late
04/24/2007 Ten months late
05/08/2007 – Just a few days from now it will be 1 year since my bid!

Not sold. Not in bankruptcy. No notification to lenders about anything extraordinary. It just seems to be routine for loans to sit and rot. Your inaction is terribly frustrating to Prosper lenders. Your lack of communication is terribly frustrating to Prosper lenders. You just aren't takin' care of business.

I feel certain that you are angry that I gave this specific example, but its your fault. You could have avoided this by selling the loan when it was only say… 5 months late. That would have been around Thanksgiving. Now Easter has come and gone. You aren't takin' care of business.

I don't think there can be any controversy about the fact that letting loans sit and rot destroys their value. Just in case, I'll quote your guy…

Quoting Jim Redmond from his Prosper Days Q&A:

> The fresher the paper is the more it's worth. If you're a collection agency, and an account's never been worked, and its just gone delinquent, you're gonna get a lot more money out of it. …. So if you were to sit and wait for six months, unless you had something really good to do to milk that account in the mean time, its value when you sell it will drop just because its waited around longer. So there's that time-value thing that gets kinda played in there.

You sit. Our loans rot. Debt sales are not solving the collections principal-agent problem.

Collections is broken. Prosper: What are you going to do to fix it?

[7] I did recently call the Prosper lender CS line and ask. The only answer I got was "It is marked to be sold in the next sale."