

# Peer-to-Peer Loan Data Update: Comparing Lending Club and Prosper Across Grades

**With the recent release of second quarter loan data by both Lending Club and Prosper, we thought it apt to revisit with the consumer P2P leaders, dive into the data via our platform, and identify any new trends.**

**With a focus on comparing corresponding loan grades across platforms, we observed several notable shifts:**

- **Average grades for issuance are rising.** Specifically, Lending Club 5-year notes and Prosper 3-year notes have increased their mix of higher grade issuance since 2011.
- **High-grade loans are similar across originators, with more divergence in lower grades.** Prosper and Lending Club coupons and debt-to-income ratios are similar for higher grade loan segments and disperse for lower graded ones.
- **Prosper and Lending Club loan performance metrics are converging.** Prosper cumulative charge-off and prepayment rates decreased relative to Lending Club's for loans issued after 2011—and now are nearly comparable.
- **Overall, a greater amount of higher grade issuance by major platforms belies the notion that as the industry matures, credit quality standards will decline.** This may, in part, be explained by the ability of large platforms to better identify higher grade borrowers via evolving marketing and risk modeling capabilities.

**Peter Mallik**  
+1 917.428.5401  
peter@peeriq.com

**Raj Iyengar**  
+1 646.780.7664  
raj@peeriq.com

## Introduction

Given the relative youth of the consumer peer-to-peer loans, a robust, common metric of credit risk across originators does not yet exist as each has its own grading system utilizing different underwriting models. This makes comparisons a fruitful lens for analysis. Working from the latest data, we provide a comparison of corresponding loan grades for the two largest consumer loan originators: Lending Club and Prosper. First, we identify originator issuance trends by grade. Then, we compare relative charge-off and prepayment performance at specific junctures in a loan's term.

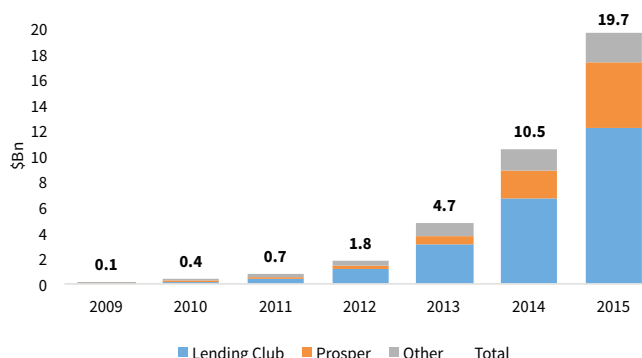
Our review shows that although marketplace consumer lending is still in its early stages, important trends associated with a maturing market are emerging. Issuance characteristics and performance by grade are converging. Large platforms are shifting towards higher grades, which also tend to have more similarities across originators than lower grades. Overall, we think these trends are positive developments for the market as credit quality of loan originated by the largest platforms is improving as the industry matures.

## Comparing Issuance Trends

It is no secret that total origination across lending platforms continues to rise steadily, due both to platform growth and a proliferation of new platforms entering the space. We focus on Lending Club and Prosper in this piece because we estimate they have originated over 80% of the outstanding balance for US marketplace consumer loans to date and thus their issuance growth still drives the market. Specifically, Lending Club issuance climbed from \$261MM to \$3.5Bn annually from 2011 to 2014, while Prosper's climbed from \$75MM to \$1.6Bn (according to public data).

Exhibit 1

### US Marketplace Cumulative Loan Origination



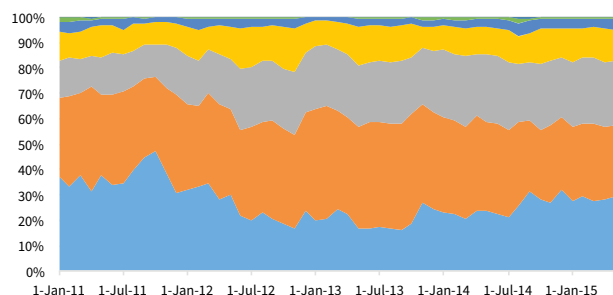
Notes: Other is estimated from summing contribution of several smaller platforms and scaling up using market growth rate of 150%. 2015 numbers are estimated by doubling half-year issuance of Prosper and LC. Source: Prosper, Lending Club, PeerIQ Research

Underneath this macro trend, segment specific issuance trends emerge when we filter by term and grade. Overall these large platforms have originated a greater amount and percentage of higher grade loans. For Lending Club 3-year notes, the issuance composition by grade has been remarkably stable, with grades A thru C making up approximately 80% of monthly issuance since 2011 (as referenced in the exhibit below).

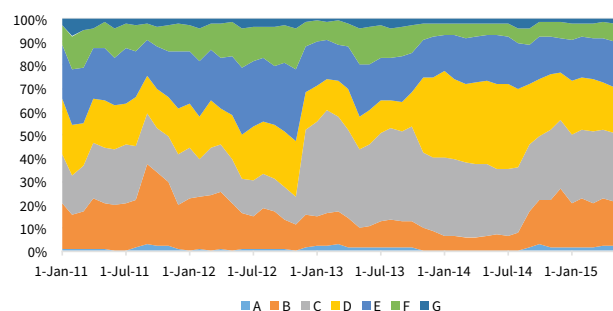
Exhibit 2

### Lending Club Percentage Issuance by Grade

#### 3y Loans



#### 5y Loans



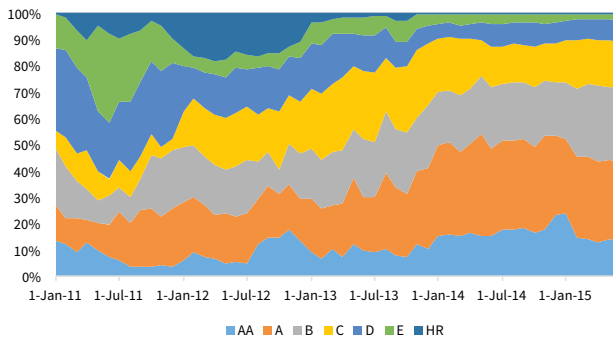
Notes: Data is from Jan 2011 thru Jul 2015. Source: Lending Club, PeerIQ Research.

On the other hand, Lending Club 5-year note (exhibit above) and Prosper 3-year note (exhibit below) issuances have skewed towards higher grades on a percentage basis since 2011. For example, in 2012, 36% of Lending Club 5-year notes were rated A thru C and 45% of Prosper 3-year notes were rated AA thru B, whereas in 2014, those percentages increased to 42% and 73%, respectively. For Lending Club's 5-year notes, the rise in average grade started at the end of 2012 with an increase in C grade note issuance. The pickup in Prosper higher grade 3-year notes accelerated after 2012, which was approximately two years after Prosper's relaunch in April 2009. Prosper's 5-year notes have actually shown a drop in average grade (exhibit below), but they are a smaller component of issuance at 65% of the 3-year note issuance since 2011.

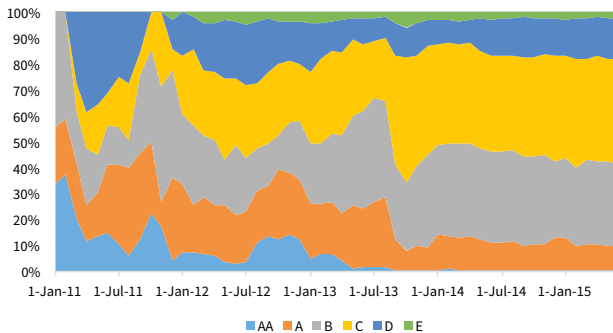
Exhibit 3

**Prosper Percentage Issuance by Grade**

3y Loans



5y Loans



Notes: Data is from Jan 2011 thru Jul 2015. Source: Prosper, PeerIQ Research.

**Comparing Key Loan Metrics**

In this section, we compare like grades across the two originators (with the caveat that the grade systems are not equivalent):

First, we see greater similarity across higher graded corresponding segments. Prosper and Lending Club weighted average coupons are very close for the four highest quality grades (Prosper AA thru C and LC A thru D) across terms for loans initiated since 2009. Coupons for lower graded loans disperse somewhat, with Prosper's being higher on average for both. For example, the weighted average coupon spread between 3-year Prosper AA and Lending Club As is near 0%, but that difference grows to 4% for Prosper Es versus Lending Club Fs.

Typical loan sizes for higher corresponding grades are similar as well. Moving down the grade spectrum, Prosper loans have lower loan sizes by design. For instance, 3-year Prosper AAs and Lending Club As have average loan sizes of \$12.7K and 13.6K, while Prosper Es and Lending Club Fs are \$5.1K and \$10.1K respectively. Some of this difference is due to the fact that the maximum loan size for Prosper E and HRs are \$15,000 (up from \$10,000 in June 2015) and \$7,500, while Lending Club does not have a specific cap for lower graded borrowers. Similar to coupons, higher graded corresponding segments have closer debt-to-income ratios than lower graded ones. The debt-to-income difference between 5-year Prosper As and Lending Club Bs versus Prosper Ds and Lending Club Es grows from 3% to 7% on average.

Exhibit 4

**Prosper - Lending Club Key Metrics by Grade Since 2009**

Prosper - Lending Club, 3-year Notes

Grades	WAvg Coupon	WAvg FICO	WAvg DTI	Avg Loan Size Ratio	CPR @ 18m	CDR @ 18m
Pr AA - LC A	0%	17	4%	94%	3%	0%
Pr A - LC B	-1%	13	6%	104%	2%	-1%
Pr B - LC C	-1%	9	6%	105%	2%	-1%
Pr C - LC D	0%	4	6%	94%	3%	2%
Pr D - LC E	2%	-4	3%	73%	3%	3%
Pr E - LC F	4%	-13	12%	51%	3%	3%
Pr HR - LC G	7%	-14	9%	25%	7%	6%

Prosper - Lending Club, 5-year Notes

Grades	WAvg Coupon	WAvg FICO	WAvg DTI	Avg Loan Size Ratio	CPR @ 18m	CDR @ 18m
Pr AA - LC A	1%	36	2%	88%	1%	1.3%
Pr A - LC B	0%	18	3%	82%	0%	1.5%
Pr B - LC C	-1%	13	7%	91%	1%	1.5%
Pr C - LC D	0%	3	7%	78%	2%	0.5%
Pr D - LC E	1%	-4	7%	64%	0%	7.0%
Pr E - LC F	3%	-7	4%	33%	-1%	1.3%

Notes: Above table contains differences between key metrics at issuance for coupon, FICO, and DTI, which are weighted by original loan size. Average loan size ratio is calculated as the ratio of Prosper to LC average loan size for a particular grade. CPR and CDR @ 18m are calculated as the quarterly vintage average of the ratio of the sum of unscheduled prepayments and charge-offs from 1 to 18 months of age divided by initial loan amount. Tables are based on public data available for loans originated from Nov2005-Jun2015 for Prosper and Jun2007-Jun2015 for LC. Source: Lending Club, Prosper, PeerIQ Research.

For some characteri hold. Prosper loan borrower FICO scores start off higher than Lending Club's for higher grade segments and then tend to decline on a relative basis for lower graded ones. But the largest FICO differences on an absolute basis are between corresponding higher graded segments (e.g. Prosper AA vs Lending Club A), although the absolute average FICO scores for them are both well above 700.

## Comparing Performance Trends

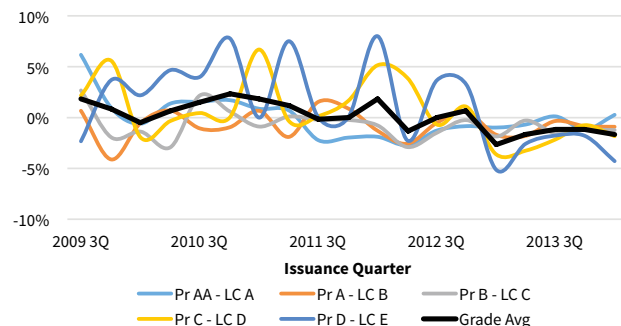
Here we explore Lending Club and Prosper loan segment charge-offs and prepayment rates at specific junctures of a loan's term to enhance our understanding of relative performance. We use *differences* in cumulative charge-offs at 18 months of age as our point of reference because they tend to accelerate between 1 to 1.5 years after issuance. Conversely, we focus on prepayment rates at 9 months of age because most unscheduled principal is paid relatively early in a loan's life. We control for seasoning by dividing our population of loans by issuance quarter or vintage, as defined by the originator.

The evidence suggests that Lending Club and Prosper charge-off and prepayment rates converged for recent vintages. Prosper cumulative charge-off rates have fallen relative to Lending Club's for vintages starting in Q1 2012 and, in some grade segments, have outperformed. Similarly Prosper prepayment rates have fallen relative to Lending Club's after being consistently higher.

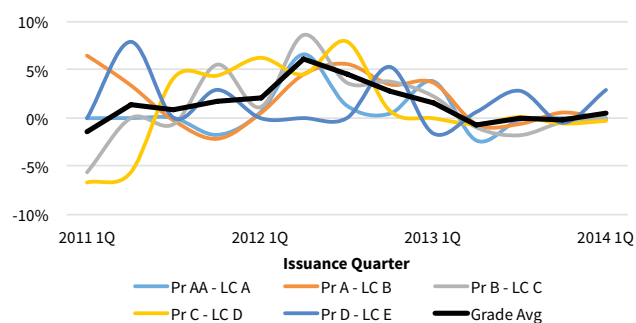
Exhibit 5

### Prosper - Lending Club Cumulative Charge-Off Rates

3y Notes at 18 Months of Age



5y Notes at 18 Months of Age



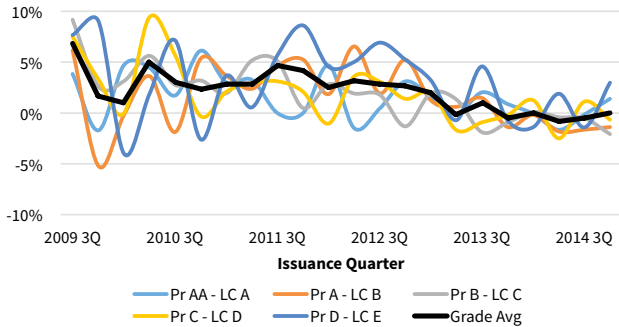
Notes: To get chart above, first we calculate the 18 months of age cumulative default rate (sum of defaults between months 1 and 18 divided by loan amount) for loans issued in particular calendar quarter or vintage. Next we take the difference between the Prosper and LC calculated rates. Grade averages excludes differences between the bottom 2 grades (LC: F, G and Prosper: E, HR). PeerIQ performs basic data ETL to ensure the original data has integrity. Data includes vintages from 2009 3Q thru 2014 1Q for 3y notes and 2010 4Q thru 2014 1Q for 5y notes. Source: Lending Club, Prosper, PeerIQ Research.

Prosper cumulative charge-off rates are nearly even with Lending Club's for 2013 vintages. Pre-2013 vintages, Prosper segments had higher charge-offs than Lending Club's. For example, the average quarterly charge off rate differences for the highest graded Lending Club and Prosper pairs (for 3-year loans) fell from approximately +2% in 2012 1Q to approximately -1% in 2013 4Q. Overall, lower graded segments show a larger 'beta' in that the differences tended to be more positive before 2013 and more negative afterwards.

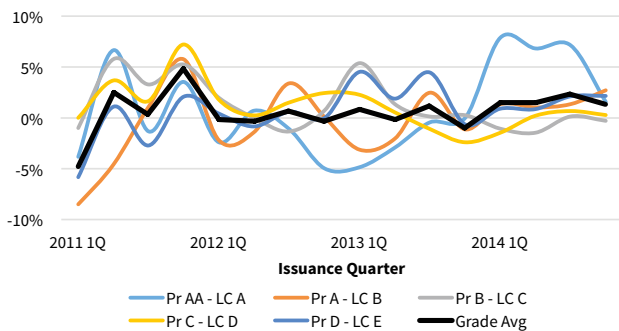
Exhibit 6

**Prosper - Lending Club Prepayment Rates**

3y Notes at 9 Months of Age



5y Notes at 9 Months of Age



Notes: To get chart above, first we calculate the 9 months of age cumulative prepayment rate (sum of unscheduled principal paid between months 1 and 9 divided by loan amount) for loans issued in particular calendar quarter or vintage. Next we take the difference between the Prosper and LC calculated rates. Grade averages excludes differences between the bottom 2 grades (LC: F, G and Prosper: E, HR). PeerIQ performs basic data ETL to ensure the original data has integrity. Data includes vintages from 2009 3Q thru 2014 1Q for 3y notes and 2010 4Q thru 2014 1Q for 5y notes. Source: Lending Club, Prosper, PeerIQ Research.

For prepayments, the story is similar. Older Prosper vintages have higher prepayment rates than corresponding Lending Club vintages, but for recent vintages the rates converged. For example, the average quarterly rate difference for the highest graded pairs of 3-year loans was approximately +3% in 2012 1Q and then approximately even in 2013 4Q. The same trend appears for 5-year loans, but is less pronounced.

**Conclusion**

Overall, a greater amount of higher grade issuance by major platforms belies the notion that as the industry matures, credit quality standards will decline. Smaller platforms are pursuing mid-prime and subprime borrowers. But the two major ones set the pace for the broader market and they have remained focused on higher quality borrowers. This could be, in part, attributable to the notion that large platforms may better identify higher grade borrowers due to their evolving risk modeling. A deeper performance history and a larger set of independent variables allow large platforms to more accurately target attractive borrowers and score credit risk. For example, in July 2015, Prosper rolled out their PMI 6 underwriting model, which shows significant changes to PMI 5. For example, approximately 60% of loans in a sample set that would have had PMI 5 grades of A-HR ended with a higher grade using the newer model. Therefore, the industry may be better able to attract and satisfy customers seeking to responsibly manage their finances.

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