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U.S. Consumers' Awareness and Use of Marketplace Lending

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Abstract:
Marketplace lending is a new kind of online lending that is unfamiliar to most U.S. consumers. A nationally representative survey finds that just 25 percent of U.S. consumers have heard of marketplace lending or recognize any of the names of the largest marketplace lenders (Lending Club, Prosper, SoFi, Avant). Of those consumers who have heard of a marketplace lender by name, 11.7 percent have applied for a marketplace loan (2.4 percent of all U.S. consumers).

Keywords: Marketplace lending, peer-to-peer lending, consumer behavior, payments, Diary of Consumer Payment Choice, Survey of Consumer Payment Choice

JEL Classifications: D12, E51

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CONSUMER PAYMENTS Research Center

1. Introduction

Marketplace lending, sometimes called peer-to-peer lending, is the practice of matching borrowers and investors through online platforms without the use of a financial institution as an intermediary. This new model of lending is growing rapidly; loans outstanding grew by more than nine times from 2013 to 2015. The most prominent marketplace lenders (MPLs) in the United States, Lending Club and Prosper, together originated more than $10 billion in personal loans in 2016, with the majority of these loans used for debt consolidation or to pay off credit card debt.[1]

While marketplace lending is a fast-growing segment of the market, it is unclear what role it eventually will play in consumer finance. Consumer demand will be a major factor in the ultimate outcome, and gauging consumer awareness is the first step in understanding demand. Using data from nationally representative surveys—the Survey of Consumer Payment Choice (SCPC) and the Diary of Consumer Payment Choice (DCPC)—this study reports on consumers' awareness and use of marketplace lending in late 2016.

We find that approximately one-quarter of consumers have some awareness of marketplace lending, that is, they are aware of the term "marketplace lending" or aware of a specific MPL. They are generally wealthier and more educated than those who are unaware. Aware consumers also are more likely to have a credit card and, on average, they have more revolving credit card debt and more household debt than unaware consumers. This is consistent with other studies finding that marketplace loans are often used for debt consolidation. Aware consumers also are more likely than unaware consumers to have experienced financial stress in the past year.

We also find that very few aware consumers seek out these loans: only 11.7 percent of consumers aware of a specific MPL have ever applied for a marketplace loan. In all, only 2.4 percent of consumers have ever applied for a marketplace loan, and only 1.6 percent currently have a marketplace loan or had one at some time. While awareness is greater for higher-income,

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[1] See "Lending Club Reports Fourth Quarter and Full Year 2016 Results" (press release), February 14, 2017. Available at ir.lendingclub.com/Mobile/file.aspx?IID=4213397&FID=1001220109. Also see Matthew Heller, "Prosper's Loss Increases to $118M in 2016," *CFO*, March 21, 2017. Available at http://ww2.cfo.com/financial-performance/2017/03/prospers-loss-increases-118m-2016/.

more-educated consumers, usage of marketplace lending is more prevalent among consumers with fewer assets, greater revolving credit card debt, and greater other household debt.

The remainder of this paper is organized as follows: Section 2 provides some background on marketplace lending, information about its growth, and a review of other research. Section 3 introduces the data sources and describes the design of the survey questions. Section 4 reports on U.S. consumers' awareness of the term "marketplace lending" and of specific MPLs. It compares consumers who are aware to those who are not on demographic and financial factors. Section 5 reports on consumers who have ever applied for a marketplace loan and how they compare to other aware consumers. Section 6 concludes.

2. What Is Marketplace Lending?

Marketplace lending has its roots in peer-to-peer lending, which began in the United Kingdom in 2005, when Zopa launched the world's first marketplace-lending platform. MPLs arrange for consumers and businesses to borrow online and for investors to invest in loans online. On marketplace-lending platforms, consumers interested in borrowing money provide information about themselves, their credit history, their desired loan amount, and the intended purpose of the loan. Using an automated process, the platforms translate this information into ratings that correspond with the predicted riskiness of the requested loans.[2] A platform (aka "marketplace")[3] will reject many applicants, but if an applicant is accepted, the rating determines the interest rate offered. If the applicant agrees to the proposed terms, the loan is posted on the platform along with the data and narrative provided by the applicant. The loan then can be viewed by potential investors, who could be individuals (aka "peers"), hedge funds, private equity firms, mutual funds, traditional financial institutions, etc. If investors find the applicant and the purpose and terms of the loan appealing, they can invest in the loan (either fully or partially). Once the loan is fully funded, the platform collects the money from the investors, originates the loan, and

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[2] Almost all MPLs create a proprietary internal credit rating for loan applications.

[3] In December 2014, Lending Club's approval rate was 5.8 percent, down from 14.4 percent in December 2013. See David Snitkof, "Rejected Loans on Lending Club—The Post-IPO Edition," Orchard Platform Blog, May 4, 2015. Available at https://www.orchardplatform.com/blog/rejected-loans-on-lendingclub-the-post-ipo-edition/

disperses the funds to the borrowers net of an origination fee. As the borrower repays electronically, the platform disperses the payments back to the investors net of a processing fee.

Thus, in their purest form, MPL platforms operate only as conduits for the matching of borrowers and investors. Today, however, some MPLs fund loans from their own balance sheets,[4] and some financial institutions purchase loans from the platforms, use the platforms to underwrite their own loans, or refer customers to MPLs.[5] In addition, many MPLs use financial institutions to originate loans.[6]

Marketplace lending has grown rapidly since its inception in the mid-2000s. A recent report estimates that marketplace business and consumer lending in North America increased from just over $3 billion in 2013 to more than $28 billion in 2015.[7] This large increase in just two years dwarfs the growth rate of consumer debt. Nevertheless, marketplace loans represented a tiny share of the consumer loan market in 2015 (about 0.75 percent),[8] so there is room for growth if awareness were to increases. Rapid growth of these alternative lenders could have implications for credit practices of traditional financial institutions; Jagtiani and Lemieux (2016) find that for small business loans, community banks face increasing competition from technology-enabled lenders—large banks and nonbanks.

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[4] A broader definition of a marketplace lender includes lenders that hold their loans on their balance sheets and have business models that are more similar to those of traditional lenders. The most prominent of these balance-sheet lenders are SoFi and Avant, which originated about $8 billion and $2 billion, respectively, in 2016. Because consumers likely do not distinguish between the two types of lenders, which largely differ in only their funding model, this report classifies awareness of SoFi and Avant as awareness of MPL.

[5] For a discussion of the role of banks in this market in China, see Nicholas Borst and Sean Creehan, "Lessons from China's Peer-to-Peer Lending Boom," Federal Reserve Bank of San Francisco *Pacific Exchanges Podcast*, July 5, 2017. Available at http://www.frbsf.org/banking/asia-program/pacific-exchanges-podcast/china-p2p-lending-boom-lessons/.

[6] Tim Sablik, "Tomorrow's Lenders?" Federal Reserve Bank of Richmond *Econ Focus*, Second Quarter 2016. Available at https://www.richmondfed.org/publications/research/econ_focus/2016/q2/cover_story.

[7] See Wardrop, Robert, et al. *The Americas Alternative Finance Benchmarking Report*, 2016. Report from the University of Cambridge Centre for Alternative Finance and the University of Chicago's Polsky Center for Entrepreneurship and Innovation. Available at https://www.jbs.cam.ac.uk/fileadmin/user_upload/research/centres/alternative-finance/downloads/2016-americas-alternative-finance-benchmarking-report.pdf.

[8] The Federal Reserve reported that in 2015, total U.S. consumer credit outstanding was $3.54 trillion, of which $939 billion was revolving debt. Board of Governors of the Federal Reserve System. Current Release: Consumer Credit—G.19. Available at https://www.federalreserve.gov/releases/g19/current/.

Other research suggests that consumers use marketplace loans mostly to consolidate debt or to repay credit card debt (Mach, et al. 2015; Morse 2015). Lending Club reported in 2014 that 83 percent of its borrowers were consolidating debt or paying off credit cards,[9] and the U.S. Treasury (2016) found that marketplace loans are used mostly by low-risk borrowers to refinance existing debt. However, these studies are of limited use for making inferences about the broader population of consumers, because the dataset includes only individuals who are *aware* of the existence of marketplace lending *and* have *applied* for a loan. These loan applicants may be different from the general population in ways not captured by observable statistics.

This research data report expands on previous research by looking at marketplace lending from the demand side. It uses data from the SCPC and DCPC to examine the consumer characteristics associated with both the tendency to become aware of MPLs and the choice to apply for a loan. Because of small sample sizes, we are unable to report statistics with sufficient precision on other important questions, including demographics of successful applicants, borrowers' experiences with the industry, and borrowers' assessments of those experiences. While exploring the supply side of the consumer lending market and the possible implications for bank regulation are important subjects for future research, they are outside the scope of this report.[10]

The rapid growth of a new source of credit also suggests that consumers may have had unmet needs, which could include more convenience, faster loan underwriting and funding, lower cost, and increased access to credit. Why might consumers choose a marketplace loan in lieu of a debt consolidation loan from a bank, savings and loan, or credit union? The convenience and speed of applying online could be an important differentiator for some consumers. According to industry participants, automated credit underwriting could make it possible to get credit faster (U.S. Treasury 2016). The convenience of a partially prefilled application based on

[9] Andrew Blackman, "Borrow or Lending Online—But Be Careful," *Wall Street Journal,* February 9, 2014. Available at https://www.wsj.com/articles/no-headline-available-1389625593.

[10] For a discussion of the effect on financial institutions and the regulatory response in Asia, see Creehan and Borst (2017). For a discussion of risks to financial institutions engaging in third-party arrangements, see Angela M. Herrboldt, "Marketplace Lending," FDIC *Supervisory Insights* 12(2): 12–18, Winter 2015. Available at https://catalog.fdic.gov/supervisory-insights-winter-2015.

public data and a fast approval or decline for the loan could be desirable for consumers, who are increasingly receptive to executing financial transactions online.[11] That said, from the consumer's point of view, the process described here is not much different from the process of applying online for a bank loan or credit card.[12]

Some consumers might choose marketplace loans for the lower interest rates, which are enabled by factors including streamlined back-office processing, the absence of brick-and-mortar storefronts, and the expanded pool of potential investors. While low-risk borrowers do get better rates for marketplace loans compared to credit cards,[13] this may not be true for higher-risk borrowers.[14] In addition, some consumers might choose marketplace loans because they have difficulty borrowing from traditional sources. Consumers with short credit histories, for example, could benefit from an underwriting process that considers additional risk data, such as type of employment (Demyanyk and Kolliner 2014). Historically disadvantaged groups may also benefit from MPLs over traditional lenders; Barasinska and Schäfer (2014) find that female borrowers have the same chance as male borrowers of receiving a peer-to-peer loan.

However, the use of marketplace loans primarily for debt consolidation implies that MPLs are mainly providing additional credit to existing borrowers and not expanding access to credit for new borrowers. Marketplace loans are generally available to borrowers with a credit score of 660 or greater,[15] and Morse (2015), using Lending Club data, finds that low-income borrowers are

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[11] See Ian Foottit et al., "A Temporary Phenomenon? Marketplace Lending: An Analysis of the UK Market, 2016." Available at https://www2.deloitte.com/uk/en/pages/financial-services/articles/marketplace-lending.html

[12] W. Scott Frame, "Marketplace Lending's Role in the Consumer Credit Market," Federal Reserve Bank of Atlanta *Notes from the Vault*, September 2015. Available at https://www.frbatlanta.org/cenfis/publications/notesfromthevault/1509.aspx.

[13] Yuliya Demyanyk and Daniel Kolliner, "Peer-to-Peer Lending Is Poised to Grow," Federal Reserve Bank of Cleveland *Economic Trends*, August 2014. Available at https://www.clevelandfed.org/newsroom-and-events/publications/economic-trends/2014-economic-trends/et-20140814-peer-to-peer-lending-is-poised-to-grow.aspx.

[14] Preston Ash, "P2P or Not P2P?—What the Future Holds for Peer-to-Peer Lending," Federal Reserve Bank of Dallas *Financial Insights* 5(3), September 30, 2016. Available at https://www.dallasfed.org/~/media/documents/outreach/fi/2016/fi1603.pdf.

[15] Michael J. De La Merced, "Lending Club Middleman for Small Loans, Plans Stock Offering, *New York Times*, August 27, 2014. Available at https://dealbook.nytimes.com/2014/08/27/lending-club-leader-in-peer-to-peer-plans-i-p-o/?mcubz=0&_r=0.

less likely to receive marketplace loans. According to the data, only 12.8 percent of loans go to the bottom 40 percent of borrowers by income.

To increase understanding of consumer motivation, this study investigates whether consumers are uniformly aware of the availability of these loans and what types of consumers apply for these loans. The DCPC questionnaire also asked about consumers' satisfaction with the process of applying or borrowing and, for borrowers, the loan terms they received. Because of limitations in sample size, these results are not reported.

3. Data Source

Prior research has used data provided by MPLs. This study expands on that research by looking at marketplace lending from consumers' point of view. It includes not only consumers who have applied for marketplace loans but also consumers who have not applied and who, in fact, may never have heard of marketplace lending or any specific MPL. Supply-side data from MPLs, in contrast, include only individuals who are *aware* of the existence of marketplace lending and have *applied* for a loan. These loan applicants may be different from the general population in ways not captured by observable statistics.

The SCPC and DCPC are annual surveys the Federal Reserve Bank of Boston conducts to gain a comprehensive understanding of the cash and noncash payment behavior of U.S. consumers.[16] Respondents are drawn from the Understanding America Study (UAS), a nationally representative sample of U.S. non-institutionalized adults age 18 and older who are recruited using the address-based sampling method of Dillman, et al. (2014). Invitations to complete the two surveys were extended to 3,572 members of the UAS panel; 2,916 completed them.[17] Individuals without home computers or internet access were provided with equipment and access to complete these online surveys.

[16] The Federal Reserve Banks of Richmond and San Francisco sponsor the DCPC with the Boston Fed.
[17] See https://www.bostonfed.org/payment-studies-and-strategies/consumer-survey-data-and-econometric-research/data-from-surveys-of-us-consumers.aspx for SCPC and DCPC summary reports, results tables, data, and technical information, including sampling strategy and questionnaire design.

In October 2016, respondents to the DCPC answered questions about their awareness and use of marketplace lending. These responses were linked to data provided in the SCPC, including information about credit card adoption, financial distress (foreclosure, for example), and whether respondents carried credit card debt. Most respondents took the SCPC in September; all took the SCPC before completing the DCPC. Because respondents answered both surveys within about one month, it is unlikely that this small time mismatch substantially affected results.

The survey questions begin by focusing on respondent awareness of marketplace lending, because we assume that most people are unaware of this new product and the terminology associated with it.[18] First, respondents were asked if they are familiar with the concept of marketplace lending:

> There are many different types of online loans. The next few questions are about a **special type of online loan,** called a **"marketplace" or "peer-to-peer" loan**.
>
> Marketplace lenders connect borrowers with investors, by arranging for consumers and businesses to borrow online and for individual investors and firms to invest in loans.
>
> When answering the questions, please keep the following in mind:
>
> *Do not include any of the following types of loans that it is possible to apply for online…*
>
> - *…credit cards.*
> - *…any loans obtained from a bank, savings bank, or credit union. Examples: Bank of America, USAA, Navy Federal Credit Union.*
> - *…any loans obtained from a payday lender.*
> - *…any loans where borrowers can start the application process online and then have to speak with a person by phone or in person.*
>
> Before reading this information, had you heard of **marketplace lending, sometimes called "peer-to-peer" lending**?

Second, respondents were asked if they had have of specific MPLs: Lending Club, Prosper, SoFi, or Avant. We asked about specific lenders second to avoid providing respondents with information that might affect how they responded to the more general question about the term marketplace lending.

[18] The survey strategy of asking first about awareness and then about application to and use of an MPL is modeled after the SCPC procedure for asking consumers about another unfamiliar financial innovation, virtual currencies such as Bitcoin. For details on this strategy, see Greene et al. (2016).

Respondents who answered that they had heard of at least one of the specific MPLs received follow-up questions about their own experience, if any, with marketplace lending (631 respondents).[19] Respondents were asked if they ever had applied for a marketplace loan. If so, they were asked to give the name of the lender to which they applied, their reasons for applying (for example, terms, turned down elsewhere), their reasons for borrowing (for example, education, pay credit card debt), and the year in which they applied (70 respondents). The subset of respondents who currently have a marketplace loan (35 respondents) or had a marketplace loan in the past (eight respondents) reported the principal amount, term, interest rate, late-payment behavior, and their assessment of costs versus expectations. We were not able to analyze these important questions about consumers' experience because of the small numbers of consumers who ever had applied for or had these loans.

4. Awareness of Marketplace Lending

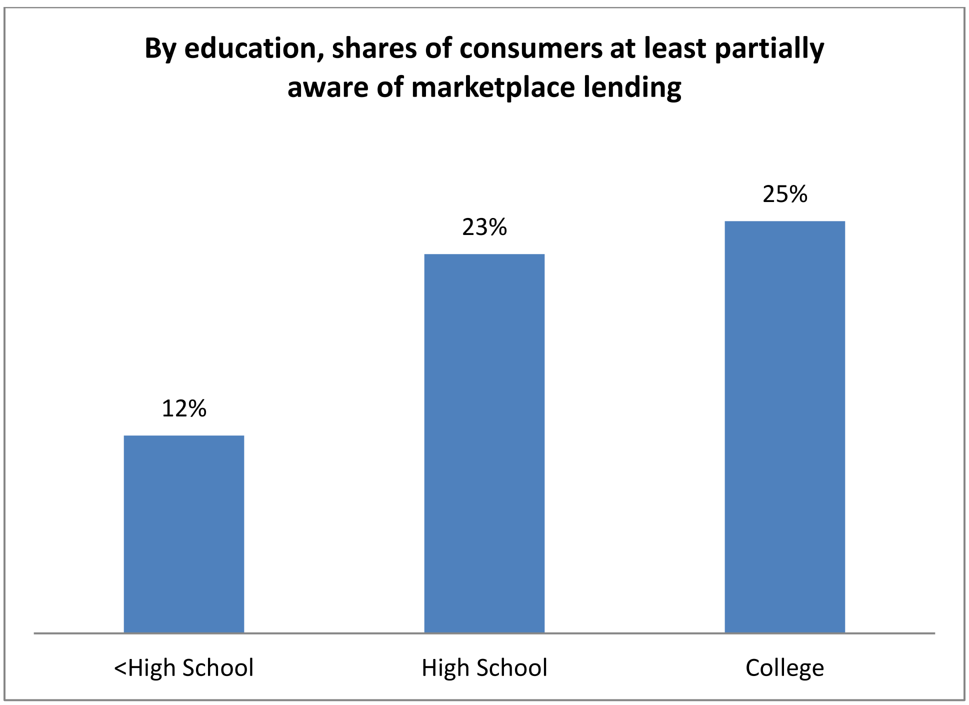
The multiple questions related to awareness allow for multiple definitions of aware. We call respondents *term aware* if they reported being aware of the term marketplace lending, that is, if they answered yes to the first question above. We call respondents *lender aware* if they reported being aware of a specific MPL. We call respondents who reported being both term aware and lender aware *fully aware*, and respondents who reported being either term aware or lender aware *partially aware.* In the analysis below, we specify to which subset of consumers we refer.

Overall, few U.S. consumers are term aware: only 15 percent of consumers reported that they have heard of the term marketplace lending. More consumers—19 percent—have heard of a specific MPL, making them lender aware. Twenty-six percent are partially aware as defined above, while just 9 percent are fully aware.

This general lack of awareness holds for most segments of the population, as shown in Table 1, which provides breakdowns of awareness by gender, age, race, income, geographic

[19] Due to a skip-logic error in the survey, those who reported being aware of the term "marketplace lending" but did not report being aware of a specific lender did not receive the follow-up questions about their experience with MPLs. We do not believe that this error significantly affected the results, as it is unlikely that a person would have a marketplace loan without knowing the name of the largest MPLs.

location, marital status, education, and employment status, although there are some differences across categories. Regardless of which type of awareness one is concerned with, consumers with higher income and more education tend to be more aware than those with lower income or less education. By income, 19 percent of low-income respondents are partially aware, increasing to 26 percent of middle-income respondents, and to 30 percent of high-income respondents. By education, 12 percent of respondents with less than a high school degree are partially aware; the fraction climbs to 23 percent of high school graduates and to 35 percent of college graduates. In addition, people older than 65 are the least aware.

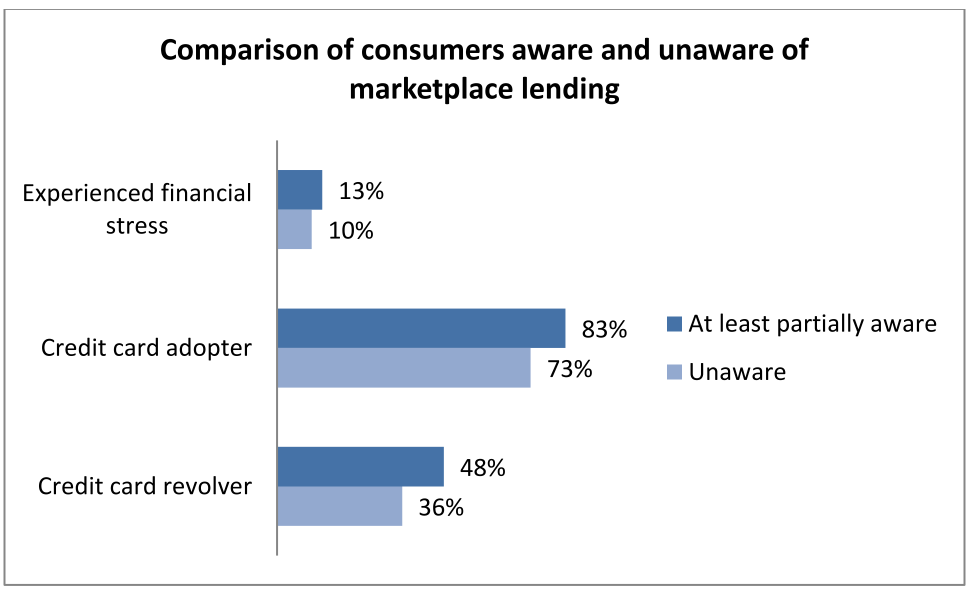


Source: Diary of Consumer Payment Choice, Survey of Consumer Payment Choice, Federal Reserve Bank of Boston.

Figure 1: By Education, Shares of Consumers at Least Partially Aware of Marketplace Lending

Next, we examine to what extent awareness of marketplace lending is related to financial status. Table 2 shows a comparison of financial characteristics of consumers who are at least partially aware to those of consumers who are unaware. These characteristics are financial stress, assets, debt, credit card usage, and self-reported credit score. Financial stress is defined as experiencing any of the following financial difficulties during the past 12 months: respondent or someone else in the household lost his or her primary job, respondent declared bankruptcy, respondent's primary home mortgage was foreclosed, or respondent's credit card account was closed or frozen by the bank or card company. Credit card usage includes adoption (ownership) of credit cards, whether the respondent revolved credit card debt, the amount revolved, and whether the revolving balance increased or decreased from the prior year.

We find that the financial characteristics of consumers who are partially aware differ from those who are unaware, and many of these differences are statistically significant (Table 2). Partially aware consumers have different credit card usage from those who are unaware. They are 10 percentage points more likely to have a credit card and 12 percentage points more likely to revolve credit card debt. They are twice as likely to have revolving credit card debt of at least $5,000. In addition, partially aware respondents make more credit card payments as a share of all their payments: 17 percent compared to 13 percent.[20] They are also somewhat more likely to have experienced financial stress in the past year. Note that these statistics document a correlation between partial awareness and some financial characteristics, not a causal link between the two. We cannot say for certain what causes what; we simply observe that these factors are correlated.



Source: Diary of Consumer Payment Choice, Survey of Consumer Payment Choice, Federal Reserve Bank of Boston.

Figure 2: Comparison of Consumers Aware and Unaware of Marketplace Lending

[20] Credit card payments shares are defined as the number (rather than value) of credit card payments divided by the total number of payments. Respondents who made zero payments during the diary-day period are given a credit card share of zero for the purposes of this analysis and in the regressions described below.

Generally, some demographic characteristics are closely related to financial characteristics, such as education and income to wealth and credit usage. Therefore, some of the correlations documented above may not remain significant when controlling for multiple factors. To examine whether awareness is related to demographics or financial need, we perform a logistic regression analysis, reported in the first column of Appendix Table 1. The model specification regresses lender awareness on the various demographics and financial characteristics included in Tables 1 and 2. Appendix Table 1 reports odds ratios, that is, the change in the relative probability that a person exhibiting the given characteristic will be lender aware or have applied for a loan compared to an individual with a set of baseline characteristics that correspond to the excluded categories. For example, a coefficient estimate of 2 in the first column of the table indicates that an individual with the row characteristic is twice as likely to be lender aware as somebody with the baseline set of characteristics.

We find that once we control for other demographic and financial characteristics, college-educated consumers are almost three times as likely as those who did not complete high school to have heard of an MPL. Financial stress is also a significant predictor of awareness. In line with the finding on financial stress, consumers with lower credit scores (699 and below) are more likely to be lender aware; consumers unaware of their scores or with high scores (800 and above) are less likely to be lender aware. Males are more likely than females to be aware, as are Caucasians compared to non-Caucasians. Having revolved credit card debt is more strongly associated with lender awareness than is other debt (remember that these loans are marketed as a way to pay down credit card debt), but the effect is small compared to the factors listed above. Interestingly, income is not shown to be a statistically significant factor.

5. Marketplace Loan Applicants

Very few U.S. consumers have ever applied for a loan from an MPL; in our sample, it's just 2.4 percent of all U.S. consumers (11.7 percent of consumers who are lender aware). Just 1.6 percent of U.S. consumers currently have a marketplace loan or had one in the past; 0.8 percent were denied or applied but did not take out the loan. Because of small sample sizes, we look at all applicants, regardless of whether they received a loan. We compare applicants (70 observations) to lender-aware respondents (approximately 500 observations) who did not apply (non-applicants).

Applicants managed their credit cards differently compared to lender-aware consumers who did not apply (Table 3). Applicants were more likely to have a credit card: 91 percent compared to 84 percent of non-applicants. Notably, applicants were much more likely to have revolving balances on their credit cards: 81 percent compared to just 50 percent of non-applicants. Applicants with revolving balances had higher balances than non-applicants with revolving balances; among revolvers, the average applicant had $8,510 in revolving debt, significantly higher than the $6,616 in revolving debt that non-applicants held. Again, these data are compatible with research suggesting that most marketplace loans are used for debt consolidation. Perhaps related to their higher debt balances, applicants used their credit cards less frequently to make payments; applicants used credit cards for 11 percent of their payments, non-applicants for 18 percent.

The average applicant had less non-credit-card debt; the average total non-credit-card debt for applicants was approximately $101,000, versus $127,000 for the average non-applicant. These lower debt levels, however, make up a greater proportion of overall wealth for applicants; household assets are significantly lower for applicants ($168,000) than for non-applicants ($427,000). Again, it is not necessarily the case that having higher credit card debt, for example, causes a consumer to apply for a marketplace loan or that having a marketplace loan causes a consumer to have higher revolving debt; we simply observe that these factors are related.

Also noteworthy, the results in Table 3 do not suggest that applicants' financial positions are deteriorating compared to the financial positions of non-applicants. The shares of applicants and non-applicants saying that their unpaid credit card balance is the same as last year are not statistically significantly different, and the shares of consumers experiencing financial stress in the past year is the same for the two groups.

The second column of Appendix Table 1 shows coefficient estimates of a logit model predicting a lender-aware respondent's application status. We find that, as with awareness, having high revolved credit card debt is highly predictive of one's application status, suggesting perhaps that those who wish to pay off their credit cards are more likely to seek out a marketplace loan than those who do not. Debts remain a weakly predictive factor, while assets flip sign and become predictive of *not* applying.

Interestingly, financial stress is no longer a statistically significant predictor. This may be a result of the relatively low number of individuals in the sample who experienced financial stress, or it may be that those who experience financial stress are inclined to seek out loan opportunities in general but do not find that marketplace loans fit their needs. Education likewise loses its significance as a factor, suggesting that any effect of education on use of marketplace lending comes from educated individuals' awareness rather than from their tendency to apply.

6. Conclusion

This note sheds some light on consumer awareness and use of marketplace lending. Despite the growth of marketplace lending, we find that just one-quarter of U.S. consumers are either aware of the term marketplace lending or aware of a specific MPL. Wealthier and more educated consumers are more likely to be aware of marketplace lenders, as are those with more revolved credit card debt and those who have experienced financial stress. While awareness is greater among higher-income, better-educated consumers, usage of marketplace loans is more prevalent among lender-aware consumers with lower wealth and greater revolving credit card debt.

The DCPC also included questions related to participants' experiences with marketplace loans. These included practical questions (for example, how much the loan was for and what interest rate applicants were offered) as well as questions related to consumers' expectations (such as whether the terms were better or worse than they expected). The responses to such questions had the potential to give additional insights into whether MPLs are serving the needs of their customers better than are other credit providers. However, because of the relatively small sample sizes of the SCPC and DCPC, as well as the relatively low rates of awareness and participation, we cannot report conclusive results on the consumer experience. To conduct further research incorporating these factors, it would be necessary to field the survey with a much larger sample or to conduct a survey with a targeted oversample of people who applied for, have had, or currently have a marketplace loan.

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Table 1: Marketplace Lending Awareness within Demographic Groups

(Percentage shares of U.S. consumers)

Category	Group	Share of consumers who are… Partially aware[1]	Lender-aware[2]	Term-aware[3]	Fully aware[4]
All		0.26	0.15	0.19	0.09
Gender	Female	0.23	0.13	0.18	0.07
	Male	0.28	0.18	0.21	0.10
Age	<25	0.21	0.12	0.16	0.08
	26-45	0.28	0.18	0.22	0.12
	46-65	0.28	0.15	0.20	0.08
	>65	0.19	0.11	0.13	0.05
Caucasian	No	0.23	0.13	0.18	0.08
	Yes	0.27	0.16	0.19	0.09
Income	Less than $25k	0.19	0.10	0.13	0.04
	$25k to $100k	0.26	0.13	0.20	0.08
	More than $100k	0.30	0.22	0.22	0.13
Census Region	Northeast	0.25	0.15	0.18	0.08
	Midwest	0.26	0.16	0.19	0.09
	South	0.24	0.13	0.19	0.07
	West	0.28	0.19	0.22	0.13
Married	No	0.23	0.13	0.17	0.08
	Yes	0.27	0.17	0.20	0.10
Education	Less than High School	0.12	0.06	0.08	0.03
	High School	0.23	0.11	0.17	0.06
	College	0.35	0.25	0.25	0.16
Work Status	Employed	0.29	0.17	0.21	0.10
	Unemployed	0.17	0.11	0.14	0.08
	Retired	0.23	0.14	0.16	0.06
	Other	0.21	0.12	0.16	0.08
	Multiple	0.23	0.14	0.17	0.08

Sources: 2016 Survey of Consumer Payment Choice, 2016 Diary of Consumer Payment Choice, Federal Reserve Bank of Boston. *Notes:* (1) Partially aware respondents either are aware of the term "marketplace lending" or recognize the name of at least one marketplace lender. (2) Lender-aware respondents recognized the name of at least one MPL: Lending Club, Prosper, SoFi, other. (3)Term-aware respondents reported that they had heard of the term "marketplace lending." (4) Fully aware respondents are both term aware and lender aware. 2,916 observations.

Table 2: Marketplace-Lending Aware and Unaware Consumers: Financial Characteristics

(Percentage shares by level of awareness)

Chracteristic	At least partially aware(1)	Unaware(2)	Difference	p-value	Signifcance
Experienced financal stress last year	0.13	0.10	0.03	0.011	**
Self-reported FICO score					
Below 600	0.11	0.16	-0.05	0.000	***
600-649	0.11	0.09	0.02	0.073	*
650-699	0.14	0.10	0.04	0.000	***
700-749	0.18	0.14	0.04	0.001	***
750-800	0.24	0.18	0.07	0.000	***
Above 800	0.12	0.15	-0.03	0.006	***
Don't know	0.10	0.18	-0.09	0.000	***
Income (household)					
Less than $25k	0.19	0.28	-0.09	0.000	***
$25k to $100k	0.39	0.38	0.00	0.854	
More than $100k	0.43	0.34	0.09	0.000	***
Household debt (excluding revolved credit card debt)					
None	0.14	0.24	-0.10	0.000	***
$1 to $50k	0.01	0.01	0.00	0.101	
$50k+ to $100k	0.00	0.01	-0.01	0.001	***
$100k+ to $200k	0.00	0.00	0.00	0.666	
More than $200k	0.84	0.74	0.10	0.000	***
Household assets					
None	0.09	0.13	-0.04	0.000	***
$1 to $50k	0.00	0.01	-0.01	0.000	***
$50k+ to $100k	0.00	0.00	0.00	0.140	
$100k+ to $200k	0.00	0.01	-0.01	0.000	***
More than $200k	0.90	0.85	0.06	0.000	***
Credit card adopter	0.83	0.73	0.10	0.000	***
Credit card revolver	0.48	0.36	0.12	0.000	***
Credit card payment volume share	0.17	0.13	0.05	0.000	***
Revolved credit card debt					
None	0.52	0.64	-0.12	0.000	***
$0.01 to $1,000	0.13	0.15	-0.02	0.103	
$1,000+ to $5,000	0.15	0.13	0.03	0.022	**
$5,000+ to $10,000	0.11	0.04	0.07	0.000	***
More than $10,000	0.09	0.05	0.04	0.000	***
Revolvers who say unpaid credit balance is…					
… less than last year	0.39	0.40	-0.01	0.721	
… the same as last year	0.30	0.29	0.02	0.466	
… more than last year	0.23	0.24	-0.01	0.637	

Sources: 2016 Survey of Consumer Payment Choice, 2016 Diary of Consumer Payment Choice, Federal Reserve Bank of Boston. Notes: Statistically significant at the *** 1 percent, ** 5 percent, or *10 percent level. (1) At least partially aware respondents are aware of the term "marketplace lending," recognize the name of at least one marketplace lender, or both. For at least partially aware respondents, the number of observations ranges from 797 to 812. (2) For unaware respondents, the number of observations ranges from 2,083 to 2,104.

Table 3: Marketplace Lending Applicants and Aware Non-applicants: Financial Characteristics

(Percentage shares or average dollar values by applicant status)

Characteristic	Applicants(1)	Non-applicants(2)	Difference	p-value	Signifcance
Experienced financal stress last year	0.14	0.14	-0.01	0.859	
Self-reported FICO score					
Below 600	0.12	0.10	0.02	0.518	
600-649	0.23	0.10	0.13	0.001	***
650-699	0.15	0.16	-0.02	0.647	
700-749	0.23	0.18	0.05	0.274	
750-800	0.13	0.27	-0.13	0.000	***
Above 800	0.08	0.09	0.00	0.945	
Don't know	0.05	0.10	-0.05	0.063	*
Credit card adopter	0.91	0.84	0.08	0.032	**
Credit card revolver	0.81	0.50	0.31	0.000	***
Credit card payment volume share	0.11	0.18	-0.07	0.009	***
Revolvers who say unpaid credit balance is…					
… less than last year	0.46	0.36	0.10	0.079	*
… the same as last year	0.26	0.33	-0.07	0.224	
… more than last year	0.25	0.23	0.03	0.651	
Revolved credit card debt amount ($) among…					
all consumers	$7,023	$3,518	$3,505	0.014	**
revolvers	$8,510	$6,616	$1,894	0.273	
Income (household)					
Less than $25k	0.16	0.18			
$25k to $100k	0.53	0.39			
More than $100k	0.31	0.43			
Other household debt ($ thousands)	$100,876	$127,432	-$26,556	0.038	**
Household assets ($ thousands)	$168,175	$427,240	-$259,065	0.004	***

Sources: 2016 Survey of Consumer Payment Choice, 2016 Diary of Consumer Payment Choice, Federal Reserve Bank of Boston. *Notes:* Statistically significant at the *** 1 percent, ** 5 percent, or *10 percent level. (1) Applicants include consumers who are lender aware and who currently have a marketplace loan, who had a marketplace loan in the past, or who applied for and did not take or were denied a marketplace loan. Includes 70 observations (55 credit card revolvers). (2) Non-applicants include consumers who are lender aware and never applied for an MPL. Includes approximately 500 observations (not all respondents answered every question).

Appendix Table 1: Regression Estimates Determinants of MPL Awareness and Applicant Status

Variable	Lender-aware (1)	Have applied for a loan (2)
Revolved credit card debt (thousands)	1.028***	1.038***
	(.006)	(.012)
Total assets (thousands)	1.00012*	0.99873*
	(.00006)	(.00068)
Total debts (thousands excluding revolv credit card debt)	1.001***	1.002
	(1.001)	(1.002)
Age	1.074***	1.15**
	(.019)	(.076)
Age squared	0.999***	0.999*
	(.00018)	(.00068)
Credit card payment volume share	1.363***	0.744
	(.15274)	(.36356)
Census region		
Northeast	excl.	excl.
	-	-
Midwest	1.098	0.735
	(.12)	(.265)
South	1.114	0.584
	(.121)	(.205)
West	1.108	0.486
	(.142)	(.228)
Experienced financal stress last year	1.416***	1.098
	(.158)	(.368)
Self-reported FICO score		
Below 600	excl.	excl.
	-	-
600-649	1.514***	1.216
	(.22)	(.626)
650-699	1.444**	0.366**
	(.214)	(.164)
700-749	1.199	0.694
	(.162)	(.346)
750-800	1.25*	0.441
	(.166)	(.255)
Above 800	0.697**	0.824
	(.105)	(.499)
I don't know	0.751**	0.391
	(.108)	(.268)
Male	1.379***	1.118
	(.1)	(.253)
Caucasian	1.28**	2.133**
	(.134)	(.817)
Household income		
Less than $25k	excl.	excl.
	-	-
$25k to $100k	1.103	1.607
	(.113)	(.638)
More than $100k	1.007	1.311
	(.121)	(.648)
Education		
Less than High School	excl.	excl.
	-	-
High School	1.757**	0.709
	(.388)	(.602)
College	2.848***	0.356
	(.647)	(.32)
Married	0.867*	0.616*
	(.064)	(.17)
Employment status		
Employed	excl.	excl.
	-	-
Unemployed	0.765*	0.087**
	(.114)	(.089)
Retired	1.503***	0.948
	(.231)	(.375)
Other	1.001	0.217***
	(.12)	(.095)
Multiple categories	1.126	0.224
	(.18)	(.22)
Constant	0.022***	0.008***
	(.01)	(.015)
Number of observations	*2860*	*570*

Sources: 2016 Survey of Consumer Payment Choice, 2016 Diary of Consumer Payment Choice, Federal Reserve Bank of Boston. *Notes:* Bootstrapped standard errors are reported in parentheses. Estimates are statistically significant at the *** 1 percent, ** 5 percent, or *10 percent level. Coefficients and standard errors are reported as odds ratios. Excluded categories are shown for non-binary and non-continuous response variables. (1) Lender-aware respondents recognize the name of at least one MPL. (2) Of respondents who are lender aware, respondents who have applied for a marketplace loan.