

Supervisory Research Forum (SURF) Spotlight 2020:Q3

Are Fintech Firms Reaching Out to Underserved Consumers?¹

Fintech lenders are known for using more complex algorithms and better data (alternative data) than traditional banks in their credit decisions. While fintech loan volume has remained a small fraction of the overall consumer lending market, it has grown rapidly since the financial crisis. Fintech lenders could potentially reach out to those who have been previously underserved, given their comparative advantages in modeling and access to big data. Several research studies have examined whether fintech lending has effectively expanded credit access, but the literature so far paints a mixed picture.

On the one hand, fintech lenders may be driving credit expansion to previously underserved consumers, using their proprietary algorithms to identify the “hidden prime” within the low-credit-score pool. On the other hand, these firms may simply be siphoning the best borrowers from traditional banks, wooing these consumers with faster service and potentially lower interest rates.

In this SURF Spotlight, I summarize the soon-to-be-released working paper by Julapa Jagtiani and Erik Dolson (2020) titled “Are Fintechs Reaching Out to Underserved Consumers?” from the Federal Reserve Bank of Philadelphia. This paper uses a unique data set derived from surveys of consumer credit mail offers to examine the supply side of fintech credit. The authors compare fintech firms with traditional banks and traditional nonbank lenders (“shadow banks”) to understand where fintech firms stand in their willingness to offer credit to underserved consumers, including those with low credit scores and those living in lower-income neighborhoods, rural areas, and places with fewer bank branches. The authors find slightly different results across loan products.

For mortgage loans, Jagtiani and Dolson (2020) find that, based on the Mintel survey responses, fintech firms appear to be willing to offer credit access to the underserved, especially offering more Federal Housing Administration (FHA) mortgage products than other lender types. For unsecured personal installment loans, however, the results are mixed. The authors find strong evidence that fintech firms reach out to lower-score consumers; however, they also find that fintech firms target higher-income consumers within the low-score pool as well as those with more accounts and more credit card offers. This could indicate that fintech firms are marketing to consumers who may already have access to credit but are looking for faster and better services.

It is important to note that the analysis in this paper is not based on the actual loan origination but rather on credit offers, which may not result in actual loan origination. In addition, these credit offers may be intended for consumers who are unlikely to go to the fintech platforms on their own, but they could potentially benefit from switching to fintech products. Therefore, the

¹ This commentary was written by Erik Dolson and Julapa Jagtiani of the Supervision, Regulation, and Credit Department of the Federal Reserve Bank of Philadelphia. The opinions expressed here are those of the authors and do not necessarily reflect the views of the Federal Reserve Bank of Philadelphia or the Federal Reserve System.

observations in the Mintel credit offer survey may not cover the full scope of customers being served by the lenders making the credit offers.

Previous Literature

Recent literature indicates that the mortgage market and personal loan market differ significantly in the types of consumers fintech firms target and the extent to which their target population coincides with that of traditional banks. Research on the mortgage market typically points to fintech firms expanding access to credit, although the evidence is somewhat mixed. Jagtiani, Lambie-Hanson, and Lambie-Hanson (2019) find that fintech firms have a higher market share in areas with greater mortgage denial and lower credit scores, as well as areas with fewer than 10 banks, all proxies for limited credit access. We also find tentative evidence that fintech firms reach out to marginal borrowers in the mortgage market, specifically lower-income borrowers and those in low- to moderate-income (LMI) areas.

Fuster et al. (2018), on the other hand, do not find evidence that fintech firms target underserved consumers. Instead, they suggest that the expansion of fintech firms is because of the faster service they provide. They find that fintech firms process mortgage applications 20 percent faster than banks and have a more elastic supply, which allows them to alleviate supply constraints during demand shocks. Similarly, Buchak et al. (2017) find little evidence that fintech firms reach out to credit-constrained borrowers and conclude that the expansion of fintech firms in the credit space is because of lower regulatory burden and potentially evolving consumer preferences that favor online products. Note that the authors do not include FHA loans in their analysis; thus, their results are based on conventional mortgage borrowers who are less likely to be underserved compared with FHA mortgage borrowers.

The literature on the unsecured personal loans also reflects mixed evidence. There may be some degree of substitution between bank loans and fintech loans, especially among high-risk consumers who pay a high-risk premium on personal loans from traditional lenders. This suggests that fintech lenders may not necessarily extend credit to those who are currently unserved or underserved, since they are taking market share from traditional lenders. For example, Cornaggia et al. (2018) find that increased fintech activity tends to lower commercial bank loan volumes, particularly in the higher-risk segment. These consumers substitute away from traditional banks to fintech lenders. The effect is strongest for small commercial banks (those with assets <\$300 million) that lose 1.8 percent of their loan volume.

Some well-served consumers may also find fintech lenders to be more attractive than traditional lenders, and some may be willing to pay a premium for the faster service and greater transparency that fintech lenders provide. Di Maggio and Yao (2019), for example, find no evidence that fintech firms target marginal borrowers; they find that fintech borrowers tend to be younger, with higher incomes, and live in richer neighborhoods, in addition to having more credit accounts and a higher credit utilization ratio compared with traditional bank borrowers. These borrowers seem to be more sophisticated and may prefer fintech lenders to traditional lenders because of their faster and better services.

In contrast, Jagtiani and Lemieux (2018) find some evidence that fintech firms expand access to credit for areas that are underserved by traditional banks. The authors use account-level data

from LendingClub consumer loans and account-level Y-14M stress test data reported by large banks to explore the relationship between fintech expansion and various measures of credit gaps, such as banking market concentration and bank branches per capita. Their results indicate that LendingClub's activities have increased in areas with highly concentrated banking markets and in areas with fewer bank branches, providing evidence of the fintech industry's potential to expand access to credit in the personal loan market. Further, Jagtiani and Lemieux (2020) find that below-prime consumers could access funding at significantly lower cost through fintech lenders.

Findings

Based on the Mintel survey data on personal credit offers, Jagtiani and Dolson (2020) find that fintech lenders have a strong focus on nonprime consumers relative to traditional banks. Interestingly, fintech firms appear to reach out to the higher-income consumers (with annual incomes of at least \$75,000) within this low-score (below-prime) segment, although the effect of income is much smaller than credit score. The income data comes directly from the Mintel dataset.

Figure 1 compares personal loan mail offers for the three lender types, categorized by the income bracket and credit score of the recipient. The plot shows that a significant share of fintech mail volume goes to consumers in the highest income group (those with incomes >\$75,000) and are distributed primarily to nonprime consumers within each income segment. This provides some evidence that nonprime consumers could potentially benefit from fintech growth.

Using several more-direct measures of how well served a consumer is by traditional banks (such as the number of credit card offers that a consumer receives, the number of accounts a consumer has, and the consumer's credit utilization on their revolving accounts), Jagtiani and Dolson (2020) do not find evidence that fintech firms are reaching out to consumers with limited access to credit, according to these measures. Specifically, consumers who receive more credit card offers from traditional banks are also marginally more likely to receive a fintech personal loan offer, although the effect is small.

Interestingly, consumers who have filed for bankruptcy are significantly more likely to receive an offer from a fintech firm compared with a traditional bank. Banks tend to make credit card offers (rather than personal installment loan offers) to those who previously filed for bankruptcy since they cannot be discharged again (Jagtiani and Li, 2016).

Turning to the mortgage market, there is strong evidence that fintech firms are providing credit offers to consumers who are marginalized in a number of respects. For example, fintech lenders reach out to lower-income consumers more than traditional banks do. Figure 2 compares mail volume by the three lender types, separated by income bracket. Around 30 percent of fintech mail volume goes to consumers with incomes of less than \$50,000, compared with 25 percent for banks and 23 percent for shadow banks. Fintech lenders are also more likely to send offers to consumers who live in areas with fewer bank branches (although this effect is small)². Although our findings are only based on credit offers (rather than originations), these findings provide

² Note that the number of bank branches at the zip code level is calculated using the Federal Deposit Insurance Corporation's (FDIC) Summary of Deposits data, which is then matched to the Mintel dataset based on the zip code reported in the Mintel data.

some evidence supporting the role of fintech lenders in expanding mortgage credit access to underserved consumers.

Conclusions

Given the recent growth of fintech firms in credit markets and the shadow banking sector overall, it is interesting to examine whether fintech lenders could help provide more efficient financial intermediation. Focusing on fintech firms' willingness to provide credit to the consumers who have been underserved, a forthcoming paper by Jagtiani and Dolson (2020) find that fintech lenders are reaching out to underserved consumers, especially in the mortgage market.

The evidence is mixed when looking specifically at personal installment loans (excluding credit cards). While those consumers who receive fintech personal loan offers do indeed have lower credit scores (below prime) compared to traditional banks, they also tend to have higher income, receive more credit card offers from traditional banks, and have more credit accounts. The finding that fintech lenders focus on consumers with lower-credit scores is consistent with findings in Jagtiani and Lemieux (2019) that some credit constrained below-prime consumers could be identified as less risky by fintech lenders and could receive a loan at much lower rate than they could have received from traditional lenders (e.g., through carrying credit card balance).

The full paper will be published in the coming months.

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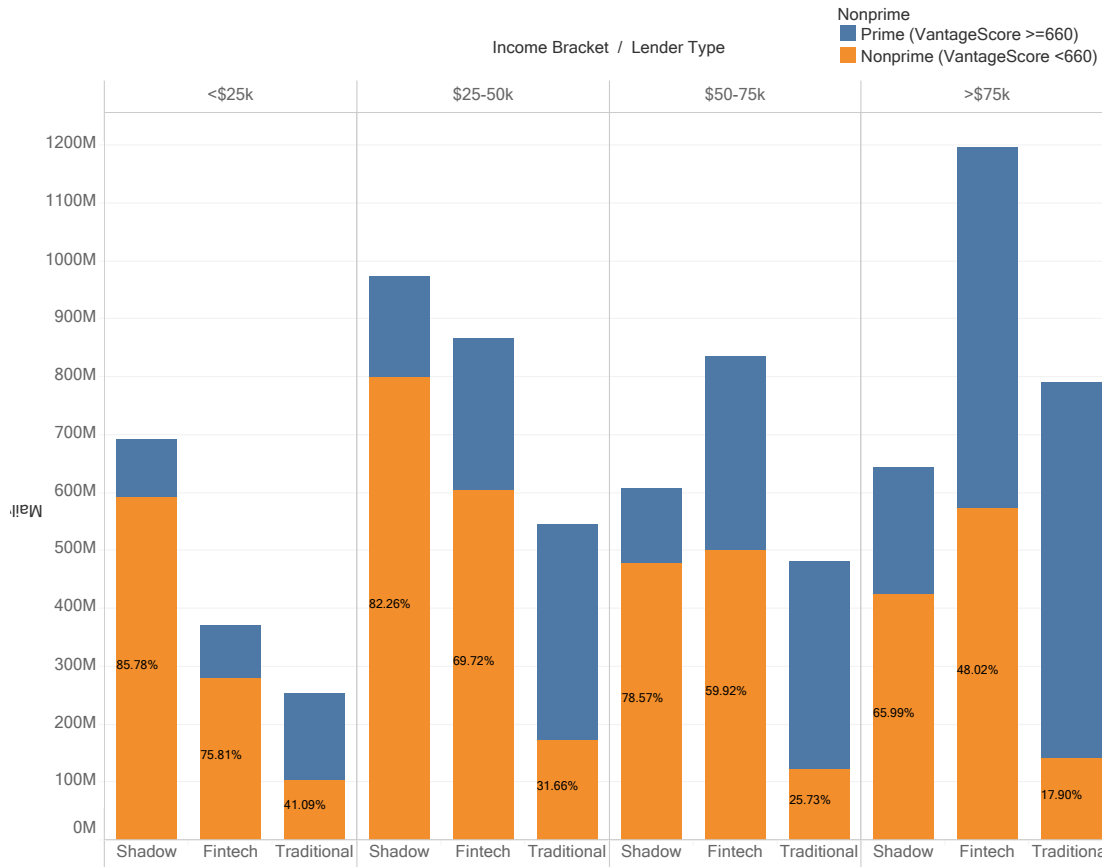
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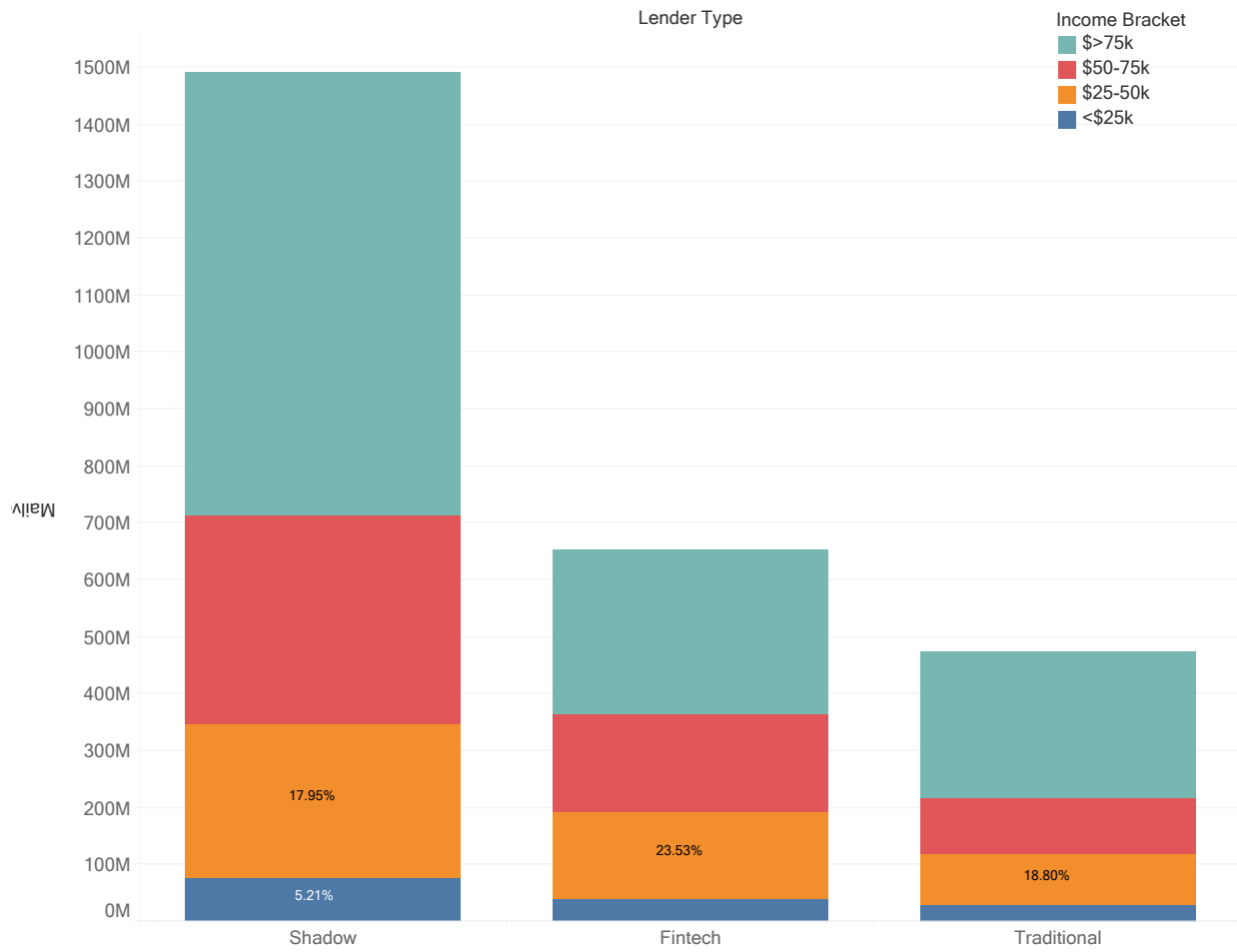
Figure 1: Personal Loan Mail Volume by Income Bracket and Prime/Nonprime Status



Source:
Mintel

Comperemedia, Inc. Direct Mail Monitor Data and TransUnion LLC Match File (2018).

Figure 2: Mortgage Mail Volume by Income Bracket



Source: Mintel Comperemedia, Inc. Direct Mail Monitor Data and TransUnion LLC Match File (2018).