

Competition and Selection in Credit Markets

Based on BFI Working Paper 2021-99, “[Competition and Selection in Credit Markets](#),” by Constantine Yannelis, Assistant Professor of Finance and FMC Faculty Scholar, Chicago Booth; and Anthony Lee Zhang, Assistant Professor of Finance, Chicago Booth

Counterintuitively, this new research finds that increased competition among lenders may decrease, rather than increase, consumer welfare in subprime credit markets by leading to higher-than-otherwise interest rates.

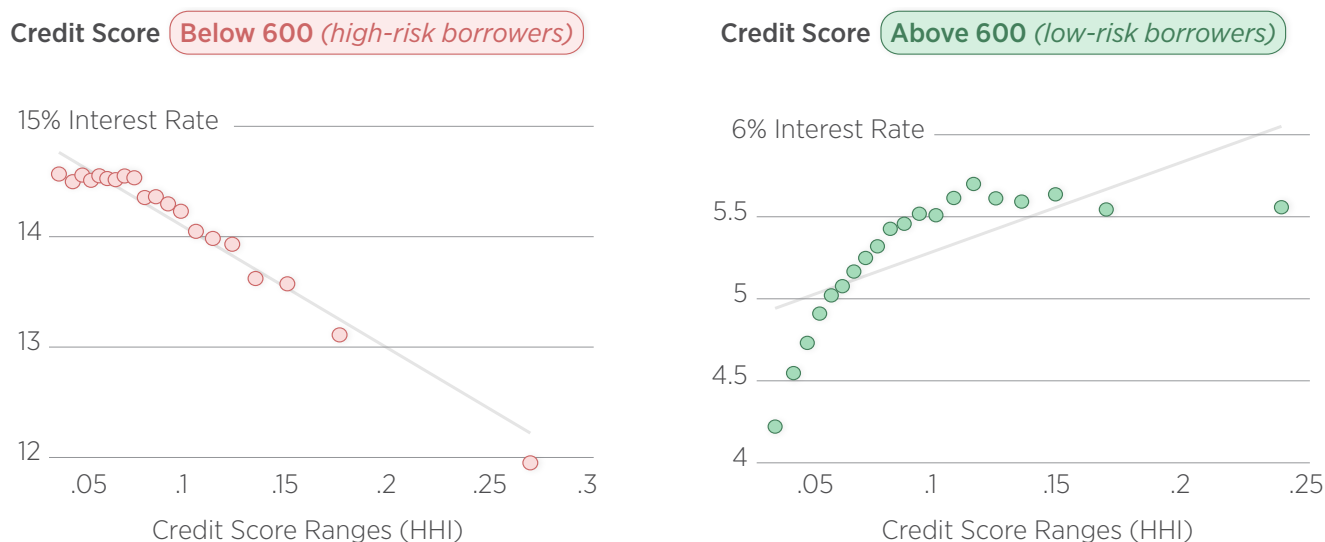
Researchers have long examined how market concentration interacts with lender screening in credit markets. The efficiency of lending markets, for example, can be hampered by information imperfections, but such harmful effects can be in part mitigated by imperfect competition. The authors propose and test a new channel through which competition can have adverse effects on consumer credit markets.

This may seem counterintuitive. How can credit market competition lead to consumer harm? Imagine that lenders can invest in a fixed-cost screening technology

that screens out consumers who are likely to default, allowing lenders to charge lower interest rates to the remaining consumers. Lenders in concentrated markets have higher incentives to invest in screening, since their fixed costs are divided among a larger customer base. As a result, when market competition increases, lenders have lower incentives to invest in screening. The population of borrowers becomes riskier, and interest rates can increase, leaving consumers worse off.

The authors develop a model of competition in consumer credit markets with selection and lender

Figure 1 • Interest Rates and Competition



Note: This figure shows median interest rates in a county for given credit score ranges, broken down in 20 equal-sized bins of HHI (Herfindahl-Hirschman index), the authors’ measure of the competitiveness of a market. The left panel shows the relationship for borrowers with VantageScore scores below 600, while the right panel shows the relationship for borrowers with VantageScore scores above 600. The two panels display strikingly different patterns, consistent with the authors’ model. The left panel, which covers high-risk borrowers, shows a strong, linear, and negative relationship: in contrast with standard economic theory, interest rates are actually decreasing in market concentration. The right panel, which shows the relationship for low-risk borrowers, shows precisely the opposite relationship. Consistent with a standard framework, the authors find that interest rates are increasing in market concentration. The magnitudes of both relationships are fairly large: an increase in HHI from 0.05 to 0.15 is associated with approximately a 1% decrease in interest rates for high-risk borrowers, and a 1% increase in interest rates for low-risk borrowers.

monitoring, which shows that, in the presence of lender monitoring, the effect of market concentration on prices depends on the riskiness of borrowers. In markets with lower-risk borrowers, the authors find a standard classical relationship: more competition leads to lower prices. However, in markets with a greater portion of high-risk borrowers, increased competition can actually increase prices.

The authors provide empirical support for the model's counterintuitive predictions through an examination of the auto loan market to reveal that, indeed, in markets with high-risk borrowers, increased competition is associated with higher prices.

These findings have implications for competition policy in lending markets. Competition appears not to improve market outcomes in subprime credit markets, so antitrust regulators may want to allow some amount of concentration in these markets. The authors' results also suggest, though, that there is some degree of inefficiency

in the industrial organization of these markets: firms appear to make screening decisions independently, even though there are returns to scale in screening. Better outcomes are possible at lower costs if firms could pool efforts in developing screening technologies. The authors suggest that developments in fintech, such as the rise of alternative data companies, could eventually improve the efficiency of screening in these markets.

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