Measuring the Welfare Cost of Asymmetric Information in Consumer Credit Markets

(by Anthony A. DeFusco, Huan Tang, Constantine Yannelis)

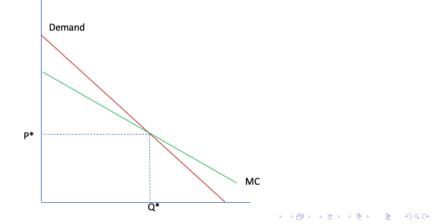
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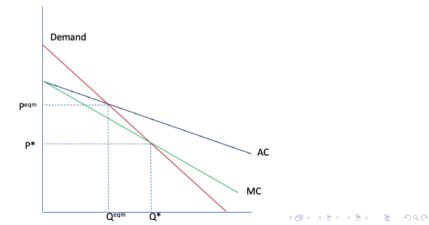
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Discussion

- Asymmetric information is of first-order importance in credit markets, results can help us think about welfare effects of open banking
- ▶ Empirical methodology is well-executed
 - Randomized experiment generates exogenous variation in interest rates which is used to estimate demand and cost curves

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- ▶ Significant contribution to the literature
 - ▶ Introduce new methodology from insurance markets to credit markets
- ► My comments will focus on:
 - 1. Issues with welfare estimation in selection markets
 - 2. Differences between insurance and credit markets

Market Competition and Adverse Selection

- ▶ Main results for welfare estimates are based on a perfect competition benchmark
- ▶ Market power in lending markets; welfare would depend on how the two interact
 - ▶ Information frictions can themselves create barriers to entry
 - ▶ Market power can alleviate costs because of information frictions
- ▶ Theoretical literature on the interaction between adverse selection and competition
 - Crawford et al., 2018 AER: Adverse selection can lower the prices monopolist charges as it implies a riskier pool of borrowers at any given price, lowering inframarginal benefits of a high price in the standard monopoly pricing equation
 - ▶ Mahoney and Weyl, 2017 ReStat: The effect of adverse selection on monopoly pricing will depend on how it changes the expected cost of serving the marginal consumer. Price will fall if the monopolist served more than one half of the population
- Monopoly pricing based on Mahoney and Weyl (2017) incorporated as a robustness test
- Richer discussion needed on the interaction between competition and asymmetric information
 - ► Why is monopoly pricing higher with adverse selection? Seems to contradict Crawford et al. (2018)

Market Competition and Adverse Selection

- ▶ Mahoney and Weyl (2017) consider models of symmetric oligopoly
- ▶ Important characteristics of lending markets not captured by their model
 - Externalities through customer selection: A firm's price affect its own cost by attracting specific types of consumers, but it also affects their rivals' cost at the same time
 - ► Asymmetrically informed lenders vs uniform asymmetric information: Information rents can affect incentives to screen, which could affect the extent of adverse selection

Static vs Dynamic Efficiency

- ▶ An important difference between insurance and credit market is repeated transactions
- ▶ Lenders can learn more about the credit risk of their customers through repayment history

- ▶ How does the size of welfare loss depend on learning?
- ▶ Can you estimate this empirically using fintech data on repeat transactions?

Average Pricing vs Customized Pricing

- Observing default history or use of big data/machine learning algorithms can facilitate better prediction of credit risk, leading to customized pricing
- ▶ How would this affect welfare estimates given that such estimates are based on average pricing?
- ▶ Would it create entry barriers by creating information advantages for certain lenders?

 Link between competition in pricing strategies (rather than prices) and adverse selection

Role of Prices vs Other Contract Features

- Most empirical work on selection markets has focused on prices as the main equilibrium object that creates selection (Akerlof, 1970)
- Other product attributes (eg. size of the loan, down payment requirement) can also affect adverse selection (Rothschild and Stiglitz, 1976)
- Endogenizing product terms other than price can generate externalities
- When consumers take loans from multiple lenders, the credit terms of one lender may directly impact the default probability of loans taken from the other lender, altering equilibrium interest rates and welfare

Conclusion

- Important paper! Provides an important first step in estimating welfare losses in consumer lending markets
- Need for future research to incorporate richer interactions between incentives to screen and monitor, market competition, and adverse selection

▶ Encourage everyone to read it