The Social Welfare of Marketplace Lending

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Abstract

Using natural disasters as exogenous shocks to the peer-to-peer (P2P) loan market, we document a local increase in loan demand post-disaster. Interest rates and delinquencies from loans approved during this demand shock are similar to pre-event levels. Loans allocated prior to a disaster are more likely to suffer delinquency over the life of the loan, but loans granted a hardship accommodation delay of payment reduce the likelihood of future delinquency providing relief to borrowers and reduced delinquency costs to investors. Contrary to regulatory concerns that P2P lending is predatory, our results suggest they provide positive social welfare benefits.

Research Questions

- **How does the P2P lending market respond to demand shocks?**
- **More specifically, after an exogenous increase in P2P loan demand from natural disasters, do lenders react with predatory lending practices?**

Data and Methodology

- **Loan Data**: Lending Club
- **Time Period**: 2007 to 2018
- **Natural Disaster Identification**: Spatial Hazard Events and Losses Database for the United States (SHELDUS)
- **Methodology**: Similar to Cortes and Strahan (2017), we estimate:

$$Log(1 + Loan\ Originations)_{j,t} = \sum_k \beta^k D^k + \lambda_j + \gamma_t + \varepsilon_{j,t}$$

where j indexes zip codes and t indexes months. Zip code level fixed effects are denoted by λ_j, and month-year fixed effects are denoted by γ_t. Event-month indicators ($D^k_{j,t}$) are included from 3 months before to 12 months after the disaster.

References and Contact Info

Cortes, K. R. and P. E. Strahan, 2017, Tracing out capital flows: How financially integrated banks respond to natural disasters, *Journal of Financial Economics* 125, 182-199.

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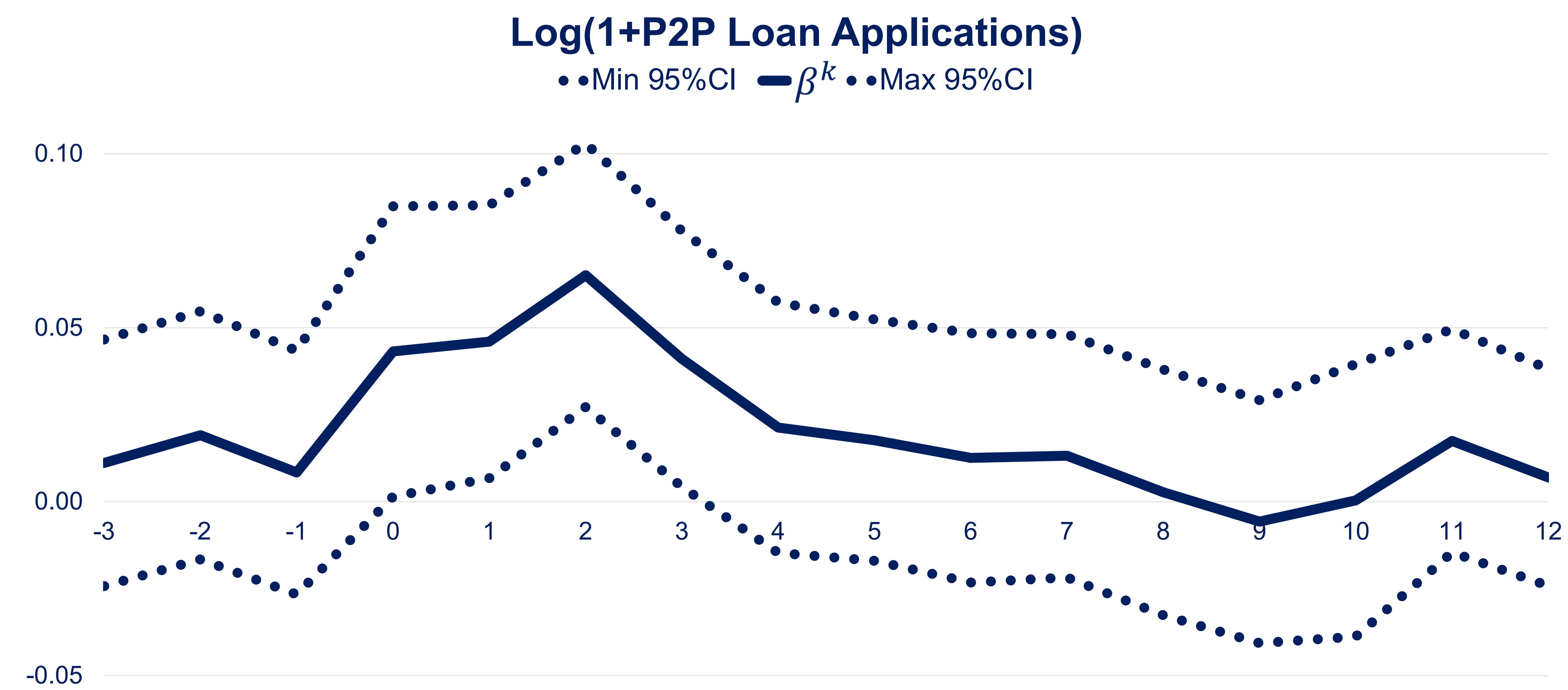
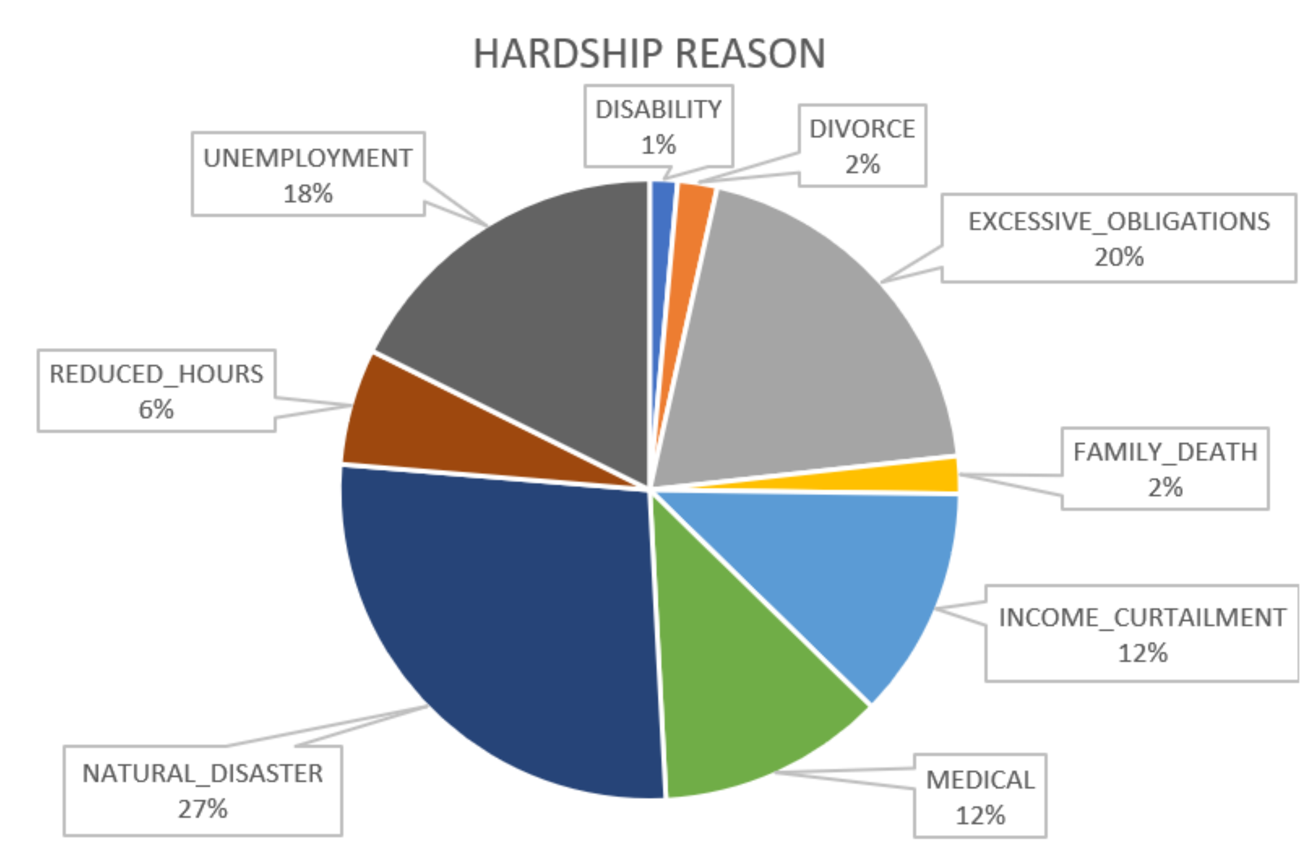
Main Results



This figure charts abnormal loan applications surrounding a natural disaster. We observe a significant increase in demand for P2P loans from the disaster month up to 3 months after the disaster.

During this 3-month period we find:

- Interest rates are similar to pre-disaster levels
- Loans approved during are no more likely to be delinquent



For loans approved before a disaster occurs, we document an increased likelihood of delinquency behavior. However, the lender provides hardship accommodations to many affected loans, which helps to reduce the delinquency likelihood.

Conclusions

- **We find the P2P market is efficient in responding to demand shocks without any evidence of predatory lending practices.**
- **In fact, this marketplace seems to provide social welfare benefits to natural disaster-affected borrowers at minimal costs to investors.**