# The Value of "New" and "Old" Intermediation in Online Debt Crowdfunding

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# Lending Crowdfunding Platforms

- Online lending started in in the mid-2000s with Zopa (UK)
- Initial business model was P2P loans—bilateral matches between lenders and borrowers— capture the portion of the market not serviced by traditional banks
- More recently, much more emphasis to marketplace model: crowdfunding platform sells loan portfolio to lenders
  - Platforms are now more bank–like
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- **Motivating research question**: Effect of marketplace model on welfare and credit provision
- Ambitious empirical identification goal!

# Paper's summary

1. Proposes a structural model of online lending with attractive features:
   - Active platform that creates portfolio products to maximize exp. profits
   - Lenders can opt between direct loans or a variety of portfolio products; explicit liquidity risk
   - Estimation using discrete-choice econometric approach in the spirit of Berry (1994)
2. Exploits a uniquely granular database from www.renrendai.com, a large Chinese platform
3. Constructs several counterfactuals to evaluate market design impact on welfare and credit creation

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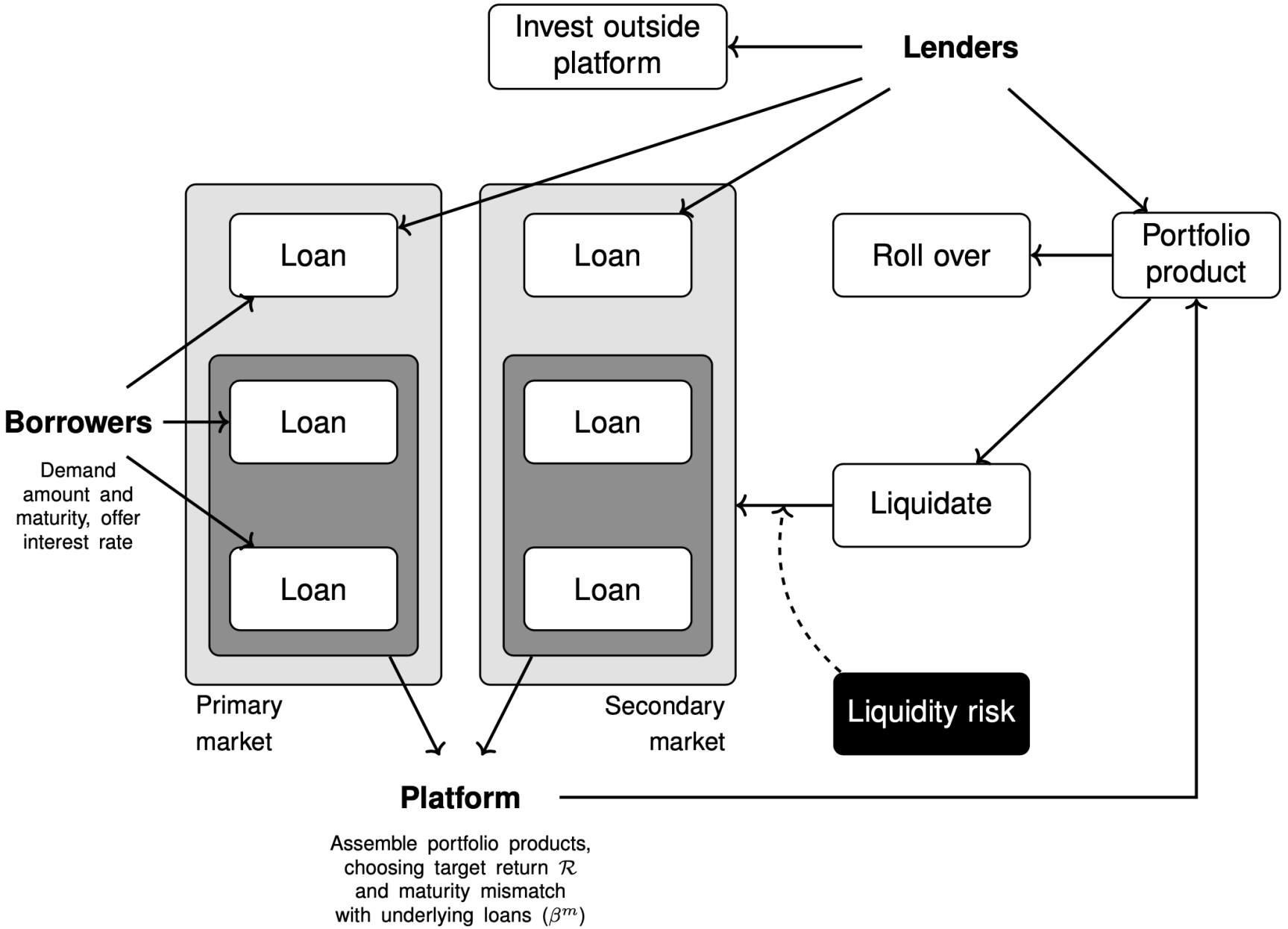
***Main finding***

- Moving to the market place model is a Pareto improvements: profits, lenders' surplus and credit supply increase
- Effects are economically significant

# Economic Setting



# Estimation: Market shares→Lenders and platform preferences

| Lenders | | Platform |
|---|---|---|
| **Share of Direct Loan c** | **Share of portfolio product k** | **Weight of loan c in portfolio product k** |
| Return | Return | Return |
| Maturity | Maturity | Maturity |
| Amount | Amount | Amount |
| | Resale time | Default rate |
| | | Share AA/A borrowers |
| | | Secondary market |

- Plus proportion rollover/secondary market sales

# Comments / Suggestions

**General**

- Rich equilibrium connections allow to take advantage of this granular dataset
- Impressive econometric effort; paper seems mature on that front

**Specific**

1. Interpretation some empirical estimates
2. Role of competition
3. Role of regulation

# Insights from Empirical Estimates

TABLE 4—LENDERS' DEMAND FOR PORTFOLIO PRODUCTS AND DIRECT LOANS

| | Direct loan | Portfolio product |
|---|---|---|
| Log Return ($\mathcal{R}_{kt}$, $r_{ct}$) | 0.30*** | 0.23* |
| | (0.08) | (0.13) |
| Log Return ($\mathcal{R}_{kt}$, $r_{ct}$) × Active lenders % | 2.94** | 2.31* |
| | (0.12) | (0.11) |
| Log Maturity ($\mathcal{M}_{kt}$, $m_{ct}$) | 0.27*** | 0.01 |
| | (0.02) | (0.03) |
| Log Maturity ($\mathcal{M}_{kt}$, $m_{ct}$) × Active lenders % | 0.22 | –0.59** |
| | (0.23) | (0.25) |
| Log Amount ($\mathcal{A}_{kt}$, $a_{ct}$) | 0.52*** | 0.99*** |
| | (0.01) | (0.03) |
| Log Amount ($\mathcal{A}_{kt}$, $a_{ct}$) × Active lenders % | 0.11 | 0.24 |
| | (0.17) | (0.27) |
| Resale Time ($\sigma_{kt}$) | | –5.41*** |
| | | (2.08) |
| Resale Time ($\sigma_{kt}$) × Active lenders % | | 53.72* |
| | | (32.22) |

- **Returns.** (+) coefficient on return, seems intuitive. But what is our prior hypothesis? What is the risk-return benchamark?Are lenders subject to behavioral biases?
- Do lenders have access to any risk metric? If not, controlling for maturity, why would they invest in low return products?
- If for diversification reasons, should we incorporate that feature to the otherwise single product choice setting?

TABLE 6—PLATFORM'S DEMAND FOR DIRECT LOANS

| | Mean | Standard Deviation |
|---|---|---|
| Return ($r_{ct}$) | –0.38 | 1.62 |
| Maturity ($m_{ct}$) | 0.11 | 0.53 |
| Amount ($a_{ct}$) | 0.97*** | |
| | (0.08) | |
| Default rate borrowers ($d_{ct}$) | –0.52*** | |
| | (0.08) | |
| Share AA/A borrowers | 4.45*** | |
| | (0.41) | |
| Secondary market loan category | –2.70*** | |
| | (0.09) | |

- **Returns**. (-) If signaling effects are at play, it'd be interesting to give borrowers a more explicit role
- Borrowers' return posting makes pricing different from classical IO where consumers act as price takers

# Role of competition

- Analysis is based on the 5th largest platform in China (5%) market share
- As of 2015 there were 2,590 P2P platforms in China; 1,021 in 2018 (p2pmarketdata.com)
- **Lender segmentation**. How segmented are lenders across these platforms?
  - If access to multiple platforms is relatively easy, comparing shares from a single platform could challenge the identification of lender's preferences
- **Product differentiation**
  - How much product differentiation among top platforms? Vertical/horizontal?
  - Do other platforms offer more appealing P2P terms?
  - Could entry be related to the finding that different investors arrive over time to Renrendai? ("more focused on diversification and limiting risk than on yields") Other preference shocks?

# Role of regulations

- The paper addresses a counterfactual in which the platform bears liquidity risk (bank-like model)
- Authors write that such a comparison can "contribute to the ongoing regulatory debate on debt crowdfunding"
- Exciting opportunity to push the model to provide more specific insights
- Bring banks into lenders' choice set
  - What type of imperfect competition outcome do we obtain? Refine outside options over time (perhaps abstracting from P2P choice)
  - Bank/lending platform competition can help estimating the shadow price of bank regulations
  - Can help estimate regulations' welfare effect. Is it optimal to bring uniform regulations for all lenders?

# Conclusions

- Ambitious and interesting paper exploiting state of the art methods and unique micro data
- Raises many interesting questions, scope for more work in this area
- Opportunity to build on econometric framework to study optimal regulations of fintech firms