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Peer-to-peer lending: an emerging shadow banking data gap[1]

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[1] This presentation was prepared for the meeting. The views expressed are those of the author and do not necessarily reflect the views of the BIS, the IFC or the central banks and other institutions represented at the meeting.

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Peer-to-Peer Lending:
An Emerging Data Gap in Shadow Banking

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This presentation reflects the views of the author and not the Bank of Canada

Peer-to-Peer Lending: An Emerging Data Gap in Shadow Banking

The key takeaways

1. There is an emerging need for more data on peer-to-peer lending.

2. Collecting this data is feasible and several options exist.

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Peer-to-Peer Lending: An Emerging Data Gap in Shadow Banking

The presentation is structured in four parts

1. Overview of peer-to-peer lending
2. Why peer-to-peer lending is important to a regulator
3. How peer-to-peer lending is currently regulated
4. How data on peer-to-peer lending can be collected

Overview of peer-to-peer lending

Peer-to-peer lending companies match borrowers and lenders online

- Peer-to-peer lending is a form of shadow banking where loans can be made through an online platform outside of traditional institutions.
- Normally the peer-to-peer lending company collects a service fee while not being a credit counterparty.

Examples:

Lending Club (US)
Prosper (US)
RateSetter (UK)
Zopa (UK)
Funding Circle (UK)

Lending Loop (Canada)
Auxmoney (Germany)
Younited Credit (France)
CreditGate24 (Switzerland)

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Overview of peer-to-peer lending

Typical business model of a peer-to-peer lender

- Website matches borrowers to lenders, collects a fee and administers loans.
- Loans are frequently personal and small business loans.
- Lenders are frequently conventional lenders and securities investors.
- Customers are attracted by lower rates and/or flexible lending standards.
- Market position is established by low overhead cost and possibly new credit analysis techniques.

Overview of peer-to-peer lending

Variations upon the typical business model

- Additional loan products including mortgages and wholesale lending
  - Examples: in the UK peer-to-peer mortgage lending is established and one large firm has also published details on notable wholesale lending to other lenders.
- Securitization and sale of peer-to-peer originated loans
  - Examples: beginning in 2016 large US and UK firms began partnering with securities dealers to securitize peer-to-peer originated loans.
- Funding loans with retail deposits (using a banking licence)
  - Example: one large UK firm is currently in the process of applying for a banking licence.

Overview of peer-to-peer lending

Variations upon the typical business model (continued)

- Cross-border lending
  - Example: one large European firm has significant cross border activity matching borrowers in four countries with lenders internationally.
- Maturity transformation
  - Example: one large UK firm use to offer borrowers terms of 12 months or more and lenders terms of 1 month or more implicitly creating a maturity transformation.

Why peer-to-peer lending is important to a regulator

It is important for two main reasons

1. Peer-to-peer lending is growing at a very rapid rate.
2. Several peer-to-peer lending companies have failed, raising concerns about regulatory adequacy.

Why peer-to-peer lending is important to a regulator

Peer-to-peer lending is growing at a very rapid rate

Driven by competitive pricing and/or flexible lending standards the peer-to-peer market has rapidly grown across 20+ countries.

Peer-to-Peer Lending Activity**		
	Outstanding Loans (USD) [Approximate values +/- 30%]	Approximate Year-over-Year Growth
UK	4 billion	37%
US	4 billion	NA
Canada	1 billion*** (<1% booked in Canada)	NA
China	130 billion	73%

** Data sources and compilation methodology is described in end notes.

***The Canadian booked abroad amount largely reflects conditional commitments for loan purchases.

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Why peer-to-peer lending is important to a regulator

Several peer-to-peer lending companies have failed raising concerns about regulatory adequacy

Failure due to fraud

- The lack of industry transparency and online nature of peer-to-peer lending has created an environment prone to fraud and this has lead to failures.
  - Examples: a Swedish peer-to-peer lender failed as a result of fraud and a large number of fraud failures have been documented in China including one Ponzi scheme that cost investors $7.6 billion.

Failure due to poor credit analytics

- Many peer-to-peer lenders have attempted to achieve market share by developing new credit analytics, and some of these analytical approaches have performed poorly and resulted in failures.
- The problem is compounded by many of the novel big data based approaches to credit analytics not having historical data to thoroughly test performance during crisis periods.
  - Examples: there have been multiple well publicised cases in the UK of peer-to-peer lenders failing due due to poor credit analytics.

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Why peer-to-peer lending is important to a regulator

Several peer-to-peer lending companies have failed raising concerns about regulatory adequacy (continued)

Failure due to mismanaged loss provisioning plans

- Many peer-to-peer lenders collect a percentage of loan originations to create a reserve fund in order to cover loan losses.
- Typically the reserve fund is used to guarantee investors zero losses on their loans conditional on the survival of the reserve fund.
- If a loss provisioning plan is mismanaged it can result in an outcome similar to a Ponzi scheme where the early investors are paid-off with the funds of the later investors until a catastrophic failure occurs.
  - Examples:
    - A number of peer-to-peer lenders have failed in China due to mismanaged loss provisioning plans leading to authorities banning the practice in 2016.
    - We do not have an example of this occurring in the developed world; however, several peer-to-peer lenders have been criticized for having mismanaged or dangerously low reserve funds including one large company in the UK.

How peer-to-peer lending is currently regulated

Regulation of peer-to-peer lending is evolving

- Banking or securities authorities have established regulations for peer-to-peer lending in most jurisdictions.
- Unlike other online markets, regulators have been generally successful applying regulations. This is because lenders typically need to comply with regulations for debts to be legally enforceable.
- However, many open questions remain relating to: transparency, loss provisioning, securitizations, recovery/resolution, and credit analytics.
- Overall there is an expectation that the regulation of peer-to-peer lending will continue to evolve with the industry.

How data on peer-to-peer lending can be collected

Evolving regulations will likely require additional data and several options are available

1. Direct regulatory data collection
2. Indirect regulatory data collection (via other financial institutions)
3. Collection of publicly available data (via web-scraping)

How data on peer-to-peer lending can be collected

Direct regulatory data collection

- This option consists of mandatory reports submitted to the regulatory supervisor.
- The approach has already been implemented by the FCA and SEC and is likely feasible for the regulatory authority in most jurisdictions.
- Direct regulatory data collection has the broadest coverage and produces the most detailed information; however, it also incurs the largest industry cost.

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How data on peer-to-peer lending can be collected

Indirect regulatory data collection (via other financial institutions)

- This option consists of regulators acquiring data on peer-to-peer lending through the direct regulatory data collections from other financial institutions.
- What makes this option feasible is that in most countries regulated financial institutions are a large proportion of the lenders in the peer-to-peer market.
- The approach has frequently been used by central banks or macro-prudential authorities in situations where they have system wide oversight responsibility but lack authority to collect information from some entities.
- Indirect regulatory data collection has less market coverage and produces more limited information than the direct approach; however, it may be useful in cases where the direct approach is not permitted or incurs too much industry cost.

How data on peer-to-peer lending can be collected

Collection of publicly available data (via web-scraping)

- This option consists of regulators retrieving data from publicly available websites through an automated web-scraping process.
- What makes this option feasible is that peer-to-peer lending websites post a large amount of detail online about current lending and outstanding loans.
- The methodology of web-scraping data collections is well understood, but there are technical limitations and issues relating to reputational risk.
- Publicly available data collections produces the most limited information of the three options; however, it also incurs the little to no industry cost.

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Key Takeaways

1. There is an emerging need for more data on peer-to-peer lending.

2. Collecting this data is feasible and several options exist.

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Notes

The values for approximate outstanding loans presented on slide nine are compiled as follows. The data for the UK is taken from the website of the industry association P2PFA. The data for China is from Wangdaizhijia as reprinted by the Financial times on April 3 2017. The data for Canada and the US was compiled by the author from publications of individual firms. Finally all amounts were converted in to USD equivalent. These values are only meant to serve as an approximation and should be used with caution.