P2P in China

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Director Ph.D. Program
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Director of CEIBS-World Bank China Centre for Inclusive Finance
Peer-to-peer lending (P2P) is the practice of lending money to unrelated individuals, or "peers", without going through a traditional financial intermediary such as a bank or other traditional financial institution.
P2P lending

Traditional Lender

Operating Expense
5-7%

LendingClub

Operating Expense
2.0%

Branch Infrastructure
Reserve Requirements
Customer Acquisition
Underwriting
Origination
Servicing

Technology Drives Cost Down

Customer Acquisition
Underwriting
Origination
Servicing

1. Operating expenses as a percentage of outstanding loan balance
2. October 2012 annualized operating expenses as a percentage of outstanding loan balances assuming no growth in origination volume
P2P lending

Banking

Lending Club

17.06%
17.12%
12.23%
8.30%
3.97%
0.06%

Borrowing rate
Lending rate

資料來源：Lending Club 資料，宏源證券
Cumulative US consumer P2P lending

Cumulative US Consumer P2P Lending Volume 2009-14

SOURCE: Lend Academy
Development of P2P lending

- 2005: Zopa 1st P2P platform
- 2006: Prosper 1st P2P platform in the U.S.
- 2007: Ppmoney 1st P2P in China
- 2007-2010: Slow growth period
- 2011: P2P was booming due to liberalization of interest rate, financial disintermediation and shadow banking
- 2012: Off-line due diligence
- 2013: 75 platforms default
- 2015: Expecting P2P regulation
The number of P2P platforms in China
The amount of P2P loans originated each month in China (Billion RMB)
The accumulated amount of P2P loans in China (Billion RMB)

<table>
<thead>
<tr>
<th>Month</th>
<th>Amount (Billion RMB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb-14</td>
<td>10.54</td>
</tr>
<tr>
<td>Mar-14</td>
<td>24.56</td>
</tr>
<tr>
<td>Apr-14</td>
<td>39.45</td>
</tr>
<tr>
<td>May-14</td>
<td>55.73</td>
</tr>
<tr>
<td>Jun-14</td>
<td>72.88</td>
</tr>
<tr>
<td>Jul-14</td>
<td>94.55</td>
</tr>
<tr>
<td>Aug-14</td>
<td>119.56</td>
</tr>
<tr>
<td>Sep-14</td>
<td>145.79</td>
</tr>
<tr>
<td>Oct-14</td>
<td>172.63</td>
</tr>
<tr>
<td>Nov-14</td>
<td>203.95</td>
</tr>
<tr>
<td>Dec-14</td>
<td>241.03</td>
</tr>
<tr>
<td>Jan-15</td>
<td>276.81</td>
</tr>
<tr>
<td>Feb-15</td>
<td>310.32</td>
</tr>
<tr>
<td>Mar-15</td>
<td>358.56</td>
</tr>
</tbody>
</table>
The amount of P2P loans outstanding in China (Billion RMB)
The number of active borrowers and lenders of P2P lending in China

Active lenders

Active borrowers
## Relative size of P2P lending

<table>
<thead>
<tr>
<th>The end of 2014</th>
<th>Total loan balance</th>
<th>P2P lending balance</th>
<th>Penetration ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>China (Billion ¥)</td>
<td>19,694.5</td>
<td>103.6</td>
<td>0.35%</td>
</tr>
<tr>
<td>US (Billion $)</td>
<td>3,887.6</td>
<td>6.0</td>
<td>0.15%</td>
</tr>
<tr>
<td>UK (Billion £)</td>
<td>339.2</td>
<td>1.89</td>
<td>0.56%</td>
</tr>
</tbody>
</table>
Booming of P2P lending in China

• Financial repression
• Domination of indirect financing
• Interest rate cap
• Regulation arbitrage
• Distorted risk premium
• Active engagement of PE and VC
• “Internet plus” national strategy
Contribution of SMEs

• 99% of firms
• 60% of GDP
• 80% of employment
• 50% of taxation
• 65% of patents
• 80% of SMEs are not able to get access to loans from commercial banks.
Individual consumers

Distribution family wealth

- Mainland China: 6% <100,000, 45% 100,000-1M, 49% >1M
- US: 6% <100,000, 48% 100,000-1M, 42% >1M
- HK: 10% <100,000, 70% 100,000-1M, 20% >1M
- Taiwan: 4% <100,000, 75% 100,000-1M, 24% >1M
- UK: 2% <100,000, 75% 100,000-1M, 24% >1M
- Japan: 2% <100,000, 85% 100,000-1M, 13% >1M

Data source: BCG 国泰君安证券研究
Individual consumers

80% of household income in rural area is 13,000RMB
Individual consumers

More than 30% of individual consumers put more than 20% of income in saving

Percentage of income in saving?

Source: 2013 BCG Global Consumer Confidence Survey.
Note: Due to rounding, some percentages may not add up to 100%.
Individual consumption growth
P2P meets the demand of long tail
Booming of P2P lending in China

- Financial repression
- Domination of indirect financing
- Interest rate cap
- Regulation arbitrage
- Distorted risk premium
- Participation of PE and VC
- Internet plus policy
Sources of External Financing

Direct financing:
- Net financing of corporate bonds, 14.3%
- Undiscounted bankers’ acceptances, 6.7%
- Trust loans, 8.1%
- Entrusted loans, 8.1%
- Foreign currency bank loans, 5.8%

Indirect financing:
- RMB bank loans, 52.0%
- Foreign currency bank loans, 5.8%
- Entrusted loans, 8.1%
- Trust loans, 8.1%
- Undiscounted bankers’ acceptances, 6.7%
- Equity financing on the domestic stock market by non-financial enterprises, 1.6%

Source: The People’s Bank of China 2012
### Assets of Banking Industry

<table>
<thead>
<tr>
<th>RMB 100 millions</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>State owned commercial banks</td>
<td>318,358</td>
<td>400,890</td>
<td>458,815</td>
<td>536,336</td>
<td>600,401</td>
<td>647,556</td>
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<td></td>
</tr>
<tr>
<td>National joint-stock commercial banks</td>
<td>88,131</td>
<td>117,850</td>
<td>148,617</td>
<td>183,794</td>
<td>235,271</td>
<td>261,718</td>
</tr>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>City commercial banks</td>
<td>41,320</td>
<td>56,800</td>
<td>78,526</td>
<td>99,845</td>
<td>123,469</td>
<td>139,557</td>
</tr>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>176,104</td>
<td>212,151</td>
<td>256,627</td>
<td>312,898</td>
<td>377,083</td>
<td>421,124</td>
</tr>
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<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>623,913</td>
<td>787,691</td>
<td>942,585</td>
<td>1,132,873</td>
<td>1,336,224</td>
<td>1,469,955</td>
</tr>
</tbody>
</table>

Source: CBRC, Statistics
Interest Rate Cap

Loan rate

Deposit rate
Regulation arbitrage

• There is no formal regulation on P2P operation.
• There is no minimal entry barrier such as capital requirement.
• P2P platform is not subject to the same regulations as banking: such as reserve requirement, loan-deposit-ratio, internal risk control and interest rate cap.
Distorted risk premium

• China’s lack of deposit insurance has recently given rise to a society-wide, tacit assumption that bank deposits are fully guaranteed by the state.

• On the basis of this assumption, banks and investors are engaging in morally hazardous behavior.

• Most of investors believe that the government provides implicit insurance on all the financial products.
Participation of PE and VC

The number of P2P platforms receive capital from PE/VC

Data source: Dongfang Securities Research Institute
Participation of PE and VC

P2P

Participating Companies:
1.恒大集团董事长 王家印
2.小米董事长 雷军
3.联想集团董事长 柳传志
4.巨人网络董事长 史玉柱
## Business models

<table>
<thead>
<tr>
<th></th>
<th><strong>Online</strong></th>
<th><strong>O2O</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Role</strong></td>
<td>Information intermediary</td>
<td>On-line trading, off-line credit assessment and investor identification</td>
</tr>
<tr>
<td><strong>Capital</strong></td>
<td>No</td>
<td>Credit risk reserve or third party guarantee</td>
</tr>
<tr>
<td><strong>preservation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Loan size</strong></td>
<td>Small</td>
<td>Large</td>
</tr>
<tr>
<td><strong>Strength</strong></td>
<td>Big data and lower cost</td>
<td>Higher risk control</td>
</tr>
<tr>
<td></td>
<td>No policy risk</td>
<td>High quality investors</td>
</tr>
<tr>
<td><strong>Weakness</strong></td>
<td>Incomplete credit data</td>
<td>Human cost</td>
</tr>
<tr>
<td></td>
<td>Human cost</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Time consuming</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Geographic limitation</td>
<td></td>
</tr>
</tbody>
</table>
Online: Information intermediary

Borrowers

P2P platform

Investors

Data

Capital flow

29
Online: Capital pool

Borrowers

Data

Capital flow

P2P platform

Data

Capital flow

Investors
O2O model 1: Debt broker

Borrowers

Buy Debt

P2P platform

Sell Debt

Investors
O2O model 2: Partnership

Partners (micro-loan, guarantee)

Identify borrowers

Check risk

P2P platform

Investors
O2O model 3: Collateral mode

Borrowers

P2P platform

Investors

Guarantee (Insurance, capital depository)
Ecosystem of P2P lending

- **Self-discipline**
  - Industry自律

- **Regulation**
  - Government

- **3rd party**
  - Third party

- **Micro-loan**
  - Guarantee
  - Factoring
  - Trust
  - E-commerce
  - Others

- **Resource**
  - Borrowers

- **Investors**
  - P2P platform
  - O2O

- **Risk management**
  - Credit rating, guarantee, insurance

- **Capital depository**
  - On-line

- **P2P platform**
  - P2P网贷平台

- **CEIBS**
  - 中欧国际工商学院

- **www.ceibs.edu**
Types of P2P lending

- Credit loan
- Property backed loan
- Vehicle backed loan
- Share backed loan
- Supply chain financing
- Financing leasing
- Bridge loan
- Voucher backed loan
- Small ABS
The total yield over time

Total yield

---|---|---|---|---|---|---|---|---|---|---|---|---|---
Total yield 21.63% 21.01% 20.20% 19.60% 18.54% 17.84% 17.46% 17.14% 16.46% 16.30% 16.08% 15.81% 15.64% 15.02%
The distribution of total yield

- Above 40%: 5%
- 30%-40%: 11%
- 20%-30%: 24%
- 15%-20%: 31%
- 12%-15%: 20%
- 9%: Below 12%
- Percentage: 37
Geographic distribution of total yield
The average duration of loans

Average duration

<table>
<thead>
<tr>
<th>Month</th>
<th>Average duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb-14</td>
<td>4.23</td>
</tr>
<tr>
<td>Mar-14</td>
<td>4.88</td>
</tr>
<tr>
<td>Apr-14</td>
<td>5.13</td>
</tr>
<tr>
<td>May-14</td>
<td>5.23</td>
</tr>
<tr>
<td>Jun-14</td>
<td>5.47</td>
</tr>
<tr>
<td>Jul-14</td>
<td>6.22</td>
</tr>
<tr>
<td>Aug-14</td>
<td>6.46</td>
</tr>
<tr>
<td>Sep-14</td>
<td>6.59</td>
</tr>
<tr>
<td>Oct-14</td>
<td>6.81</td>
</tr>
<tr>
<td>Nov-14</td>
<td>6.98</td>
</tr>
<tr>
<td>Dec-14</td>
<td>6.88</td>
</tr>
<tr>
<td>Jan-15</td>
<td>6.87</td>
</tr>
<tr>
<td>Feb-15</td>
<td>7.02</td>
</tr>
<tr>
<td>Mar-15</td>
<td>6.71</td>
</tr>
</tbody>
</table>
The distribution of duration

- Less than 1 month, 6.08%
- 1-3 months, 54.95%
- 3-6 months, 25.45%
- 6-12 months, 11.86%
- 12 months and above, 1.66%
Geographic distribution of P2P loans
The number of P2P platforms in trouble
### P2P in China vs. in US

<table>
<thead>
<tr>
<th></th>
<th>China</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulation</td>
<td>No</td>
<td>Well developed</td>
</tr>
<tr>
<td>Competition</td>
<td>Too many competitors</td>
<td>96% of the market is dominated by two players: Lending Club and Prosper</td>
</tr>
<tr>
<td>Borrowers</td>
<td>SMEs and individual</td>
<td>Individual</td>
</tr>
<tr>
<td>Credit system</td>
<td>Incomplete</td>
<td>Sophisticated</td>
</tr>
<tr>
<td>Risk control</td>
<td>Off-line dual diligence or guarantee</td>
<td>Credit rating</td>
</tr>
<tr>
<td>Risk tolerance</td>
<td>Weak</td>
<td>Strong</td>
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<tr>
<td>Business model</td>
<td>Capital pool</td>
<td>Information platform</td>
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</table>
Credit rating

<table>
<thead>
<tr>
<th></th>
<th>Prosper</th>
<th>Lending Club</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>6-8%</td>
<td>A</td>
</tr>
<tr>
<td>A</td>
<td>8-12.5%</td>
<td>B</td>
</tr>
<tr>
<td>B</td>
<td>12-16%</td>
<td>C</td>
</tr>
<tr>
<td>C</td>
<td>16-22%</td>
<td>D</td>
</tr>
<tr>
<td>D</td>
<td>22-29%</td>
<td>E</td>
</tr>
<tr>
<td>E</td>
<td>26-31%</td>
<td>F</td>
</tr>
<tr>
<td>HR</td>
<td>31%</td>
<td>G</td>
</tr>
<tr>
<td></td>
<td>6-9%</td>
<td>6-9%</td>
</tr>
<tr>
<td></td>
<td>10-14%</td>
<td>14-17%</td>
</tr>
<tr>
<td></td>
<td>17-20%</td>
<td>17-20%</td>
</tr>
<tr>
<td></td>
<td>21-22.5%</td>
<td>21-22.5%</td>
</tr>
<tr>
<td></td>
<td>23-24%</td>
<td>23-24%</td>
</tr>
<tr>
<td></td>
<td>25%</td>
<td>25%</td>
</tr>
</tbody>
</table>
SMEs vs. individual

<table>
<thead>
<tr>
<th>Purpose</th>
<th>ROI</th>
<th>Avg Rate</th>
<th>Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>car</td>
<td>12.13</td>
<td>16.81%</td>
<td>3.78%</td>
</tr>
<tr>
<td>credit_card</td>
<td>13.68</td>
<td>16.89%</td>
<td>2.92%</td>
</tr>
<tr>
<td>debt_consolidation</td>
<td>13.56</td>
<td>17.48%</td>
<td>3.57%</td>
</tr>
<tr>
<td>educational</td>
<td>13.26</td>
<td>13.85%</td>
<td>-0.13%</td>
</tr>
<tr>
<td>home_improvement</td>
<td>13.72</td>
<td>17.24%</td>
<td>2.99%</td>
</tr>
<tr>
<td>house</td>
<td>12.89</td>
<td>18.73%</td>
<td>4.42%</td>
</tr>
<tr>
<td>major_purchase</td>
<td>10.69</td>
<td>17.40%</td>
<td>5.77%</td>
</tr>
<tr>
<td>medical</td>
<td>12.21</td>
<td>18.37%</td>
<td>4.97%</td>
</tr>
<tr>
<td>moving</td>
<td>13.49</td>
<td>18.49%</td>
<td>3.60%</td>
</tr>
<tr>
<td>other</td>
<td>13.25</td>
<td>18.72%</td>
<td>4.50%</td>
</tr>
<tr>
<td>renewable_energy</td>
<td>13.25</td>
<td>18.57%</td>
<td>4.02%</td>
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<td>small_business</td>
<td>8.53</td>
<td>18.71%</td>
<td>9.02%</td>
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<tr>
<td>vacation</td>
<td>12.95</td>
<td>17.48%</td>
<td>3.65%</td>
</tr>
<tr>
<td>wedding</td>
<td>12.60</td>
<td>18.10%</td>
<td>4.29%</td>
</tr>
</tbody>
</table>
Challenges of P2P lending in China

- Under regulation
- Lacking of individual credit system
- Too many P2P platforms
- Homogeneous products
- Adverse selection
- Moral hazard problem
Thanks for your attention!

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