DISCUSSION OF
“IN THE SHADOW OF BANKS: WEALTH MANAGEMENT PRODUCTS AND ISSUING BANKS’ RISK IN CHINA”

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WEALTH MANAGEMENT PRODUCT (理财产品)

- AN GROWINGLY IMPORTANT PART OF ECO-SYSTEM OF CHINESE FINANCIAL MARKET
  - Chinese version of privately manufactured safe asset

WMP Balance and Percentage to Total Deposits

- WMP Balance (trillion RMB)
- WMP/Total Deposit
QUESTION 1

❖ WHAT COULD CAUSE THE RISE OF WMP
  ❖ 2009 Stimulus Plan plus competition b/w BIG4 and SMB
  ❖ SMB in a disadvantage in getting regular deposit to meet Loan-to-deposit ratio regulation; so offer a better rate to attract WMP
  ❖ Hachem and Song (2016) emphasize the change of LDR regulation and competition

❖ INTERESTING VARIATION OF BOC (MR. XIAO EFFECT)
  ❖ BOC was extremely aggressive in following Beijing’s order
  ❖ SMBs who happened to compete with BOC had to fight harder…..
2009 STIMULUS PLAN AND BANK CREDIT EXPANSION

New Bank Loan as a Percentage of 2004 GDP

4 trillion stimulus

Jan-09 Jan-10 Jan-11 Jan-12 Jan-13 Jan-14 Jan-15 Jan-16 Jan-17 Jan-18 Jan-19 Jan-20

New Bank Loan/2004 GDP GDP (trillion RMB)
MR XIAO’S EFFECT

❖ MEASURE SMB BANKS’ HETEROGENEOUS EXPOSURES TO MR XIAO’S SHOP
  ❖ City-level information of # of branches for each bank. Clever
  ❖ Cross-sectional prediction: the higher the BOC exposure, the tighter the LDR and the greater the WMP issuance
  ❖ And, only works after 2009

❖ IDEALLY, WE SHOULD INCLUDE BANK FIXED EFFECT
  ❖ Unfortunately, exposure is quite persistent (understandable)

❖ CONTROLS ARE NEEDED......
  ❖ Right now only includes bank type as controls (local or joint-equity)
## Loan-to-Deposit Ratio

<table>
<thead>
<tr>
<th>Year</th>
<th>Dep Var: LDR</th>
<th>BOC</th>
<th>ICB</th>
<th>CCB</th>
<th>ABC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
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<tr>
<td>07-14</td>
<td>2.379***</td>
<td>0.790</td>
<td>1.177</td>
<td>3.274***</td>
<td>5.300**</td>
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<tr>
<td></td>
<td>(3.700)</td>
<td>(0.774)</td>
<td>(1.226)</td>
<td>(2.720)</td>
<td>(2.209)</td>
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<tr>
<td>07-08</td>
<td>0.276</td>
<td>0.336</td>
<td>-0.566</td>
<td>0.970</td>
<td>3.505</td>
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<td>(0.404)</td>
<td>(0.707)</td>
<td>(-0.440)</td>
<td>(0.580)</td>
<td>(1.614)</td>
</tr>
<tr>
<td>09-10</td>
<td>-1.698*</td>
<td>-1.179**</td>
<td>-0.411</td>
<td>-3.475</td>
<td>-5.783**</td>
</tr>
<tr>
<td></td>
<td>(-1.782)</td>
<td>(-2.466)</td>
<td>(-0.300)</td>
<td>(-1.629)</td>
<td>(-2.395)</td>
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<tr>
<td>11-12</td>
<td>-0.395</td>
<td>0.394</td>
<td>-0.697</td>
<td>-0.823</td>
<td>-2.120</td>
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<tr>
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<td>(-0.637)</td>
<td>(1.074)</td>
<td>(-0.802)</td>
<td>(-0.504)</td>
<td>(-1.222)</td>
</tr>
</tbody>
</table>

- quarter fixed effect: √
- bank type fixed effect: √

- CCB has a slightly larger cross-sectional variation than BOC
WMP ISSUANCE

<table>
<thead>
<tr>
<th>Year</th>
<th>08</th>
<th>09-10</th>
<th>11-12</th>
<th>13-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dep Var: Issuance/Equity</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
</tr>
<tr>
<td>BOC</td>
<td>6.061</td>
<td>7.246***</td>
<td>40.45*</td>
<td>146.4***</td>
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<tr>
<td></td>
<td>(1.319)</td>
<td>(3.167)</td>
<td>(2.056)</td>
<td>(2.847)</td>
</tr>
<tr>
<td>ICBC</td>
<td>3.077</td>
<td>2.174</td>
<td>44.10**</td>
<td>54.60</td>
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<tr>
<td></td>
<td>(0.948)</td>
<td>(1.167)</td>
<td>(2.242)</td>
<td>(0.855)</td>
</tr>
<tr>
<td>CCB</td>
<td>-6.079</td>
<td>-1.414</td>
<td>-52.97*</td>
<td>-93.99</td>
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<tr>
<td></td>
<td>(-1.370)</td>
<td>(-0.480)</td>
<td>(-1.792)</td>
<td>(-1.248)</td>
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<tr>
<td>ABC</td>
<td>0.756</td>
<td>-3.797**</td>
<td>18.87</td>
<td>15.21</td>
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<tr>
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<td>(0.522)</td>
<td>(-2.314)</td>
<td>(1.295)</td>
<td>(0.347)</td>
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</tbody>
</table>

- XIAO GOT PROMOTED AND LEFT BOC IN MARCH 2013
- MUTED EFFECT OF CHANGE OF WMP ISSUANCE 2013-2014?
QUESTION 2

❖ WMP ON BANK’S RISK

❖ WINDOW DRESSING
  ❖ Issuing WMP right before the quarter
  ❖ Especially for principal-floating WMPs which are off-balance sheet. Mature before the quarter end, so deposit balance ↑

❖ ROLLOVER RISK IN INTERBANK MARKET
  ❖ The higher the BIG4 WMP due, the higher the bank’s Shibor rate
  ❖ Bank-month level, stock ↓ if WMP due ↑, for the days with high Shibor (both level and shock)

❖ CLEAR CONNECTION WITH THE FIRST PART?
HUGE INTERBANK MARKET

- Interbank market bond includes credit bond and interest rate bond

WMP, Bond and Stock Market Cap

- WMP Balance (trillion RMB)
- Bond Balance (trillion RMB)
- Stock Market Cap (trillion RMB)
RISKY WMP INVESTMENT IN INTERBANK MARKET

- WMP in credit bond / interbank credit bond balance
- WMP in non-standard asset / interbank non-standard asset
WMP AND OTHER SHADOW BANKING ACTIVITIES

New Entrusted/Trust Loans and Increase in WMP

- New Bank Loan/GDP
- New Entrusted and Trust Loans/GDP
- WMP Increase/GDP
FINAL REMARKS

❖ **2009 STIMULUS PLAN HAS TREMENDOUS UNINTENDED CONSEQUENCES**
  ❖ Interest rate liberalization, “let market be decisive”

❖ **THE BARBARIAN GROWTH OF SHADOW BANKING IS AFTER 2012**
  ❖ This paper: after 2012 regulators push banks to remove loans to off-balance sheet, so more WMP
  ❖ Chen, He, and Liu (2017): similar flavor, local government debt, cross-sectional evidence

❖ **WITH SOPHISTICATED INTERBANK MARKET, WMP INVESTMENT IS MORE AND MORE COMPLICATED**
  ❖ Chinese Bond market collapse in late 2016 is related to the fact WMP enters some repo transactions as junior claim (equity)
  ❖ These WMPs offer more than 5%, with 4% of 1-year Shibor ....
  ❖ Cross-sector regulation is urgent