Discussion of “Regulatory arbitrage and window-dressing in the shadow banking activities: evidence from China’s Wealth Management Products”

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The views expressed here are those of the presenter and do not necessarily represent those of the Hong Kong Monetary Authority.
Motivation

- Rapid expansion of shadow banking in China.
  - WMPs as a funding source ⇒ but bank deposits ↓.
  - To help satisfy the 75% LDR requirement, banks issue WMPs that expire before month/quarter end.

- Goal: To investigate the role of WMPs in helping banks to meet LDR requirement at month/quarter end
Method and results

- Bank-level data — quarterly data.
  - Unbalanced panel of 71 banks (excluding 5 largest banks).
  - 512 observations between March 2007 and December 2013.

- Regress LDRs on WMPs with maturity dates fall near end of quarter (i.e. baseline is [-4,0] days).

- Baseline result: 1% increase in No. of WMPs decreases LDR by 0.7-1.4 ppt.
Some issues...

- Compare Table 2A (with [-4, 0]) and 3C (with [-3, 0]):

<table>
<thead>
<tr>
<th></th>
<th>[-4, 0]</th>
<th>[-3, 0]</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE in column 3</td>
<td>-1.084</td>
<td>-0.720</td>
</tr>
<tr>
<td>FE in column 5</td>
<td>-0.836</td>
<td>-0.471</td>
</tr>
</tbody>
</table>

Grouping of WMP only changed by one day from quarter end but the difference is big.

- Differences between [-4, 0] and [-3, 0] estimates are significantly different at 15% level (t-tests).

- Also, comparing Table 3C (with [-3, 0]) and 3D (with [-7, 0]):

<table>
<thead>
<tr>
<th></th>
<th>[-3, 0]</th>
<th>[-7, 0]</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE in column 3</td>
<td>-0.720</td>
<td>-0.943</td>
</tr>
<tr>
<td>FE in column 5</td>
<td>-0.471</td>
<td>-0.652</td>
</tr>
</tbody>
</table>

Effect increases if including dates farther away from quarter end? What if changing the date range to even wider?

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Some suggestions (1)

1. Possible omitted variable: RRR across banks — constraining banks’ liquidity.
   - No data on dynamic differentiated RRR across banks.
   - Proxy by share of individual bank’s reserve in PBoC out of bank’s total deposits (WIND data).

2. Other possibilities: net interest margin (NIM), Capital Adequacy Ratio (CAR), lagged credit growth, lagged deposit growth.

2. LDRs (the dependent variable) is bunching around 75%.
   - Residuals may not be normally distributed.
   - May consider generalized linear model (GLM) with non-Gaussian link.
Some suggestions (2)

3. Seems better to regress LDR on the proportion of WMPs to be expired (e.g. [-4, 0]) among outstanding WMPs instead of the number of WMPs come due.

- No. of WMPs increased over time in general.
- Larger banks (i) tend to issue more WMPs and (ii) tend to manage LDR better (lower LDR).
  - ...it could be that the negative correlation between WMP and LDR is not pointing to banks using WMPs for regulatory arbitrage.
  - ...despite effect partially controlled by including firm size and fixed effect.

What I worry is: Even if absolute no. of WMPs and LDRs both vary across time and/or cross-section, but if the proportion of WMPs expired by quarter end doesn’t vary much, it will be difficult to support WMP-LDR relationship.