Multinational Banks and the Global Financial Crisis
Weathering the Perfect Storm?

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The bright side of multinational banking...

Multinational banks in Emerging Markets

1. Clear, positive impact on banking efficiency (Fries and Taci, 2005)
2. In the medium term, positive impact on access to finance (Bruno and Hauswald, 2012; Giannetti and Ongena, 2012)
3. More stable than cross-border credit (Peek and Rosengren, 2000a)
4. Stabilizes economies during local banking crises (De Haas and Van Lelyveld, 2006; 2010) due to ICMs (Cetorelli and Goldberg, 2012)
... and the dark side

**Multinational banks in Emerging Markets**

- Exacerbate local business and credit cycles \( (\text{Morgan, Rime, and Strahan, 2004}) \)
  - Boom in Emerging Europe: 2004-2007
  - Regional U.S. housing booms \( (\text{Loutskina and Strahan, 2012}) \)
- Transmit financial shocks
  - From Japan to the U.S. \( (\text{Peek and Rosengren, 1997/2000b}) \)
  - From Western to Emerging Europe \( (\text{Popov and Udell, 2012}) \)
... and the dark side

Multinational banks in Emerging Markets

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- Transmit financial shocks
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Bank *funding* matters as much as bank *ownership*

Lending more stable when banks...

- ... are less vulnerable to short-term US$ funding shocks (Cetorelli and Goldberg, 2011)
- ... use less wholesale funding (Ivashina and Scharfstein, 2010; Huang and Ratnovski, 2009)
- ... use more local deposits (Kamil and Rai, 2010)
Great Recession led us to revisit an earlier paper (JFI, 2010)
- Used an extensive global dataset on both multinational banks and domestic 'stand-alone' banks
- Period 1991-2004

For this pre-crisis period we found that:
1. Subsidiaries of stronger parent banks grow faster
2. Parent banks trade off lending across countries
3. Foreign bank subsidiaries need not rein in their lending during a local crisis, while domestic banks have to do so
This paper

- Again compare role of MNBs and domestic banks
- Analyze role of bank funding while controlling for other bank characteristics
- Expand our earlier bank-level dataset:
  - Period 1992-2009
  - 48 banking groups
  - 199 subsidiaries across 53 countries
  - Comparison group of 202 domestic banks
Data overview
Descriptive statistics

- Pre-crisis (2000-07) deposit growth persistently higher for domestic banks
  - MNBs better access to alternative (foreign) funding sources

- Much stronger correlation between deposit and loan growth for domestic banks than for multinational bank subsidiaries
  - In particular during the crisis (0.63 versus 0.39)
### Findings

<table>
<thead>
<tr>
<th>Sample</th>
<th>All</th>
<th>Domestic banks</th>
<th>Multinational subsidiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bank-specific variables</strong></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>Δ Gross Loans(_{(t-1)})</td>
<td>-0.08</td>
<td>-0.04</td>
<td>-0.12</td>
</tr>
<tr>
<td></td>
<td>(4.41)**</td>
<td>(2.55)**</td>
<td>(5.60)**</td>
</tr>
<tr>
<td>Profitability</td>
<td>0.05</td>
<td>0.09</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>(1.14)</td>
<td>(2.07)**</td>
<td>(0.01)</td>
</tr>
<tr>
<td>Liquidity</td>
<td>-0.11</td>
<td>-0.10</td>
<td>-0.15</td>
</tr>
<tr>
<td></td>
<td>(4.18)**</td>
<td>(3.09)**</td>
<td>(3.34)**</td>
</tr>
<tr>
<td>Solvency</td>
<td>-0.83</td>
<td>-0.76</td>
<td>-1.11</td>
</tr>
<tr>
<td></td>
<td>(6.00)**</td>
<td>(5.77)**</td>
<td>(3.79)**</td>
</tr>
<tr>
<td>Δ Deposits</td>
<td>0.23</td>
<td>0.25</td>
<td>0.22</td>
</tr>
<tr>
<td></td>
<td>(11.15)**</td>
<td>(12.02)**</td>
<td>(8.60)**</td>
</tr>
<tr>
<td>Δ Deposits * Global crisis</td>
<td>0.15</td>
<td>0.15</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>(4.99)**</td>
<td>(4.31)**</td>
<td>(2.73)**</td>
</tr>
<tr>
<td>Δ Deposits * Domestic</td>
<td>0.20</td>
<td>0.20</td>
<td>0.22</td>
</tr>
<tr>
<td></td>
<td>(7.71)**</td>
<td>(7.73)**</td>
<td>(4.59)**</td>
</tr>
<tr>
<td>Income/loans(_{(t-1)})</td>
<td>1.91</td>
<td>2.00</td>
<td>1.69</td>
</tr>
<tr>
<td></td>
<td>(5.13)**</td>
<td>(5.46)**</td>
<td>(3.45)**</td>
</tr>
<tr>
<td>Income/loans(_{(t-1)}) * Domestic</td>
<td>-0.77</td>
<td>-0.94</td>
<td>-0.18</td>
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<tr>
<td></td>
<td>(1.87)**</td>
<td>(2.32)**</td>
<td>(0.29)</td>
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<tr>
<td>Wholesale</td>
<td>0.13</td>
<td>0.18</td>
<td>0.22</td>
</tr>
<tr>
<td></td>
<td>(9.78)**</td>
<td>(10.69)**</td>
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<td>6.78</td>
<td>5.91</td>
<td>7.39</td>
</tr>
<tr>
<td></td>
<td>(3.84)**</td>
<td>(3.58)**</td>
<td>(3.16)**</td>
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<tr>
<td>Domestic bank</td>
<td>-0.59</td>
<td>-0.59</td>
<td>-0.59</td>
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### Macroeconomic variables

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<th>Var.</th>
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<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
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<tr>
<td>N</td>
<td>2,862</td>
<td>2,862</td>
<td>2,862</td>
<td>2,050</td>
<td>2,050</td>
<td>812</td>
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<td>R²</td>
<td>0.35</td>
<td>0.35</td>
<td>0.35</td>
<td>0.35</td>
<td>0.35</td>
<td>0.35</td>
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<tr>
<td>Estimation method</td>
<td>FE</td>
<td>HT</td>
<td>AB</td>
<td>FE</td>
<td>AB</td>
<td>FE</td>
</tr>
</tbody>
</table>
Contrary to earlier and more contained crises, parent banks were *not* a significant source of strength during 2008-09.

Credit growth of foreign bank subsidiaries declined relatively fast.

Parent influence:
- Subs of wholesale-funded parents were the fastest growers pre-crisis
- But also had to cut back the most during the crisis

Domestic banks were better equipped to continue lending because of their greater use of deposits, a relatively stable funding source during the crisis.
Conclusion

- Financial integration: a double-edged sword
  - Confirmation of the Japan → U.S. crisis transmission of the 1990s

- Funding structures matter for both foreign and domestic banks
  - Some domestic banks relied increasingly on international wholesale markets as well
  - Also large funding differences among foreign bank subsidiaries
    - Latin America vs. Emerging Europe
    - Bank business models vs. availability of local funding?
  - Should subsidiaries in Emerging Europe adjust their funding model in the Latin American direction?
    - How fast and how much?
    - To what extent enforced by regulation/ring-fencing?
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Thank you