Discussion: Sovereign Risk and Bank Lending: Evidence from 1999 Turkish Earthquake

by Yusuf Soner Baškaya and Şebnem Kalemli-Ozcan

Discussion Notes
Zümrüt İmamoğlu
TÜSİAD
The Question

• Do fiscal shocks affect bank lending when sovereign exposure is high?
• Sovereign governments borrow extensively from domestic banks, hence, exposure to sovereign risk is high in domestic banks.
• Recapitalization of weak banks by governments can increase exposure.
• In case of an increase in sovereign risk, banks balance sheets will be adversely affected and lending to private sector may diminish.
Methodology and Data

- Empirical assessment of such an effect is hard due to identification problems.
- The authors present a natural experiment, a shock that increases the sovereign risk exogenously, without effecting bank behaviour per se: 1999 Earthquake in Turkey.
- An original database: Confidential monthly bank balance sheet data.
- Method: Diff-in-diff
Identification issues

• The authors needs to show that
  – The earthquake has indeed caused a fiscal shock
  – That it is sizable enough on banks balance sheets to create a real effect
  – The banks exposure to earthquake zone businesses is homogenous
  – Demand side effects did not cause the reduction in lending post-earthquake
  – Holdings of gov’t debt does not signal specific bank characteristics (or that at least can be controlled for)
Fiscal shock

• The earthquake was sizable and had considerable effects in Turkey’s risk premium.

• Are there any other similar cases where natural disasters cause fiscal shocks?
  • Indonesia (2004)
  • Any other?

• What about in Turkey?
  – Placebo tests for period before the earthquake
  – Asian crisis, Russian crisis, 2001 crisis
Demand side effects

- Recession pre-earthquake and recovery afterwards.
Demand side effects

- Demand for loans by private sector: How stable is it?
- Regional exposure: Foreign bank exercise.

Fraction of banks reporting a big change in demand for:
- Commercial loans
- Consumer loans
Crowding out

- Political exposure? Government pressure to purchase bonds? How common, how realistic?

Table IV: Loans to Private Sector and Government-Bond Holdings Before and After EQ

<table>
<thead>
<tr>
<th></th>
<th>Government-bond holdings</th>
<th>Loans to Private Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>April-July 1999 Average</td>
<td>18.7</td>
<td>26.8</td>
</tr>
<tr>
<td>August-October 1999 Average</td>
<td>19.0</td>
<td>24.8</td>
</tr>
</tbody>
</table>

Note: Measures are expressed as a ratio to Total Assets (%).
Controlling for bank characteristics

• Determine the determinants of gov’t bond holdings
• Determinants during the earthquake
• Surprise: Higher cash holdings result in higher gov’t bond holding during the EQ
• The authors comment that ‘...supplying government with the needed funds since these are the stronger banks’
Results

• The paper deals with a long list of potential identification issues.

• Concludes that the banks with high gov’t exposure decreased private lending after the earthquake more.

• Fiscal distress financial imbalances, causality here is one way but example specific.