THIS TIME IS NOT DIFFERENT

SHERYL LIM
21 MAR 2016
THIS TIME IS DIFFERENT

• Reinhart and Rogoff
• History of financial crises from 1810 to 2010 for 66 countries
• Key message: “We have been here before”.

AGENDA

• Sovereign Debt crises
  • Why people lend to governments
  • Illiquidity vs. Insolvency

• Banking Crises
  • “Equal Opportunity Menace”
  • Trends in the run up to a banking crisis: Capital mobility, capital inflows, financial liberalization, housing prices

• US 2007 Subprime Financial Crisis
  • Housing prices, current account deficit, real central government debt
Why are people willing to lend to governments?
- Assumptions: frequency of borrowing, default and reentry
- Governments are concerned about their reputation as borrowers
- Implied credit ceiling; a maximum level of borrowing at which the costs just exceed the benefits
- Amount of the ceiling is determined by lenders’ perception of borrowers’ disutility of exclusion
LEGAL

• Challenged by Bulow and Rogoff: Why couldn’t the country just have declared the debt null and void?
• Legal rights of creditors in the lenders’ own countries; seizing the borrower’s assets abroad
  • Threat of direct sanctions that lenders can impose by going to creditor country’s courts
  • Can a small country have a reputation?
  • Exclusion from capital markets does not appear to be permanent nor significantly punished in the form of a premium over market interest rates (Evidence from borrowing in 1976-1979)
• Cash in advance contract
  • Collateral?
FOREIGN DIRECT INVESTMENT (FDI)

- FDI has a overall positive effect on economic growth
- Foreign company in a defaulting country might worry that their company will be seized
- Chile’s seizure of its copper mines from American companies in 1971
“MORAL HAZARD” OF INTERNATIONAL LENDING

- Bargaining power over debt repayments is not completely unilateral
- Leverage of debtor countries: There is no direct benefit for lenders when the debtor countries are excluded from international capital markets
  - Lenders may in fact be harming themselves,
  - Side-payments
- The creation of the IMF since WW2 has coincided with shorter but more frequent cases of default
ILLIQUIDITY VS. INSOLVENCY

- Willingness versus ability to service debts
- Liquidity crisis: a country that is willing and able to service debts over the long run finds itself unable to roll over its debts
- Insolvency crisis: Unwilling or unable to repay in the long run
- Expectations of creditors is critical
- Default and no-default equilibrium, depending on lenders’ confidence
- Herding behaviour
ILLIQUIDITY VS. INSOLVENCY

- Illustration of financial fragility
- Multiple equilibria
- Sunspot driving no default to default equilibrium
- Diamond-Dybvig model
Shares of years in banking crises or default from 1800 or independence to 2008

CAPITAL MOBILITY AND BANKING CRISES

Effect of a capital flow bonanza on the probability of a banking crisis, 1960-2007

FINANCIAL LIBERALIZATION

• $P(\text{Banking Crisis} \mid \text{Financial Liberalization}) > P(\text{Banking Crisis})$
• $(\# \text{ months in the banking crisis window that also occurred during financial liberalization}) \div (\# \text{ months of financial liberalization})$
FINANCIAL LIBERALIZATION

## HOUSING CYCLE

<table>
<thead>
<tr>
<th>Country</th>
<th>Crisis date</th>
<th>Peak</th>
<th>Trough</th>
<th>Duration of downturn (in years)</th>
<th>Magnitude of decline (in percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advanced economies: The Big 5</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>1992</td>
<td>1991:Q1</td>
<td>Ongoing</td>
<td>Ongoing</td>
<td>-40.2</td>
</tr>
<tr>
<td>Spain</td>
<td>1977</td>
<td>1978</td>
<td>1982</td>
<td>4</td>
<td>-33.3</td>
</tr>
<tr>
<td><strong>Asia crisis: The Big 6</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hong Kong</td>
<td>1997</td>
<td>1997:Q2</td>
<td>2002:Q2</td>
<td>6</td>
<td>-61.3</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1997</td>
<td>1996</td>
<td>1999</td>
<td>3</td>
<td>-19.0</td>
</tr>
<tr>
<td>Philippines</td>
<td>1997</td>
<td>1997:Q1</td>
<td>2004:Q3</td>
<td>8</td>
<td>-56.2</td>
</tr>
<tr>
<td>South Korea</td>
<td>1997</td>
<td></td>
<td>2001:Q2</td>
<td>4</td>
<td>-21.4</td>
</tr>
<tr>
<td>Thailand</td>
<td>1997</td>
<td>1995:Q3</td>
<td>1999:Q4</td>
<td>4</td>
<td>-20.0</td>
</tr>
<tr>
<td><strong>Other emerging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td>2001</td>
<td>1999</td>
<td>2003</td>
<td>4</td>
<td>-25.5</td>
</tr>
<tr>
<td><strong>Historical episodes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>1898</td>
<td>1899</td>
<td>1905</td>
<td>6</td>
<td>-25.5</td>
</tr>
<tr>
<td>US</td>
<td>1929</td>
<td>1925</td>
<td>1932</td>
<td>7</td>
<td>-12.6</td>
</tr>
</tbody>
</table>

US SUBPRIME CRISIS

• Was this time different?
  • Frequently argued: financial innovations like securitization improved risk management, that rising prices for risky assets were justified
  • Greenspan on the current account deficit
  • High housing prices justified by new financial markets
HOUSING PRICES

CURRENT ACCOUNT DEFICIT

REAL CENTRAL GOVERNMENT DEBT

WARNINGS OF CRISIS?

• Monitoring key reliable indicators (real housing prices, current account balance, real stock prices)
  • Useful for showing classic symptoms

• Hurdles
  • Lucas critique