The Global Financial Crisis: To Regulate or not to Regulate?

Ian Sheldon

Andersons Professor of International Trade

sheldon.1@osu.edu

Department of Agricultural, Environmental & Development Economics
Global financial stability

What has been nature of financial crisis?

“...The details can be insanely complex, but the basics are fairly simple. The bursting of the housing bubble has led to large losses for anyone who bought assets backed by mortgage payments; these losses have left many financial institutions with too much debt and too little capital to provide credit the economy needs; troubled financial institutions have tried to meet their debts and increase their capital by selling assets, but this has driven down asset prices, reducing their capital even further...”


- Deleveraging accelerated and became much more disorderly in September and October 2008
- Adverse feedback loop between financial system and global economy
What has driven crisis?

- Modern finance resulted in securitization of loans which were repackaged and sold
- Demand for complex mortgage securities resulted in loosening of lending standards, driving up house prices
- Markets underestimated impact of financial innovations on house price boom/bust
- Unsustainable growth in household debt
- Falling asset prices have caused “wealth effect”
Central bankers not innocent

- Missed scale of risks being built up in “shadow” banking system – hands-off by Greenspan
- Federal Reserve - ignored bubbles, but slashed interest rates when they burst:
  (i) 2002/3, loosened rates too much fearing Japanese-style deflation
  (ii) 2004/6, did not tighten rates up enough
  (iii) 2008, lowered rate to 2% to halt panic in markets
- (i) and (ii), fuelled housing bubble, while (iii) aggravated commodity-price surge
Current global situation

- Governments and central banks still struggling to stop “bleeding” in financial system through bank nationalization and other measures

- No agreement among G20 on how to deal with further financial difficulties as crisis spreads into real economy, and from advanced to developing countries

- Consensus on need to strengthen supervision and regulation of financial system, but not on how to go about it
What are priorities?

- Additional triage - bank recapitalization and dealing with “toxic” assets on balance sheets
- Internationally coordinated fiscal stimulus
- Strengthen international financial institutions
- Consider new approaches to regulation of cross-border financial institutions
- Do not clamp down too hard on financial institutions – should not prevent intermediation and innovation
What to regulate?

- Mandatory recapitalization of banks well in excess of Basel II floor ratio 4% to say 11%
- More transparency required in “shadow” banking system
- Bring order to market for credit-default swaps
- Take steps toward global regulator of highly-leveraged institutions with significant cross-border activities
- Create uniform regulatory framework for rating agencies
- Review mark-to-market accounting – does it amplify “boom-bust” cycles in asset prices?
Balance sheets and leverage

Simple balance sheet:

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>$100</td>
<td>Equity: $10</td>
</tr>
<tr>
<td></td>
<td>Debt: $90</td>
</tr>
</tbody>
</table>

Leverage = Assets/Equity = 10

Asset value rises to $110, equity increases to $20, leverage falling to 5.5, i.e., negative relationship between total assets and leverage
Passive economic agents


Source: Adrian and Shing (2008)
Active economic agents

- **Balance sheet after increases in value of securities:**

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Securities:</td>
<td></td>
</tr>
<tr>
<td>$110 + $90 = $200</td>
<td>Equity: $20</td>
</tr>
<tr>
<td></td>
<td>Debt: $90 + $90 = $180</td>
</tr>
</tbody>
</table>

If bank maintains leverage constant at 10, it takes on additional debt of $90 to purchase additional securities of $90.
Constant leverage


Source: Adrian and Shing (2008)
Active economic agents

- Balance sheet after increases in value of securities:

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Securities:</td>
<td>Equity, $20</td>
</tr>
<tr>
<td>$110 + $120 = $230</td>
<td>Debt: $90 + $120 = $210</td>
</tr>
</tbody>
</table>

If bank takes on debt of $120 to purchase securities worth $120, leverage increases to 11.5

Feeds back into further increases in leverage if securities’ prices rise, i.e., pro-cyclical

Works in opposite direction with fall in securities’ prices
Pro-cyclical leverage

Total Assets and Leverage of US Investment Banks: 1963-2006

Source: Adrian and Shing (2008)
Pro-cyclical leverage

Source: Adrian and Shing (2008)
Don’t ignore macroeconomics

- Still have significant global imbalances that grew out of 1997 Asian financial crisis
- Trade surpluses/growth in foreign-exchange reserves (China) – matched by trade deficits elsewhere (US and UK)
- Recycled money from high-saving countries fueled asset price bubble
- Further instability if imbalances unwind quickly
- IMF currently has insufficient lending capacity to deal with extensive capital flight – requires augmentation of its resources