The Financial Crisis: U.S. Origins and Emerging Market Contagion

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• Cause of the U.S Financial Crisis was the enormous rise and subsequent crash of the real estate market.

• Some economists think that the U.S. real estate “bubble” since 2003 was aided by low U.S. real interest rates.
• Note: Graphs are sourced from Obstfeld and Rogoff (2009), Kosaka (2010), and Ito (2009)
Figure 1.

From Obstfeld and Rogoff (2009)
• To finance this rapid-run-up and contributing to this run-up in real estate prices was the enormous growth in mortgages owned by households.

• The growth of these mortgages were helped by the securitization of these mortgages into MBS (mortgage backed securities) sold and traded by investment banks.
Figure 2.

Source: Obstfeld and Rogoff (2009).
As real estate prices started to slide in 2007, households started to have difficulty paying back their mortgages. Many households were going to pay back their mortgages by selling their current home and trading up to a better house. This strategy fell apart when the expectations of ever rising housing prices collapsed.

The value of the MBS’s depended on the ability of the households to finance these mortgages. The value of MBS’s collapsed, and they also became illiquid because they were hard to value.
• Insurance contracts were written on the MBS’s to guarantee and these insurance contracts were sold by insurance companies such as AIG and traded on the market.

• The drop in the value of these MBS’s and the insurance contracts written on them, decimated the balance sheets of banks and investment banks that owned them.
Moreover, since these assets were hard to value, investors even started to doubt the value of the balance sheets of banks and investment banks.

The TED and the LIBOR-OIS spread shot up during the crisis, which was indicative of counterparty risk. (The TED spread is the difference between LIBOR and the Treasury bill (risk free) rate.) The rise in counterparty risk meant that banks did not trust each other. Liquidity fell.
Figure 3.

TED spread and Libor-OIS spread, July 2007 – September 2009

Source: Ito (2009).
Propagation of the Crisis to Emerging Markets

- As the crisis dampened consumer confidence, and jobs, consumption and investment tanked, bringing down U.S. GDP.

- U.S. real GDP fell rapidly, turning negative in 2008Q1, and after a slight bounce-back in 2008Q2, turned negative until 2009Q2.
Figure 4.

Obstfeld and Rogoff (2009)
• This slide in U.S. GDP helped improve the U.S. Current Account, but the counterpart of this current account improvement was the decline in U.S. demand for foreign products.
Figure 5.

![U.S. Current Account Graph](image)

Source: BEA

Obstfeld and Rogoff (2009).
• To try to improve the economy, the U.S. Federal Reserve, ECB and the BOJ cut their interest rates.

• This vast improvement in international liquidity, helped contain the “credit crunch,” caused by the financial crisis.
Figure 6.

Obstfeld and Rogoff (2009)
• The weak expectations for future growth and inflation are seen in the term spreads for the U.S.
Figure 8.

Term Structure of U.S. Interest Rates

Source: Obstfeld and Rogoff (2009).
To Summarize Up to Now

• In response to the Crisis, the U.S. has not done what it has preached to the East Asian countries, after the East Asian crisis.

• That is, U.S. financial institutions were not punished.

• Seeds of future “bubble” have been planted.

• U.S. may find lower growth in the future.
Contagion to Emerging Markets

• In addition to U.S., there has been stress in other Advanced Industrialized Countries.

• There are Two Channels of Transmission.
  – Trade Channel. As exemplified by the decline in U.S. current account surpluses. Emerging markets do not export as much and they are hurt.
  – Financial Market Channel. As we shall see, emerging markets were damaged.
Historically, Latin America and Asia have experienced “sudden stops” in capital inflows.

When these sudden stops occur, growth slows dramatically.
Sudden Stops and Output Growth

Macroeconomic Costs due to Sudden Capital Reversals

Lost decades in Latin America (1980s)

Asian Economic Crisis (1997-98)
• During this Crisis, there is no exception.

• We can see that inflows into emerging market countries declined in terms of equities, bonds, and bank borrowing.
Financial Flows to Emerging Markets

Equity flows > Debt flows (bonds, loans)

Regional financial flows:
Europe > Asia > Latin America (LA)

Bank loans (% of GDP):
Europe > Asia > LA
• This is under the backdrop of rather large increases in borrowing in the emerging market countries.
Emerging Markets’ Liabilities to Advanced Economies

(% of EM GDP)

Bank loans: rises only in Europe, and gradual falls in others

Portfolio investment: large and strong growth in Asia, small but some growth in Europe, and large but stagnant in LA
• This increase in financial linkages can be seen in more detail in the graph below, where we can explicitly see the linkages between emerging markets and industrialized country financial institutions.
Financial Linkages: Advanced and Emerging Market Economies

(Investor countries)
Bank loans: Mostly from Europe.

Portfolio investment: US > Europe

(Regional linkages)
Bank loans: Mostly from Europe to Europe

Portfolio investment: Regional biases
• Compared the other countries, the emerging market countries in Asia are resilient, because the importance of bank and portfolio capital has declined.
FDI: dominant and stable

Bank loans: dwindled

Portfolio investment: mostly equities recovering recently
• Second Asian Crisis Unlikely to Occur, since Asian countries have very substantial reserves and much of their borrowing has been in FDI, not portfolio equity or bonds.

• Moreover, the financial situation of East Asian countries are very strong.
Financial Structure: East Asia

(ratio to GDP)

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Bank credit: overall dwindling.

Private bond: negligible or slow development

## Financial Structure: East Asia (continued)

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Fortunately, because of the crisis, Global Imbalances Appear to be Lessening.

The Global Imbalance is the tendency for the U.S. economy to run large current account deficits.
Global Imbalances
Global Imbalances: Disappearing?

Japan, US: expected dwindling

East Asia: limited adjustments?

How will the financial systems in East Asia get out of the current stalemate in domestic finance?

• In addition, the U.S. exchange rate is expected to weaken substantially, especially against the RMB.

THE END