Lessons from the Subprime Crisis

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Presidential Address
International Atlantic Economic Society
October 11, 2008
What caused the subprime crisis?

• The conventional wisdom is that the basic cause of the subprime crisis was bad incentives in

  – the origination of mortgages
  – the securitization of them
  – the provision of ratings for securitizations
  – risk management systems
But the main cause...

- The Federal Reserve and other central banks held interest rates too low for too long and this caused a bubble in property prices

- Without the significant drop in property prices there would not have been a problem
Why was there a proliferation in subprime mortgages?

• What was the reason subprime mortgages became so important?

• Why were they introduced and why have they caused such a problem?

• If we regulate them out of existence will we prevent the problem going forward?
Tax arbitrage

• In the US interest is tax deductible but rent is not

• This creates a significant incentive to turn rent payments into tax deductible interest payments

• This is what 100% mortgages do
Tax arbitrage (cont.)

• The buyer doesn’t own the house, the bank does

• The user of the house makes a fixed payment each month to cover the interest

• This is just like paying rent except it is tax deductible
As long as...

- Property prices keep rising
- If they fall then the arbitrage no longer works
- But property prices in the US had not fallen on average since the Great Depression
- In years prior to the crisis real estate had outperformed other assets so it seemed like a good bet
Lesson 1

Central banks need to think carefully about the effects of monetary policy on asset prices, particularly property prices.

In the past very few central banks have done this. For example, the Federal Reserve argued this was not possible and focused solely on consumer price indices of inflation.
What happened in the summer of 2007 at the start of the crisis?

• The prices of AAA-rated tranches of subprime securitizations fell dramatically in a short period of time

• When markets are efficient this indicates that information about the underlying quality of the assets plummeted

• This led to the conventional wisdom that bad incentives in the mortgage industry were to blame
But not just subprime mortgages were affected:

Co-movement between securitizations of AAA-rated tranches of subprime mortgages, commercial mortgages and CDS increased
• The prices of AAA tranches of securitizations went to levels that were very difficult to explain on the basis of fundamentals

• The April 2008 Bank of England Financial Stability Report deduced that prices of these securities at that time implied a 38% loss rate – consistent with a 76% default rate and an eventual 50% loss given default – that seemed much too high

• How can prices be so low it is not fundamentals?
Alternative to the Bad Incentives View: Mispricing

• New information about subprime defaults led to a realization they were more risky than previously thought

• This led to sales of the AAA tranches as portfolios were readjusted

• The volume of sales overwhelmed the absorption capacity of the secondary markets for securitized assets and prices fell below fundamentals
• Once the link between prices and fundamentals for these products was broken it became risky to try to arbitrage

• These “limits to arbitrage” (Shleifer and Vishny 1997) prevented prices returning to fundamentals

• It is like the dot.com bubble in that trying to arbitrage internet stocks led to bankruptcy

• The LTCM crisis also exhibited mispricing
Mispricing and the Paulson Plan

• The mispricing view of the crisis underlay the Treasury and Fed view that subprime mortgage assets could be bought at “hold-to-maturity” prices well above market prices and taxpayers could also make money

• This was not well explained when the plan was presented to the public and Congress
Lesson 2

Careful research is needed to distinguish the relative importance of the Bad Incentives View and the Mispricing View

The two views have distinctly different implications for regulation and risk management going forward, e.g. mark-to-market accounting
Why didn’t regulation prevent the crisis?

• Banking regulation is different from other kinds of regulation in that there is no wide agreement on the market failures it is designed to correct.

• It is backward looking in the sense that it was put in place to prevent the recurrence of past types of crises.
How should regulation be designed?

• What are the benefits and costs of regulation?

• What exactly are the market failures?

• The Basel agreements illustrate the lack of a widely agreed theoretical framework
The market failures

The most important are:

1. Inefficient liquidity provision
2. Mispricing due to limits to arbitrage
3. Contagion
Lesson 3

Banking regulation needs to be designed to solve market failures rather than imposed piecemeal as a reaction to crises.

Many banks focus on satisfying current regulations rather than thinking ahead.
Cross-border cooperation

One of the most worrying aspects of the current crisis is the possibility for contagion across borders.

UBS and the “too big to save” problem

The international community needs to do much more to coordinate crisis management.

Société Générale problem provides an example of how not to do it.
Lesson 4

Put in place a system of burden sharing so that crisis management can be effective in case a large multinational bank is faced with bankruptcy

Particularly important for the EU with its goal of a single market in financial services

A role for the IMF?
What’s going to happen next?

• What precedents provide the best guide?

• In the US we have not had situations like this on a nationwide basis since the Great Depression but in other parts of the world there have been many financial crises

• What is the most similar?
Japan in the 1990’s

• In the 1980’s the Japanese economy boomed

• There were huge increases in stock prices and particularly property prices

• Was it a bubble?
The Japanese Bubble

• The Nikkei index was around 10,000 in the mid-1980’s and peaked at just under 40,000 at the end of 1989

• In recent days almost 20 years later it has been trading around 8,000-9,000

• What about property prices?
The Lost Decade in Japan

• Property prices peaked in 1991 and then fell continuously for about 15 years ending up around 70-75% from their peak value

• This caused huge problems in the banking system that spilled over into the real economy

• Growth fell from being among the highest in the world to the lowest in the developed world
Will it be as bad in the US?

• The housing price bubble was much smaller in the US

• The deviation from long term growth trend in property prices in the US was about 25%

• They have fallen about 10-20% so far suggesting about another 5-15% to go

• This would be painful but not catastrophic
Except…

• Japan has a very different kind of economy in terms of the way that firms and banks reacted to the downturn

• In particular firms place great weight on the interests of employees and other stakeholders
Firm priorities

Survey of managers:
• Which of the following two would be the most prevalent view in your country?

(a) Executives should maintain dividend payments, even if they must lay off a number of employees

(b) Executives should maintain stable employment, even if they must reduce dividends
Job Security or Dividends?

- Japan: 97% Job Security
- Germany: 59% Job Security
- France: 60% Job Security
- United States: 89% Job Security
- United Kingdom: 89% Job Security

Job Security more important.
How stable is the US economy relative to Japan?

• Japan stopped growing fast in the 1990’s but the economy did not have a long lasting deep recession

• How much of this was due to firms’ reluctance to lay off workers and of banks to call in loans?

• What happens when the US falls into recession - how strong will the feedback effects be?
Lesson 5

It is important to understand the experience of Japan in the 1990’s and the determinants of feedback effects such as corporate governance.

This is a key area for research going forward.
Concluding remarks

Many remaining issues

• Mark-to-market accounting in financial institutions has severe drawbacks in times of crisis

• Provision of liquidity at quarter-end and year-end and window dressing

• Fed view versus the ECB view and problems caused by exchange rate movements