Does Finance Accelerate or Retard Growth? Theory and Evidence

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July 12, 2013

Growth and Finance

- A number of large East Asian economies have grown spectacularly in the last few decades
  - China
  - Korea
  - Taiwan, China

- They are possibly the greatest economic transformations in history

The Largest Economies in the World: GDP and Growth

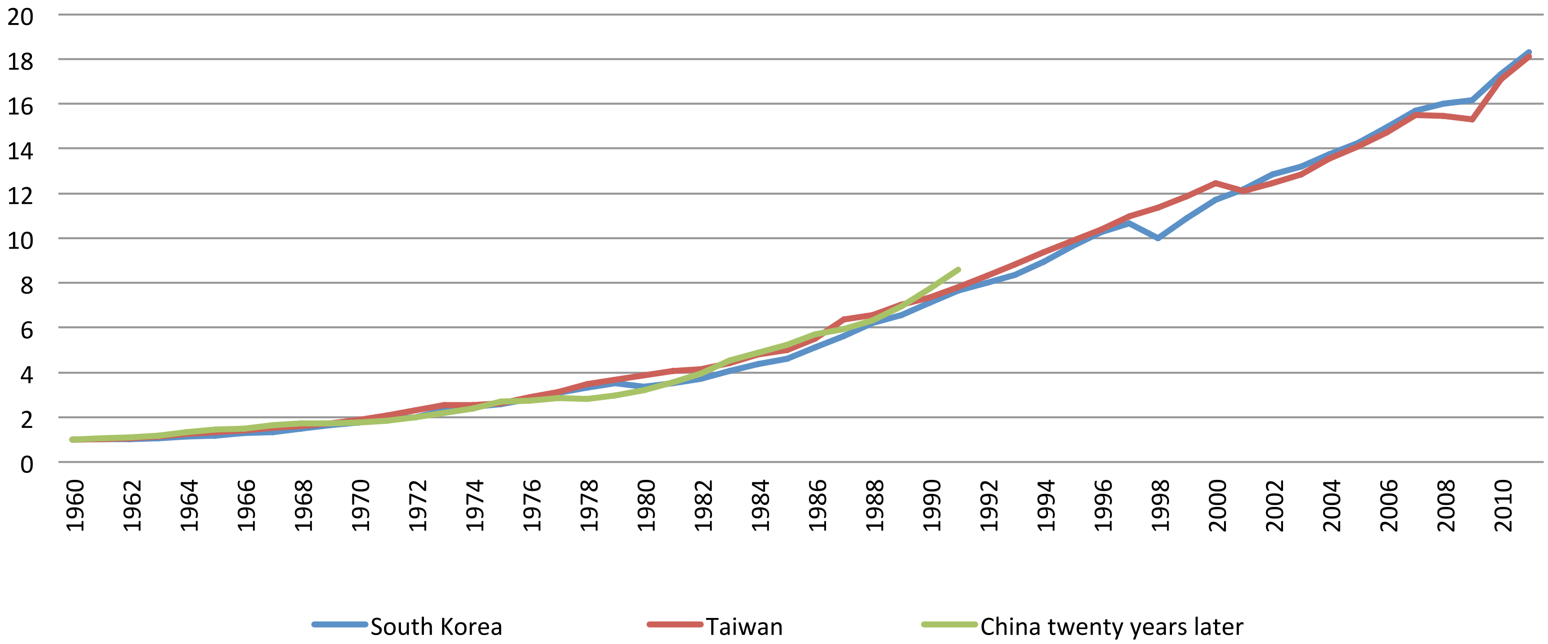
	GDP in 2011(simple exchange rates)		GDP in 2011 (PPP)		GDP growth: 1990-2011* (constant prices)		Per capita GDP growth: 1990-2011* (constant prices)	
Rank	Country /Region	US$ billion	Country /Region	Int'l $ billion	Country /Region	Annual growth	Country /Region	Annual growth
1	U.S.	15,094	U.S.	15,094	China	10.4%	China	9.5%
2	China	7,298	China	11,300	Vietnam	7.3%	Vietnam	5.8%
3	Japan	5,869	India	4,458	India	6.5%	India	4.7%
4	Germany	3,577	Japan	4,440	Angola	6.0%	Korea	4.6%
5	France	2,776	Germany	3,099	Malaysia	5.8%	Taiwan	4.3%
6	Brazil	2,493	Russia	2,383	Bangladesh	5.4%	Sri Lanka	4.2%
7	U.K.	2,418	Brazil	2,294	Nigeria	5.4%	Sudan	4.1%
8	Italy	2,199	U.K.	2,261	Sri Lanka	5.3%	Poland	3.9%
9	Russia	1,850	France	2,218	Sudan	5.3%	Chile	3.9%
10	Canada	1,737	Italy	1,847	Chile	5.3%	Bangladesh	3.6%
11	India	1,676	Mexico	1,662	Taiwan	5.0%	Thailand	3.5%
12	Spain	1,494	Korea	1,554	Peru	4.9%	Malaysia	3.5%

Source: IMF World Economic Outlook Database April 2012
Notes: Countries with population less than 11 million, GDP less than US$ 50 billion in 2011, or less than 15 years of GDP observations are excluded from the rankings.

The Top Large Economies in terms of GDP per capita in 2011

	GDP per capita in 2011 (PPP)	
Rank	Country /Region	Int’l $
1	U.S.	48,387
2	Netherlands	42,183
3	Canada	40,541
4	Australia	40,234
5	Germany	37,897
6	Belgium	37,737
7	Taiwan, China	37,720
8	U.K.	36,090
9	France	35,156
10	Japan	34,740
11	Korea	31,714
12	Spain	30,626
13	Italy	30,464
14	Czech Republic	27,062
15	Greece	26,294

A Comparison of Growth in GDP per capita in Taiwan, Korea, and China



Base year is 1960 for Taiwan and Korea , and 1980 for China

Source: Maddison GDP stat

- What economic lessons can be learned from the remarkable growth performance of these countries?

- Are they simply applying the conventional wisdom, which is to copy European and US development?

- Or are they doing something fundamentally different that we have yet to fully understand?

Conventional Wisdom

- Key driver for long-run economic growth is efficient institutions that facilitate business transactions (e.g., Coase, 1960; North and Thomas, 1973; Williamson, 1979).

- Emphasis has been on two types of *formal* institutions:
  - First, the law and finance literature posits that a strong legal system that enforces contracts and resolves disputes is important for finance and growth(LLSV).
  - Second, a developed financial system, and in particular, financial markets and a banking sector, are vital sources of external financing to fund firm growth (e.g., McKinnon 1973; King and Levine 1993; Levine and Zervos 1998).

Alternative View

- China provides a counterexample to the conventional wisdom (Allen, Qian, and Qian (2005)). China's legal and financial systems were not well developed yet its economy grew at the fastest pace in the world.

- Similarly the legal system plays a very limited role in finance and commerce in Taiwan, Korea, Vietnam and Japan.

- Despite India's English common-law origin and a British-style judicial system, formal legal and financial institutions are of limited use (Allen, Chakrabarti, De, Qian, and Qian (2011)).

Sources of Finance for Chinese Firms

- According to the World Bank's Enterprise Surveys China's firms access finance in the following way

– Retained Earnings	15%
– Market Finance	12%
– Bank Finance	15%
– Alternative Finance	52%

(Alternative finance consists of funds from leasing, trade credit, credit cards, loans from family and friends, investment funds, development banks and other state services, informal sources, and other sources)

Why are some Asian countries so successful?

- The conventional view is that Asian countries are successful **despite** their lack of Western institutions

- The suggestion here is that they are successful **because of** their lack of Western institutions and their use of alternative institutions

- Policy conclusion: Encourage alternative finance and the institutions supporting it

Crises

Sources of Systemic Risk:

1. Panics – banking crises due to multiple equilibria

2. Banking crises due to asset price falls

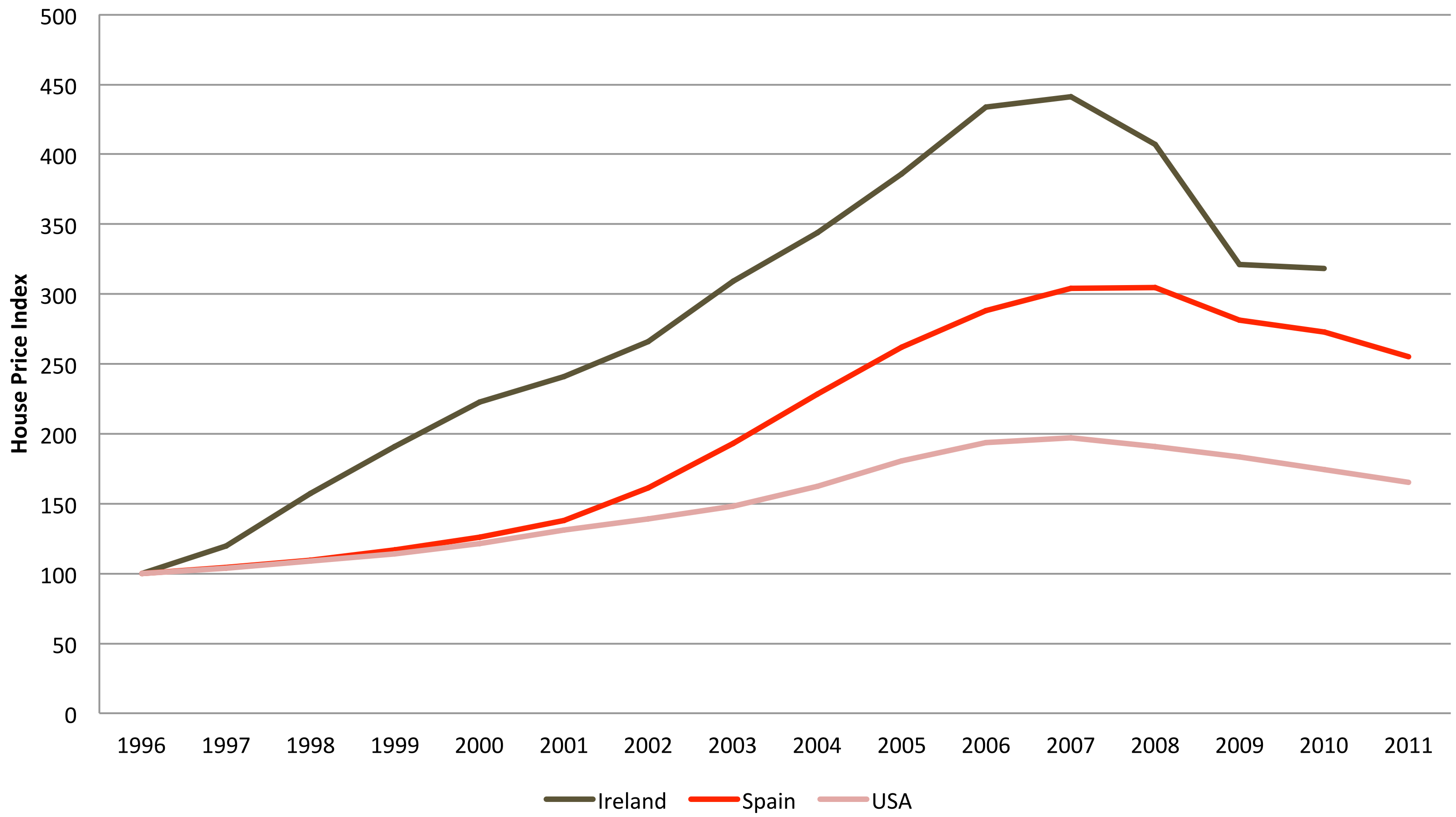
3. Contagion

4. Foreign exchange mismatches in the banking system

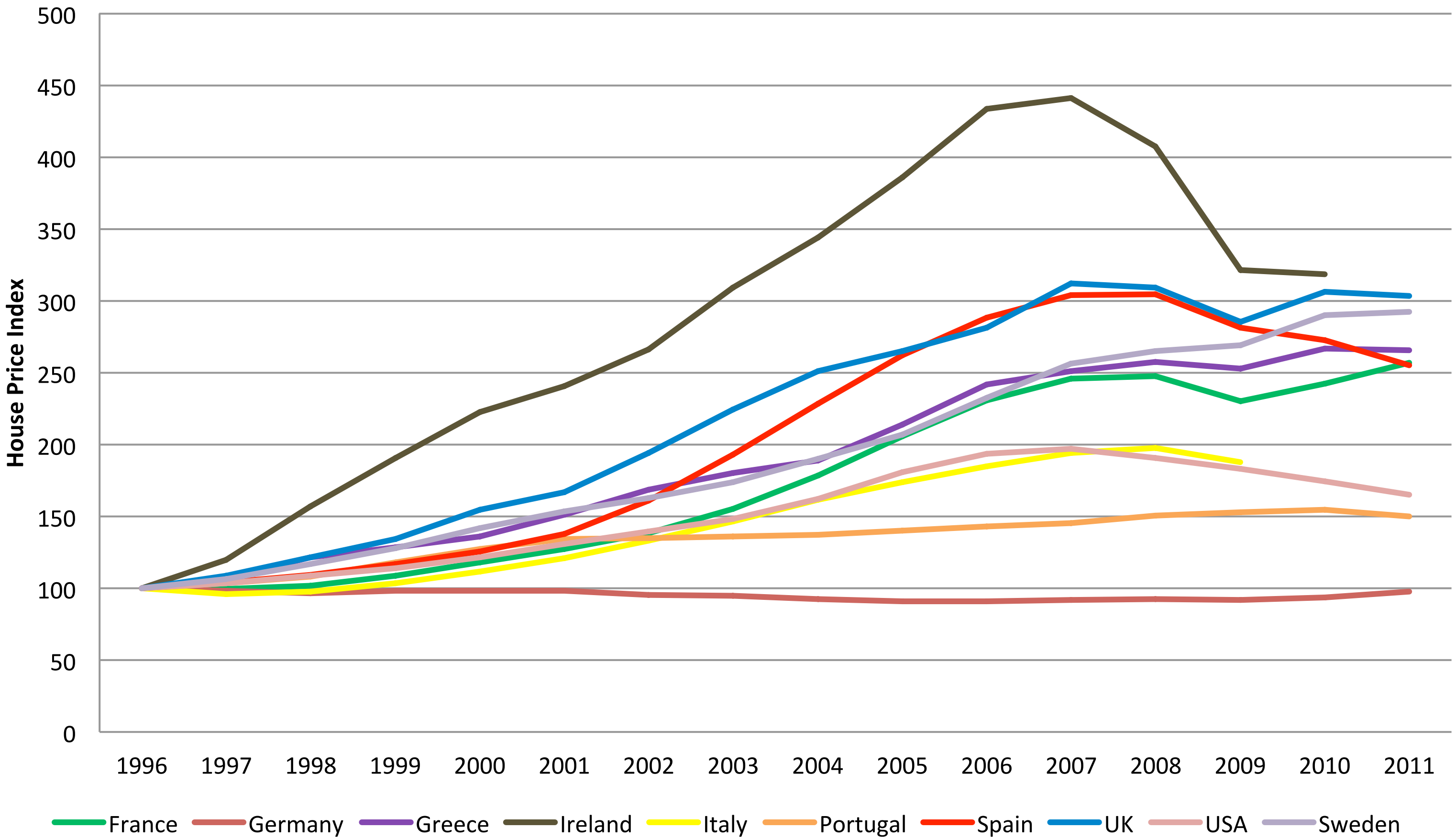
Real Housing Price Cycles and Banking Crises: (from Reinhart and Rogoff (2009))

Country	Crisis date	Peak	Trough	Duration of downturn	Magnitude of decline (in percent)
		Advanced economies: The Big 5			
Finland	1991	1989:Q2	1995:Q4	6 years	–50.4
Japan	1992	1991:Q1	Ongoing	Ongoing	–40.2
Norway	1987	1987:Q2	1993:Q1	5 years	–41.5
Spain	1977	1978	1982	4 years	–33.3
Sweden	1991	1990:Q2	1994:Q4	4 years	–31.7
		Asian Crisis: The Big 6			
Hong Kong	1997	1997:Q2	2003:Q2	6 years	–58.9
Indonesia	1997	1994:Q1	1999:Q1	5 years	–49.9
Malaysia	1997	1996	1999	3 years	–19.0
Philippines	1997	1997:Q1	2004:Q3	7 years	–53.0
South Korea	1997		2001:Q2	4 years	–20.4
Thailand	1997	1995:Q3	1999:Q4	4 years	–19.9
		Other emerging			
Argentina	2001	1999	2003	4 years	–25.5
Colombia	1998	1997:Q1	2003:Q2	6 years	–51.2
Historical episodes					
Norway	1898	1899	1905	6 years	–25.5
US	1929	1925	1932	7 years	–12.6

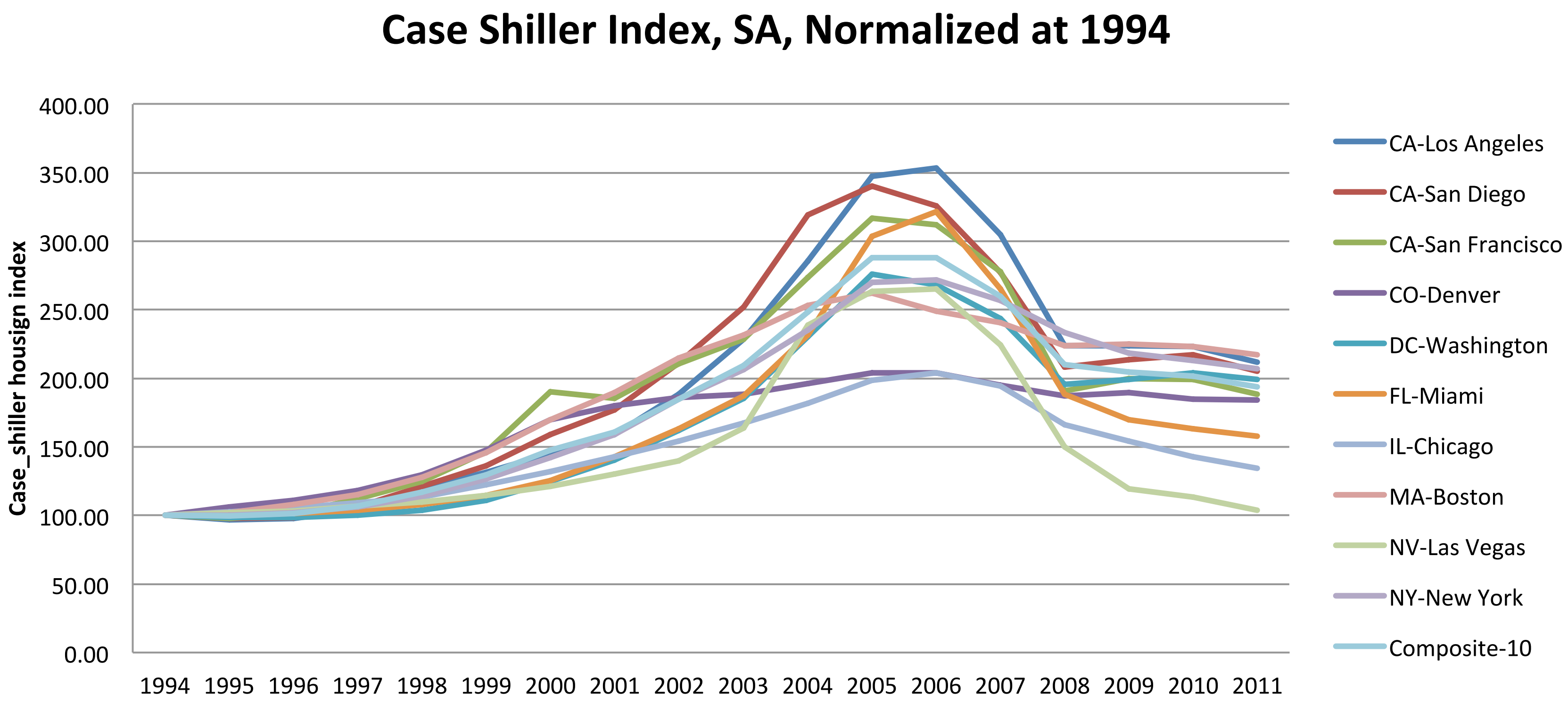
Nominal Housing Prices in Ireland, Spain and the U.S.



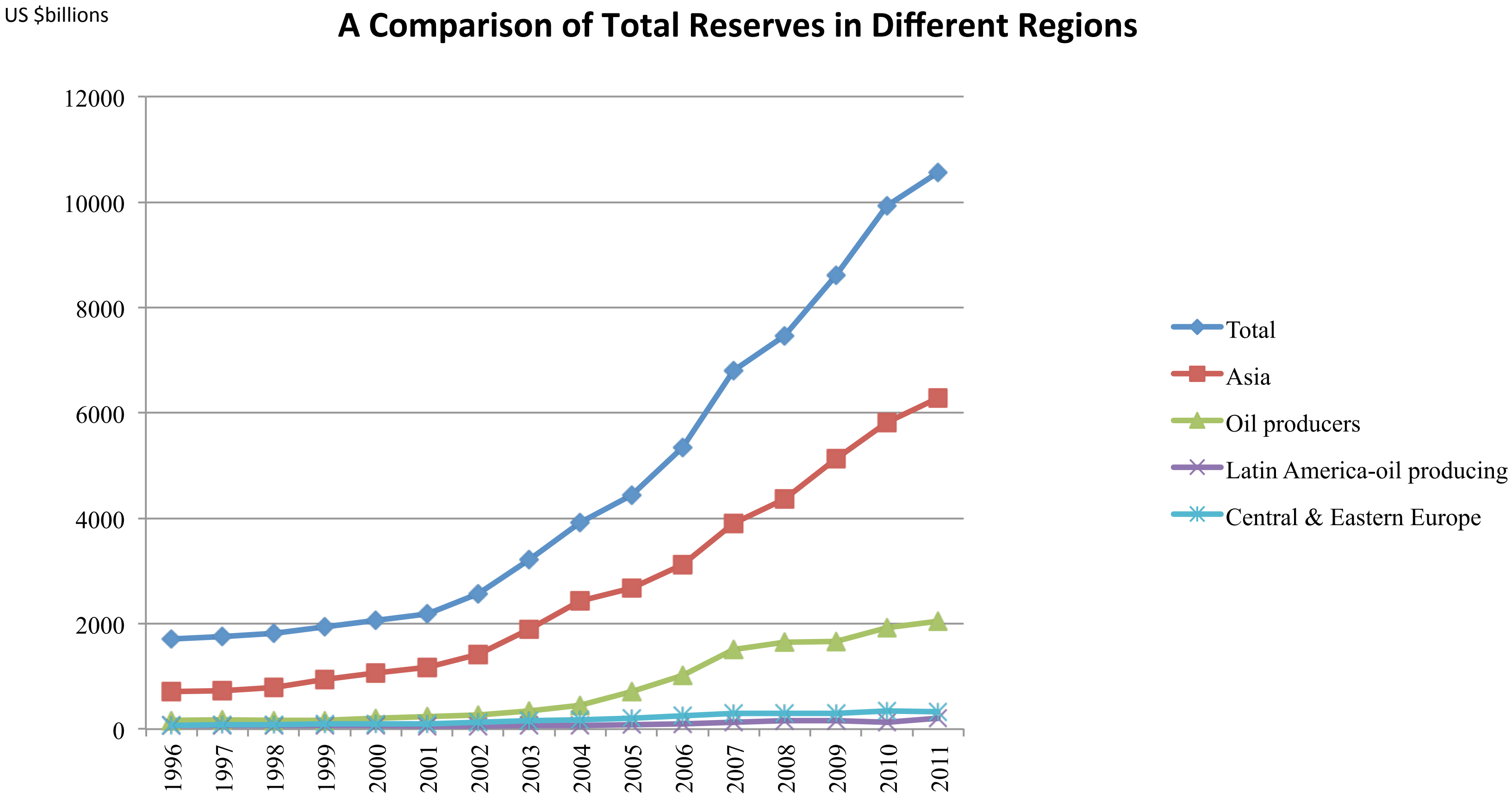
Nominal Housing Prices in U.S. and Various European Countries



Nominal Housing Prices in Different U.S. Cities

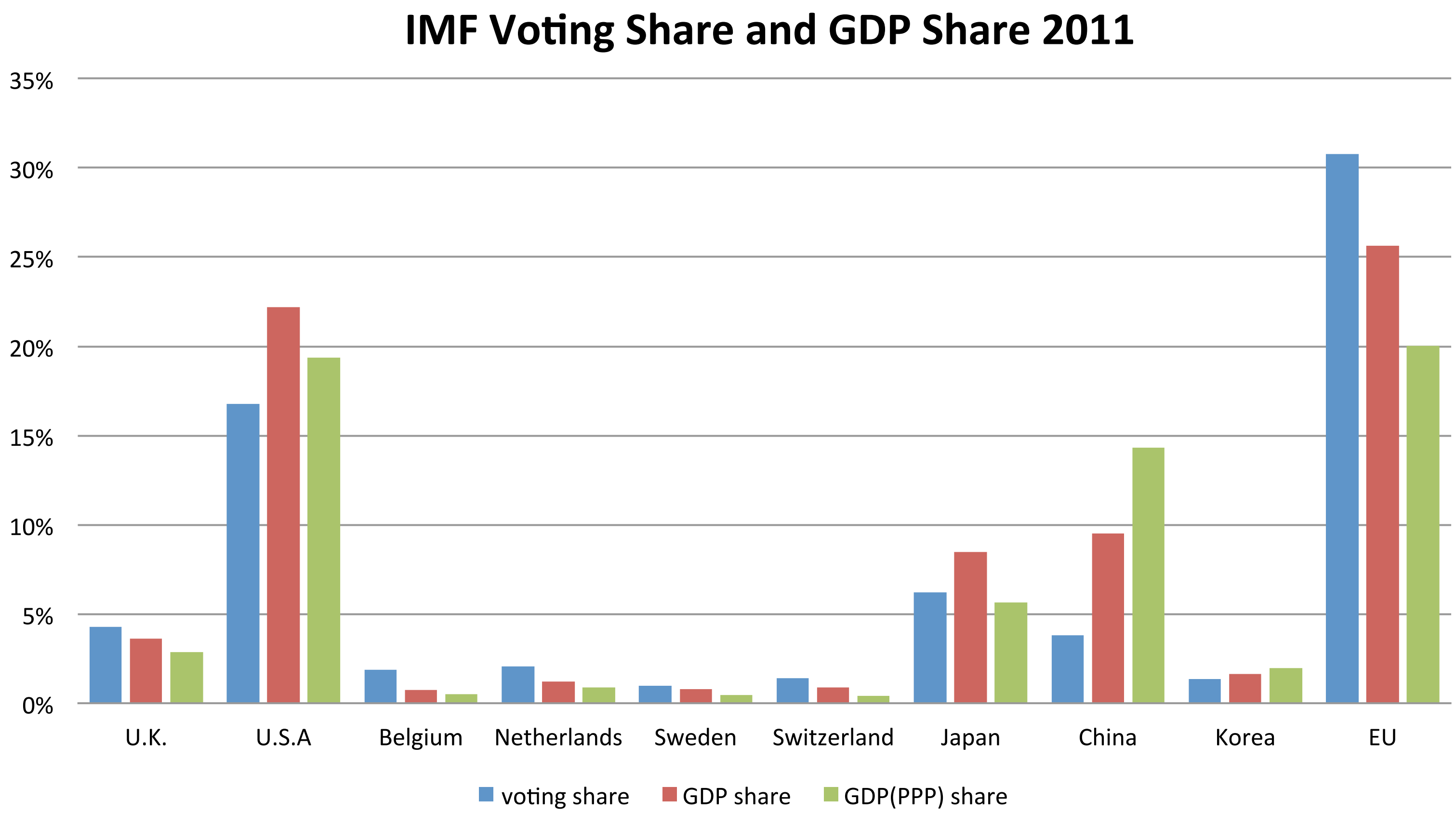


Total Reserves in Billions of US $ 1996-2011

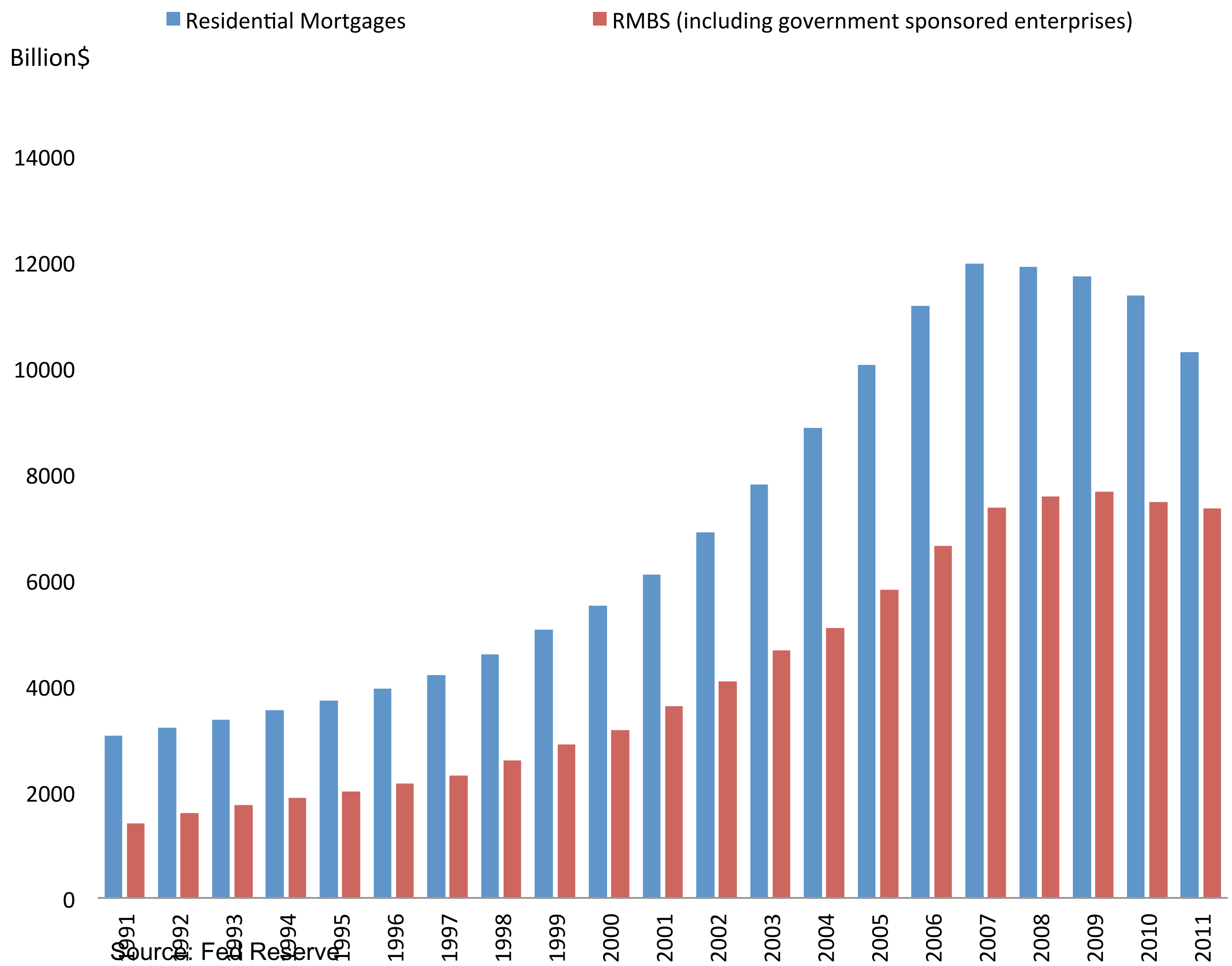


Source: IFS database of IMF

International Financial System: Governance Issues



U.S. Residential Mortgages



Source: Fed Reserve

Policy responses

- Central banks and governments need to be much more focused on preventing bubbles and global imbalances than in the past – this is the real cause of the crisis

- Banking regulation needs to focus on correcting market failures rather than being imposed ad hoc as has been done historically

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Macro-prudential policies 1

- First objective is to eliminate real estate bubbles by targeted intervention in property markets

1. Reductions in loan-to-value ratios for hot real estate markets
2. Increases in taxes on real estate transfers
3. Increases in annual real estate taxes
4. Direct restrictions on real estate lending

- Evidence from Korea, Hong Kong, Singapore suggest they work in the short run but not in the long run

Macro-prudential policies 2

- Second objective is to increase resilience of banking sector through countercyclical policies

1. Capital requirements should be raised during booms so they can be relaxed in busts
2. Similarly for reserve ratios particularly on real estate related loans
3. Differentiated capital requirements and higher risk weights for real estate loans

- Some evidence these can kinds of measures can help increase the resilience of the banking sector, e.g. Spain

- Global imbalances need to be reduced
  - Self-insurance by Asian countries through large reserves is optimal for them but very inefficient globally
- Reform governance structure of the IMF
  - Reduce European representation
  - End system of European Managing Director/US First Deputy
  - Increase East Asian influence
- Concerning Chinese reserve accumulation
  - Rmb as a reserve currency

Resolution mechanism

- Large institutions are saved to avoid contagion at the cost of moral hazard
  - Large institutions hold less capital and are riskier as they internalize that they are "too big to fail"
- "Too big to fail" is not "Too big to liquidate"
- Government should orderly resolve failing institutions
  - Guarantee short term commitments to avoid contagion
  - The top 5 executives should be removed immediately
  - All employee pension claims should be eliminated
  - Over the next few years the bank should be liquidated

Financial inclusion: The case of Kenya

- Equity Bank is a pioneering commercial bank that devised a banking service strategy targeting low income clients and traditionally under-served territories (Allen, Carletti, Cull, Qian, Senbet, and Valenzuela, 2012).
- M-PESA is a mobile-phone based service that greatly facilitates money transfer and remittance by the poor
- M-Kesho is a combination of the two
- Policy: Encourage development of banks like Equity Bank