Criza financiara vazuta de pe Wall Street

Cauze si consecinte

Tony Romani

May 14, 2009 - Doctoral School of Finance and Banking

Table of Contents

1. Global Context

a. The definition of a bubble

b. Commodities

c. Globalization of commerce

d. State-controlled asset managers

e. Impact of leverage

1. Global Context

a. The definition of a bubble

b. Commodities

c. Globalization of trade

d. State-controlled asset managers

e. Growth of leverage

Economic bubble

Economic phenomenon characterized by a deviation of prices, for an entire asset class, away from what is justified by intrinsic value.

The 2 stages of a bubble:

1. Artificial demand exceeds supply, thus leading prices to increase

2. Higher prices attract suppliers, leading to a point where supply is sufficient and artificial demand vanishes

Examples:

- Tulip mania (1637)
- The South Sea Company (1720)
- American Economic Bubble (1920s)
- Japanese asset price bubble (1980s)
- The Dot-com bubble (1995–2001)
- Emerging markets public equity and real estate bubbles:
  - Romania
  - China
  - Vietnam
- Global commodities bubble (2004-2008)

Source: Wikipedia

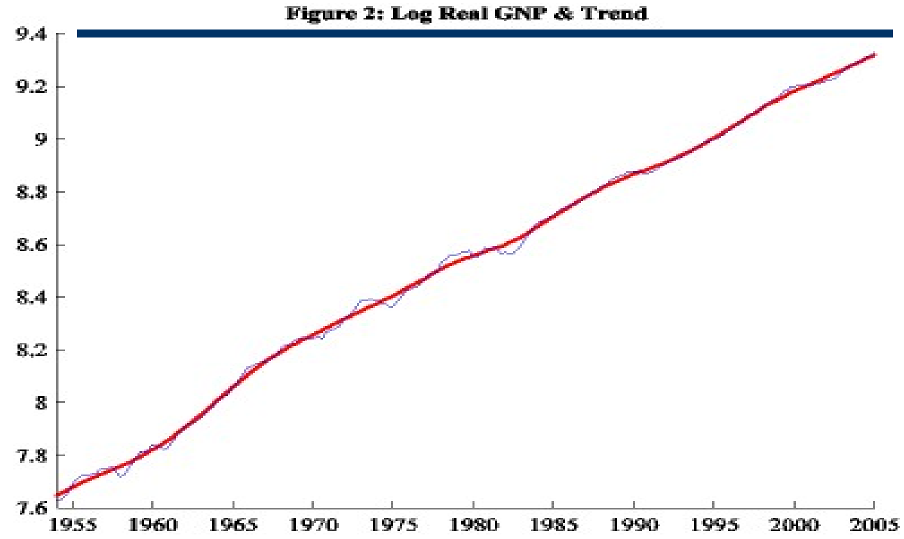
Economic or business cycles* – 4 stages

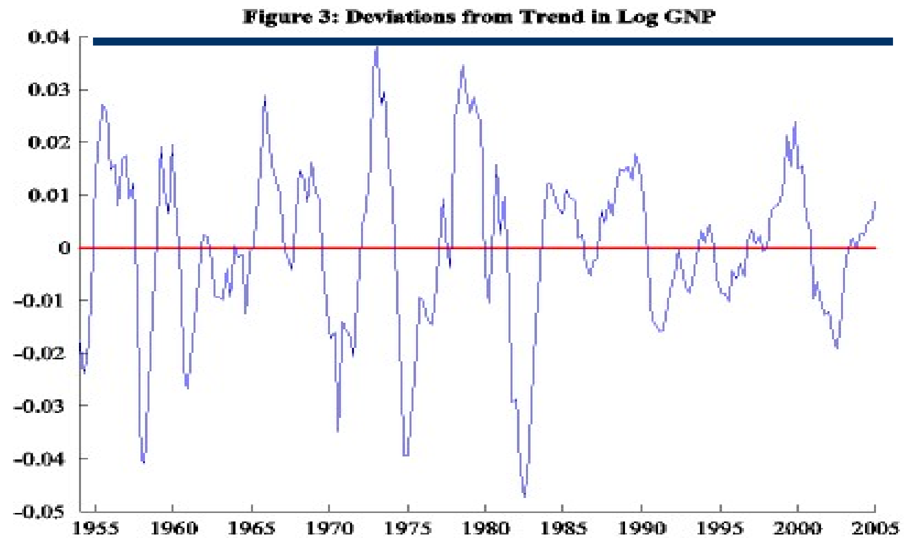
- **Expansion** (increase in production and prices, low interest rates)

- **Crisis** (asset prices fall, banks and financial institutions fail)

- **Recession** (drop in economic activity and prices, high interest rates)

- **Recovery** (growth in economic activity resumes, growing incomes and optimism push stocks higher)





*Identified by French economist Clement Juglar in 1860

Source: Wikipedia

1. Global Context

a. The definition of a bubble

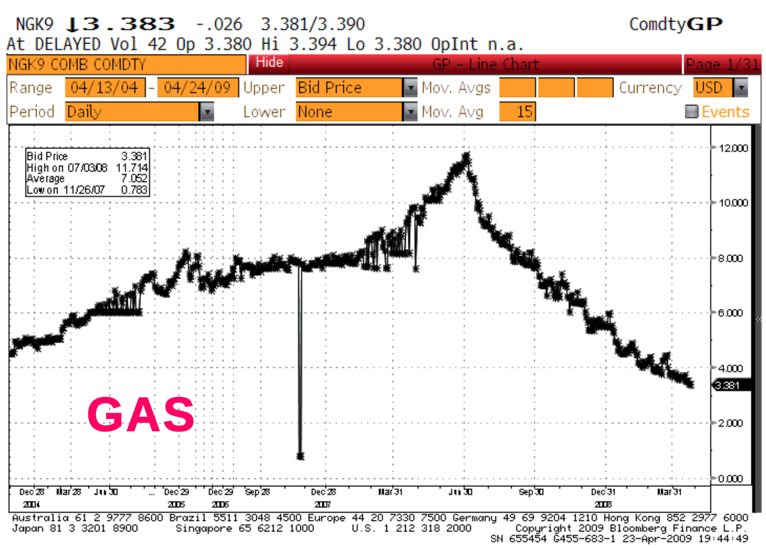
b. Commodities

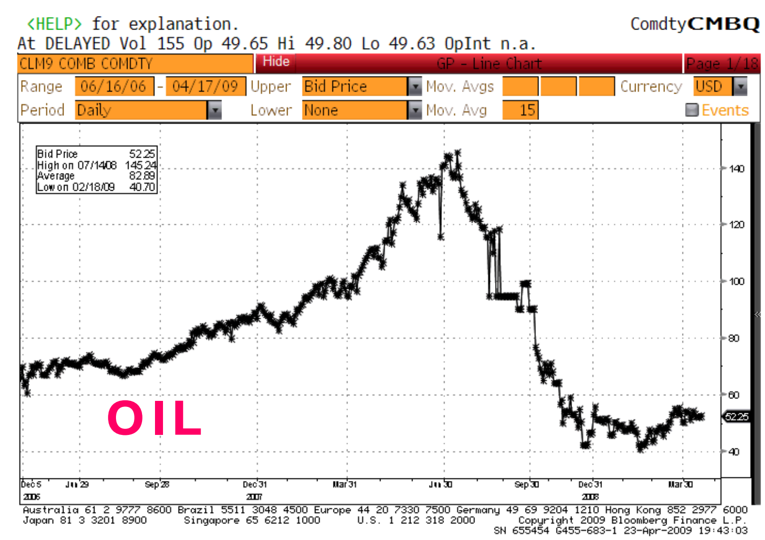
c. Globalization of trade

d. State-controlled asset managers

e. Growth of leverage

Commodities bubble (2004-2008)





Source: Bloomberg

1. Global Context

a. The definition of a bubble

b. Commodities

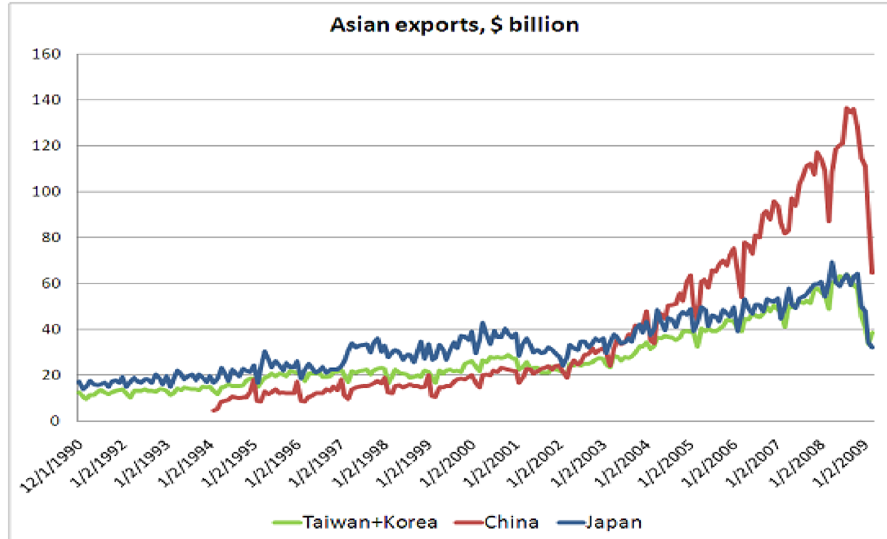
c. Globalization of trade

d. State-controlled asset managers

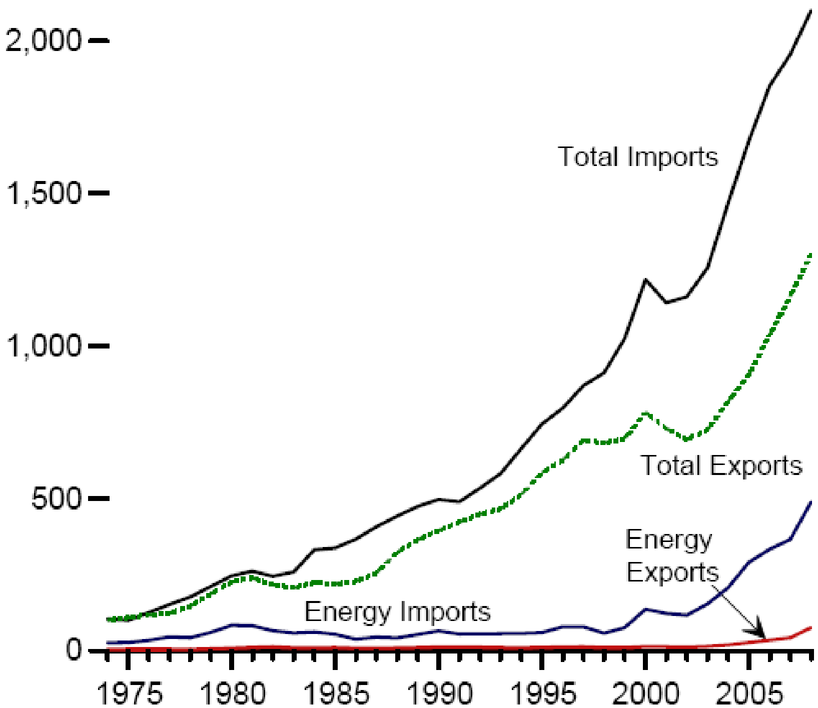
e. Growth of leverage

Global trade (1989 – 2009)

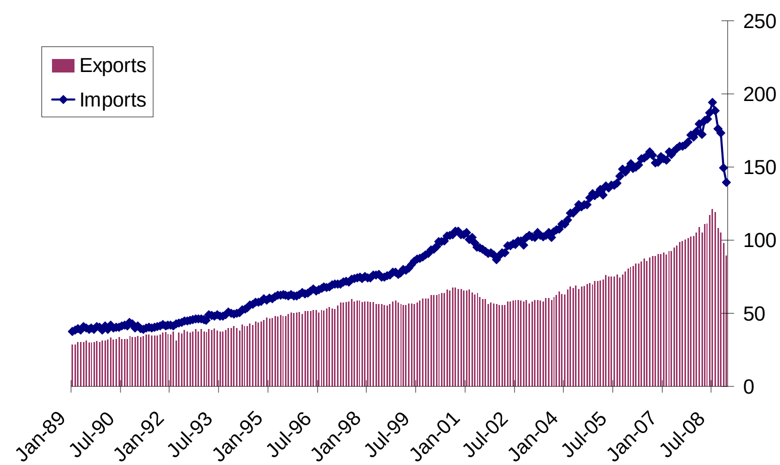
- Huge trade imbalances due to:
  - – China – cheap manufacturing
  - – U.S. – cheap credit
  - – Global demand for oil & goods



U.S. Annual Exports and Imports (Energy)



U.S. Monthly International Trade ($billion)



Source: U.S. Government Agencies

1. Global Context

a. The definition of a bubble

b. Commodities

c. Globalization of trade

d. State-controlled asset managers

e. Growth of leverage

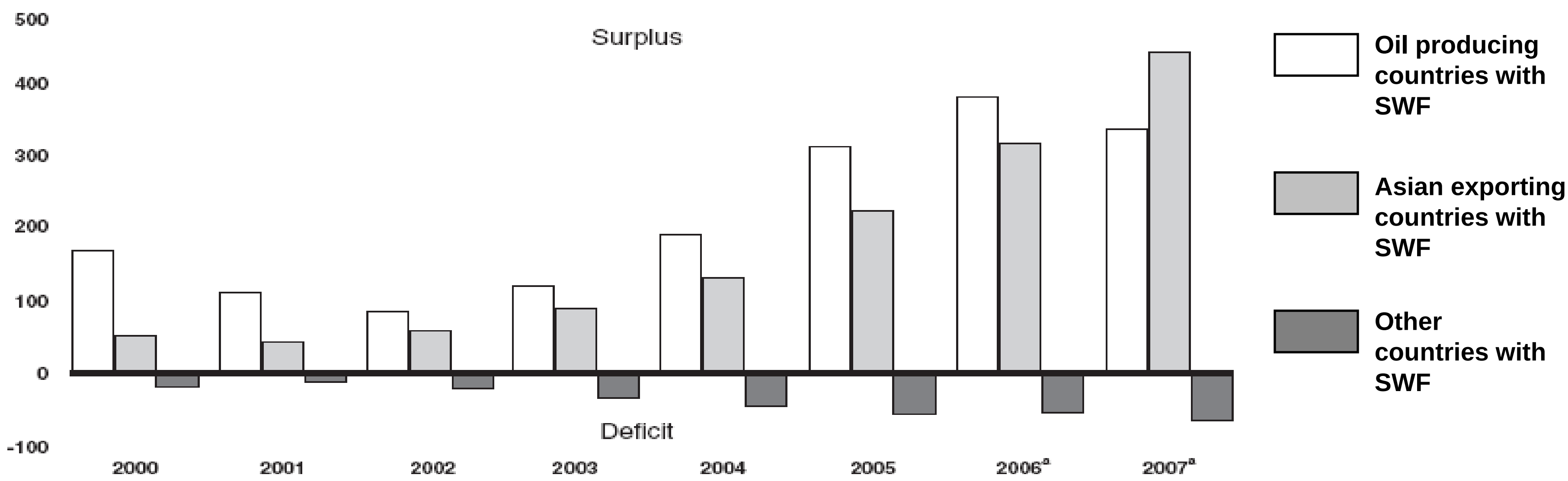
Sovereign Wealth Funds

- Government-controlled entities:
  - Funded by exports of goods & oil
  - Control huge amounts of cash
  - Have little experience in investing

Top 10 Sovereign Wealth Funds (Jan. 2008)

Country	Assets ($bn)	Inception	Source	Wealth Per Citizen
Abu Dhabi	$875	1976	Oil	$950,000
Norway	380	1996	Oil	74,500
Singapore	330	1981	Goods	100,000
Saudi Arabia	300	n/a	Oil	15,000
Kuwait	250	1953	Oil	80,000
China	200	2007	Goods	151
Singapore	159	1974	Goods	35,400
Russia	158	2004	Oil	1,180
Canada	119	1999	Oil	12,800
Qatar	50	2000	Oil	250,000

Current Account Balances of Country Groups



Source: Freeman & Co. Research; U.S. Dept. of Energy

1. Global Context

a. The definition of a bubble

b. Commodities

c. Globalization of trade

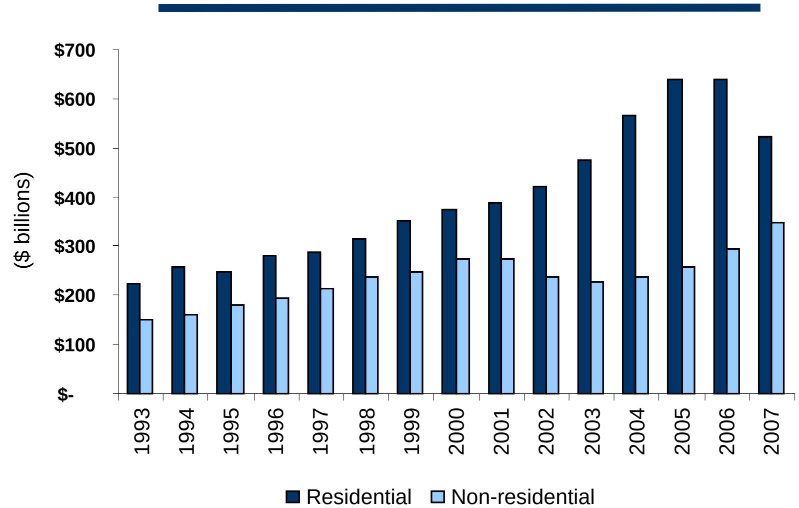
d. State-controlled asset managers

e. Growth of leverage

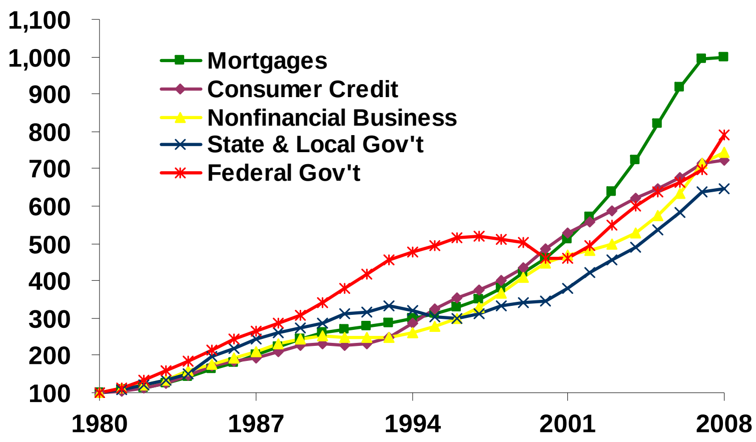
"Dumb" money has made debt very cheap

- The United States has been flush with cash since 1980
  - Public and private credit exploded
  - Financial sector credit - 120% GDP
  - Mortgages grew 10x since 1980

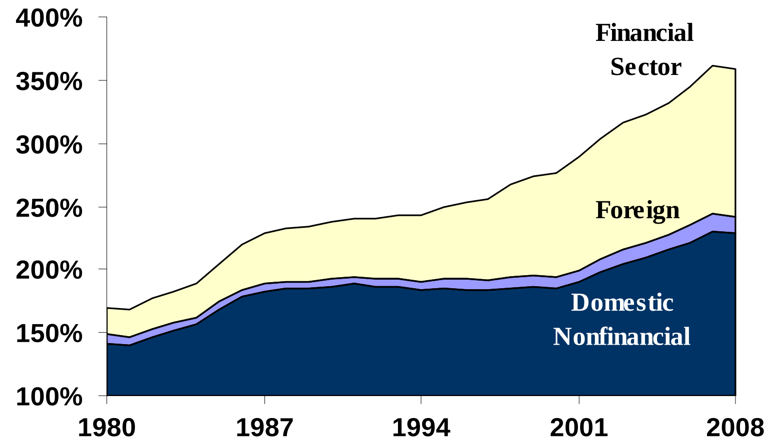
Total US Private Construction



Total US Debt Growth by Sector



Total US Debt as a % of GDP



Source: Federal Reserve

2. Primary Causes of the U.S. crisis

a. Historical low interest rates

b. Leverage of the financial sector

c. Financial innovation

d. Financial markets oversight

e. Fraud

2. Primary Causes of the U.S. crisis

a. Historical low interest rates

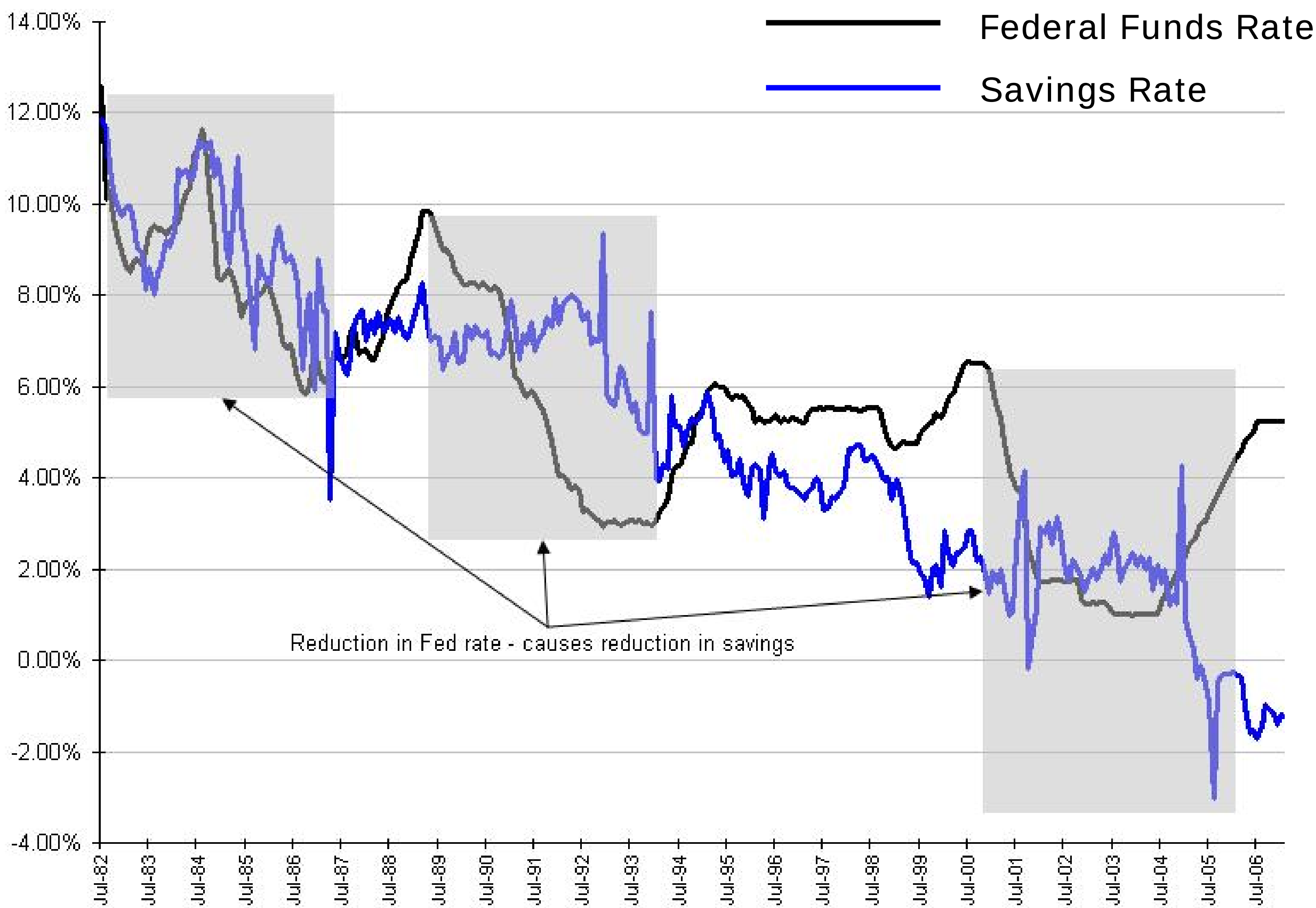
b. Leverage of the financial sector

c. Financial innovation

d. Financial markets oversight

e. Fraud

Historical low interest and savings rates



Source: Federal Reserve

2. Primary Causes of the U.S. crisis

a. Historical low interest rates

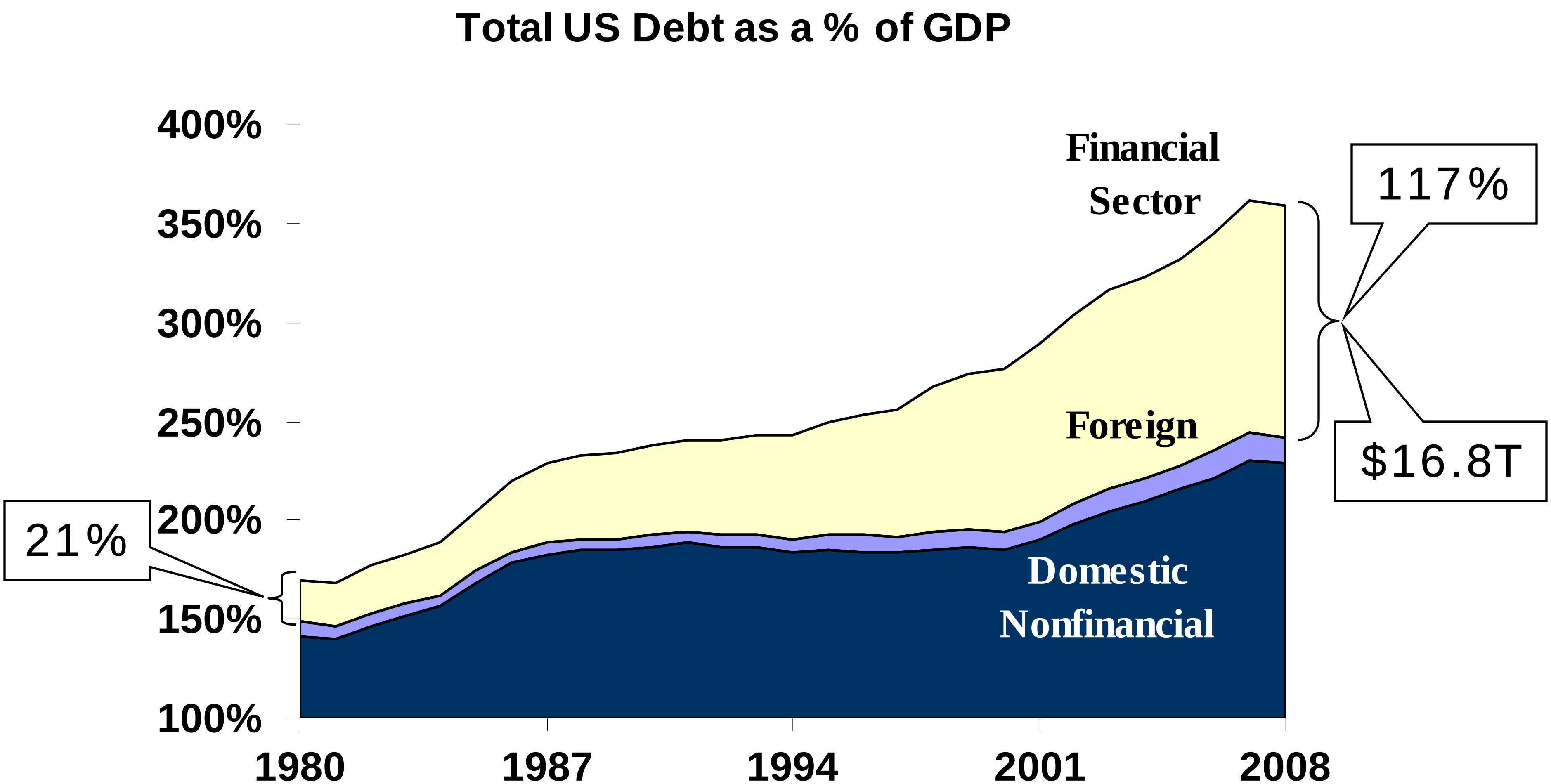
b. Leverage of the financial sector

c. Financial innovation

d. Financial markets oversight

e. Fraud

Leverage of the financial sector



Source: Federal Reserve

2. Primary Causes of the U.S. crisis

a. Historical low interest rates

b. Leverage of the financial sector

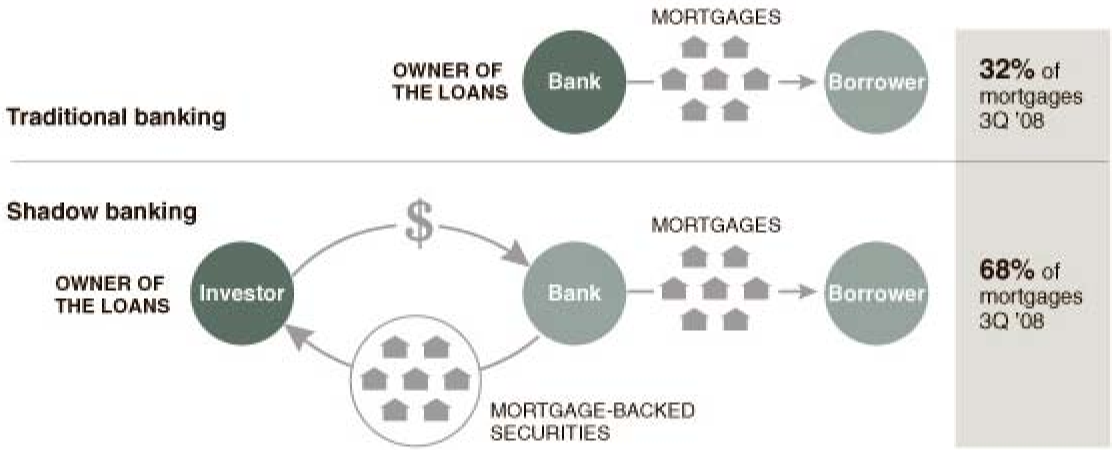
c. Financial innovation

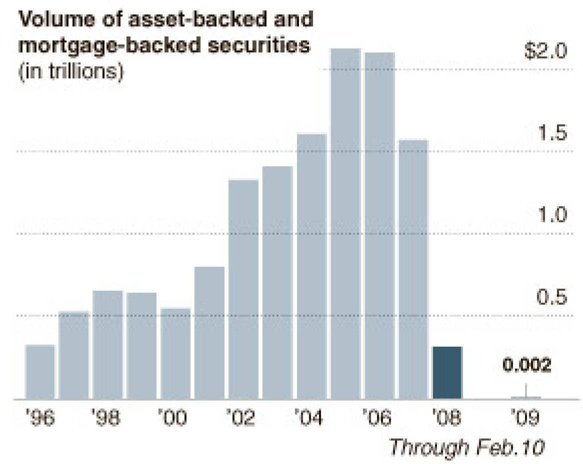
d. Financial markets oversight

e. Fraud

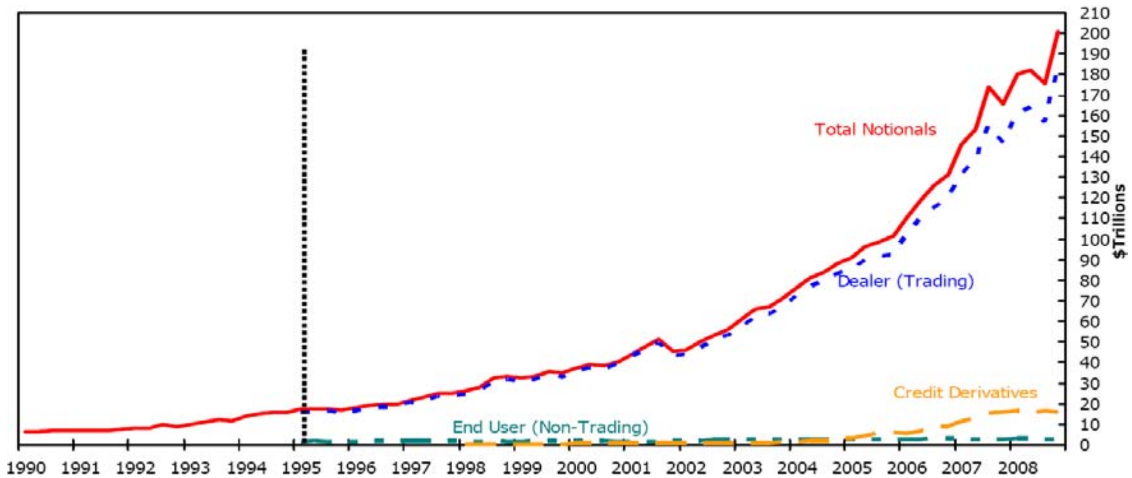
Structured Products and Derivatives

MBS, CMBS, CDO, CLO – A variety of ways to stretch the bank's balance sheet

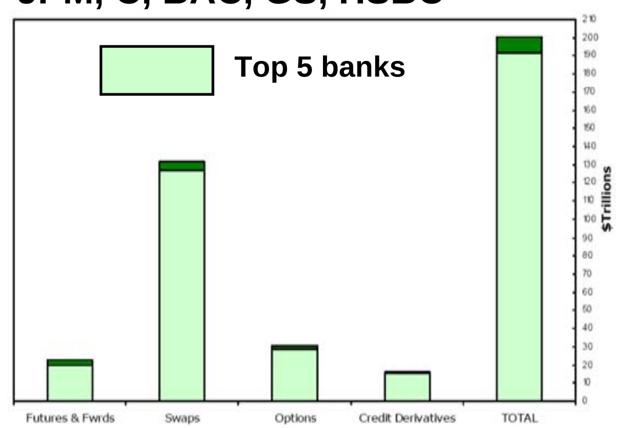




Derivatives transacted by insured Commercial Banks only



JPM, C, BAC, GS, HSBC



Sources: NY Times, OCC

2. Primary Causes of the U.S. crisis

a. Historical low interest rates

b. Leverage of the financial sector

c. Financial innovation

d. Financial markets oversight

e. Fraud

Financial Markets Oversight

Financial Institutions	Enforcers
• Commercial Banks – Safety of savings and checking accounts	*FDIC, Federal Reserve, Thrift Supervision*
• Broker-Dealers (I-Banks), Exchanges – Investor protection	*S.E.C., SPIC, State Attorney Generals, FINRA*
• Audit Firms (PwC, E&Y, D, KPMG) – Reliability of financial information	*PCAOB*
• Investment Funds (HF, PE) – Systemic risk, Investor Protection	*Unregulated*
• Rating Agencies – Comparability and risk evaluation	*Unregulated*

2. Primary Causes of the U.S. crisis

a. Historical low interest rates

b. Leverage of the financial sector

c. Financial innovation

d. Financial markets oversight

e. Fraud

Fraud of Mortgage Origination

Limited Documentation – also known as Liar's Loans

Key Players

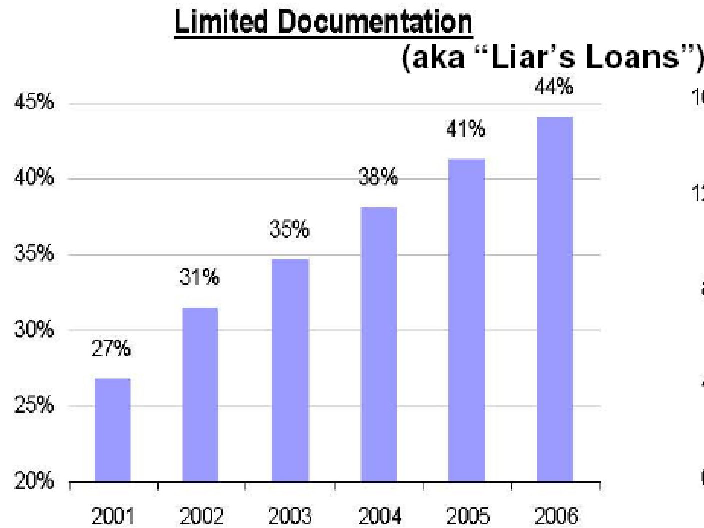
Mortgage Brokers

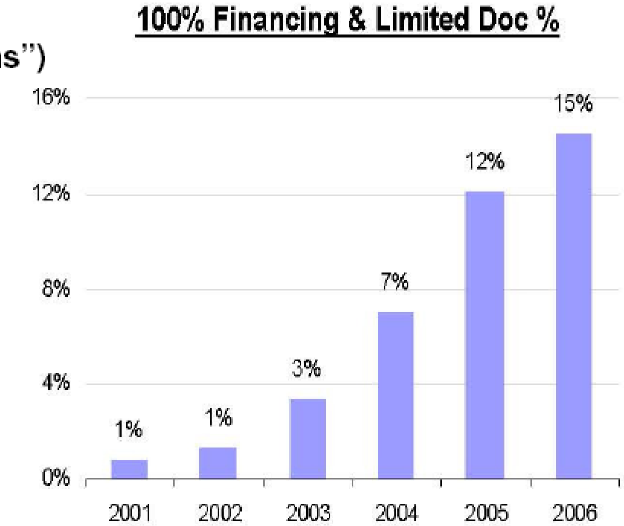
Real Estate Agents

Appraisers

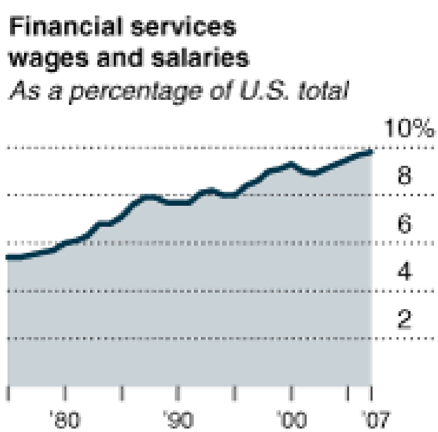
Banks

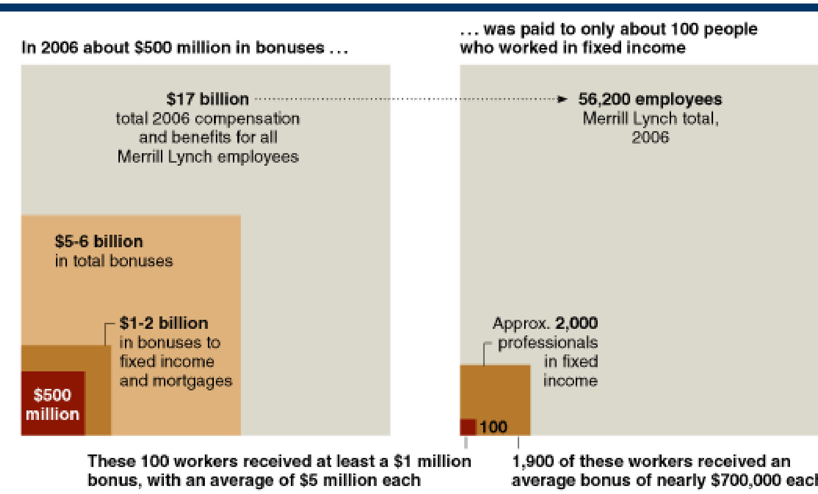
Rating Agencies





Did Wall Street knew what was happening?





Sources: NY Times, Freeman & Co. research

3. Stages of the Financial Crisis

a. Default of subprime mortgages

b. Contamination of structured products

c. Massive bank write-downs

d. Collapse of financial institutions

e. Freezing of the financial system

3. Stages of the Financial Crisis

a. Default of subprime mortgages

b. Contamination of structured products

c. Massive bank write-downs

d. Collapse of financial institutions

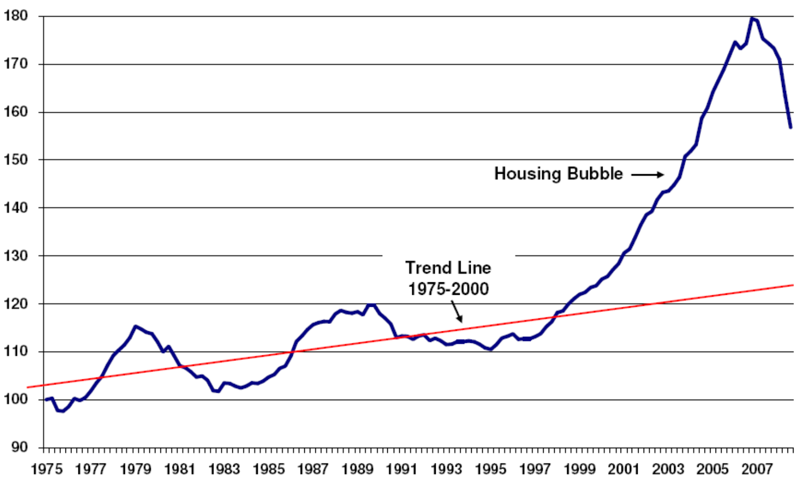
e. Freezing of the financial system

Easy loans pushed prices and defaults higher

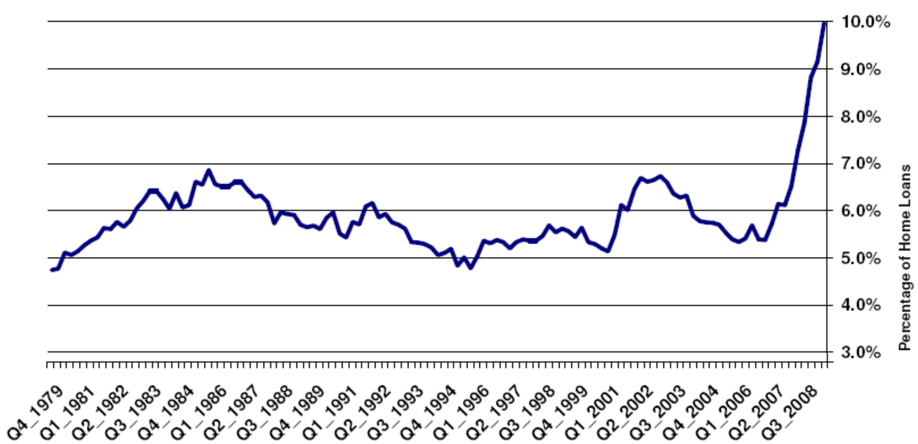
- The real home price indicator showed the signs of a housing bubble starting in 2002

- Default rate reached 10% in 2008
  - It reached 20% for subprime loans

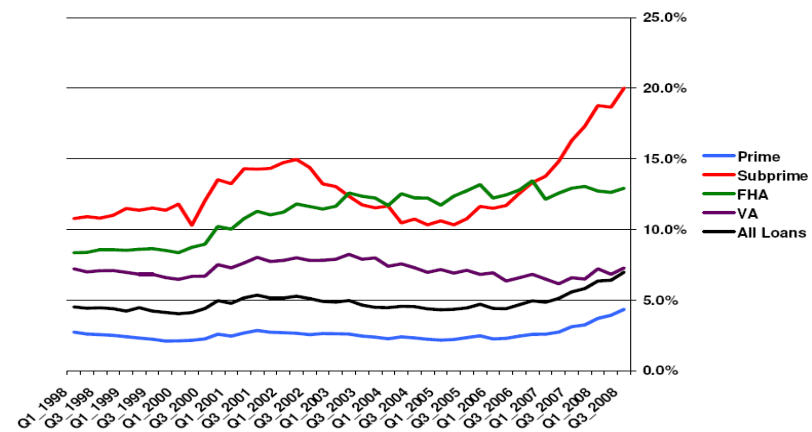
Real Home Prices (1975 > 100)



Defaults as % of total loans



Defaults in % by mortgage type



Source: MBA, OFHEO

3. Stages of the Financial Crisis

a. Default of subprime mortgages

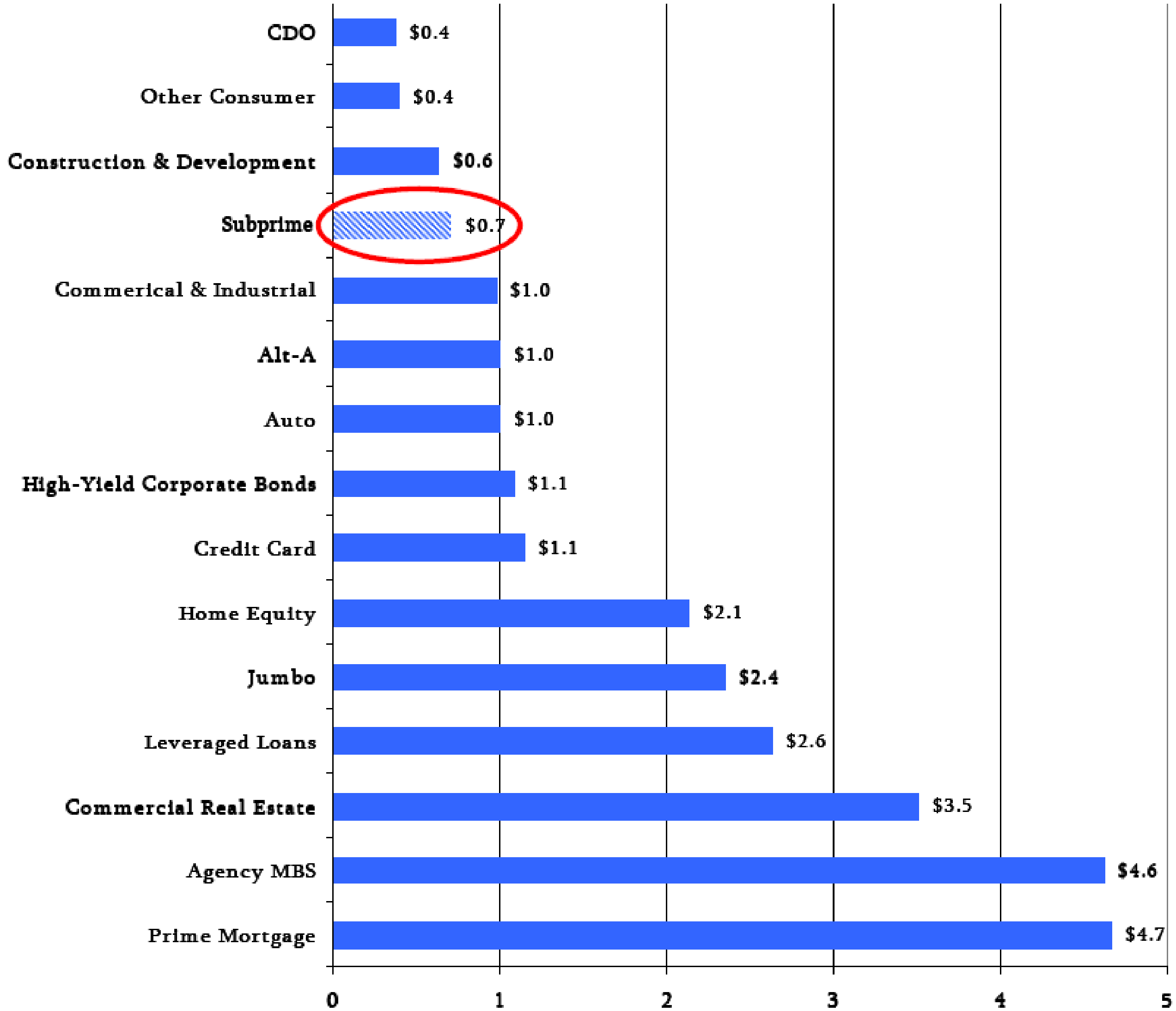
b. Contamination of structured products

c. Massive bank write-downs

d. Collapse of financial institutions

e. Freezing of the financial system

Contamination of structured products



- The subprime was a very small part of the whole market
- But securitization allowed entire portfolio to become tainted by subprime
- With little knowledge of what was inside their loan portfolios, investors pulled the plug on the entire market

Source: Federal Reserve

3. Stages of the Financial Crisis

a. Default of subprime mortgages

b. Contamination of structured products

c. Massive bank write-downs

d. Collapse of financial institutions

e. Freezing of the financial system

Massive bank write-downs

- By August 2008, the largest banks had a total of $364 billion in write-downs

- That was before Lehman Brothers' bankruptcy and before AIG's $173 billion bail-out

Legend:

- Liquidated or controlled by government

- Received substantial support from government

Write Downs & Capital Raises During the Credit Crisis (up to 8/27/08)

	Firm	Write-Downs ($B)	Cap Raised ($B)	Market Cap ($B)
•	Citi	$55.10	$49.10	$97.15
•	Merrill Lynch	51.80	29.90	36.91
•	UBS	44.20	28.10	61.64
	HSBC	27.40	3.90	185.33
•	Wachovia	22.70	11.00	30.31
•	Bank of America	21.20	20.70	132.33
•	Washington Mutual	14.80	12.10	6.12
•	Royal Bank of Scotland	14.40	23.60	66.01
•	Morgan Stanley	14.40	5.60	42.79
•	JPMorgan Chase	14.30	9.50	125.83
•	Deutsche Bank	10.60	3.20	43.38
•	Credit Suisse	10.40	2.70	52.64
•	Barclays	10.00	18.20	49.58
•	Lehman Brothers	8.20	13.90	9.95
•	Credit Agricole	7.90	8.70	43.04
•	Fortis	7.30	7.10	31.07
•	Societe Generale	6.70	9.60	54.33
	CIBC	6.40	2.80	20.95
	WestLB	4.70	7.40	N/A
	E-Trade	3.60	2.40	1.58
	Nomura Holdings	3.30	1.20	25.60
	Natixis	3.20	6.60	10.59
	Mitsubishi UFJ	1.60	1.60	81.57
	Totals	**$364.20**	**$278.90**	

Source: Bloomberg; Freeman & Co. Research

3. Stages of the Financial Crisis

a. Default of subprime mortgages

b. Contamination of structured products

c. Massive bank write-downs

d. Collapse of financial institutions

e. Freezing of the financial system

Chain of failures of monumental sizes

- 58 American commercial banks have gone into bankruptcy so far in 2008 and 2009, compared to 27 banks from 2000 to 2007

Top failed global financial institutions

- $350 billion

- $307 billion

- $613 billion

- $912 billion

- $946 billion

- €974 billion

FORTIS

Source: FDIC; Bloomberg

3. Stages of the Financial Crisis

a. Default of subprime mortgages

b. Contamination of structured products

c. Massive bank write-downs

d. Collapse of financial institutions

e. Freezing of the financial system

Unprecedented freeze of the financial system

- Faced with the imminent collapse of their counterparties, banks stopped lending to each other and their clients
- The collapse of the financial system could have triggered an economic collapse on a global scale
- The day after Lehman Brothers' collapsed, AIG (the world largest insurer and CDS writer) was faced with the prospect of paying $60 billion to its counterparties. If AIG did not pay, a good number of other banks were likely to fail, triggering yet other collapses as in a domino game
- The only option left for the U.S. government was to take dramatic steps to prevent such a collapse

4. Short Term Consequences

a. Lack of credit availability

b. Government interference

c. Global recession

d. Widespread global unemployment

e. Breakdown of many Ponzi schemes

4. Key Short Term Consequences

a. Lack of credit availability

b. Government interference

c. Global recession

d. Widespread global unemployment

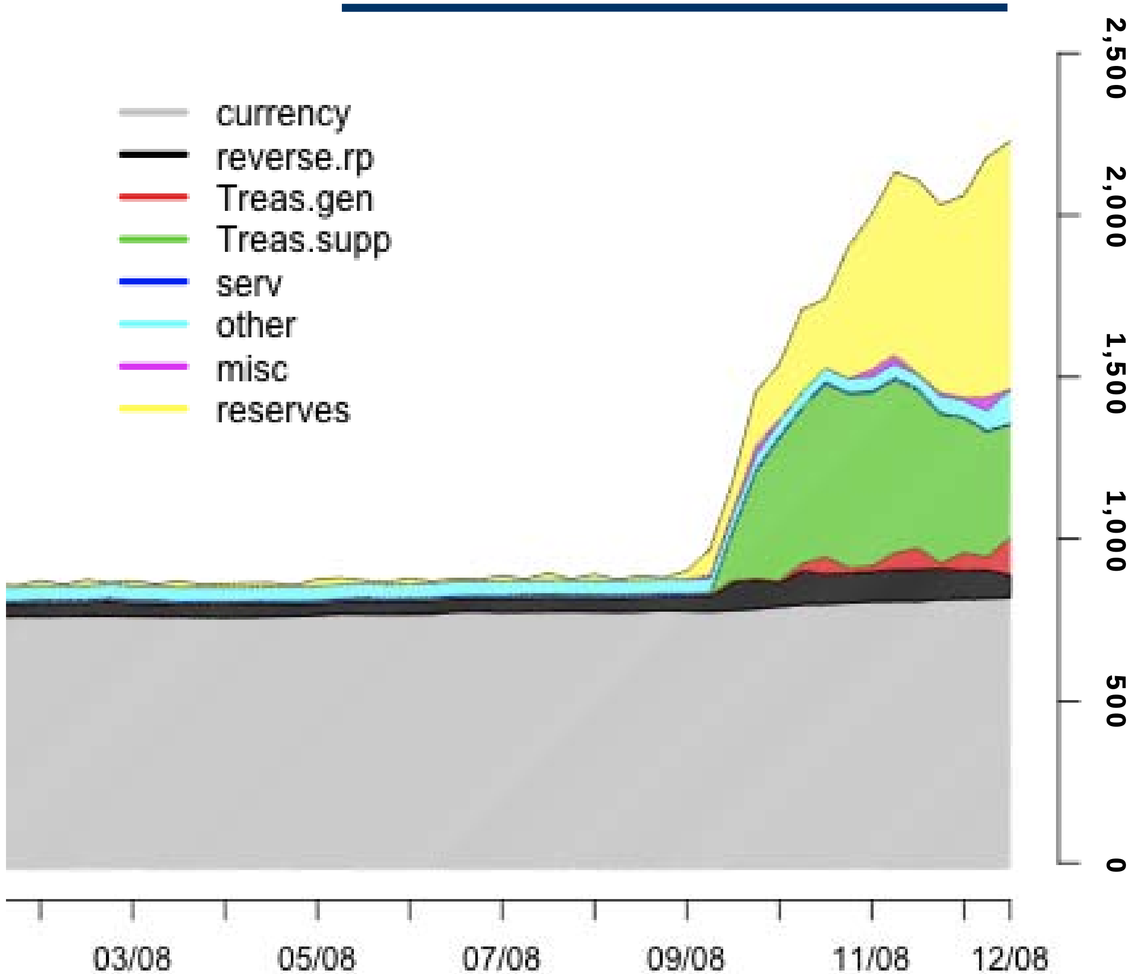
e. Breakdown of many Ponzi schemes

Global credit freeze forces government's hand

Affected by Crisis

- Student loans
- Credit cards
- Car loans
- Mortgages
- Commercial paper
- Revolving credit
- Medical equipment

Federal Reserve Balance Sheet ($Trillion)



Source: Federal Reserve

4. Key Short Term Consequences

a. Lack of credit availability

b. Government interference

c. Global recession

d. Widespread global unemployment

e. Breakdown of many Ponzi schemes

Actions by Federal Reserve and Treasury Dept.

- Sale of Bear Stearns and guarantee to buyer
- Bailouts of AIG, Fannie Mae, Freddie Mac, Citibank, Bank of America
- Lending facility extended to Primary Dealers
- Guarantee for all money market funds
- Equity stakes in 208 American financial firms
- Medical equipment
- Purchase of long term federal debt
- Short selling ban of 2008

Source: Federal Reserve

4. Key Short Term Consequences

a. Lack of credit availability

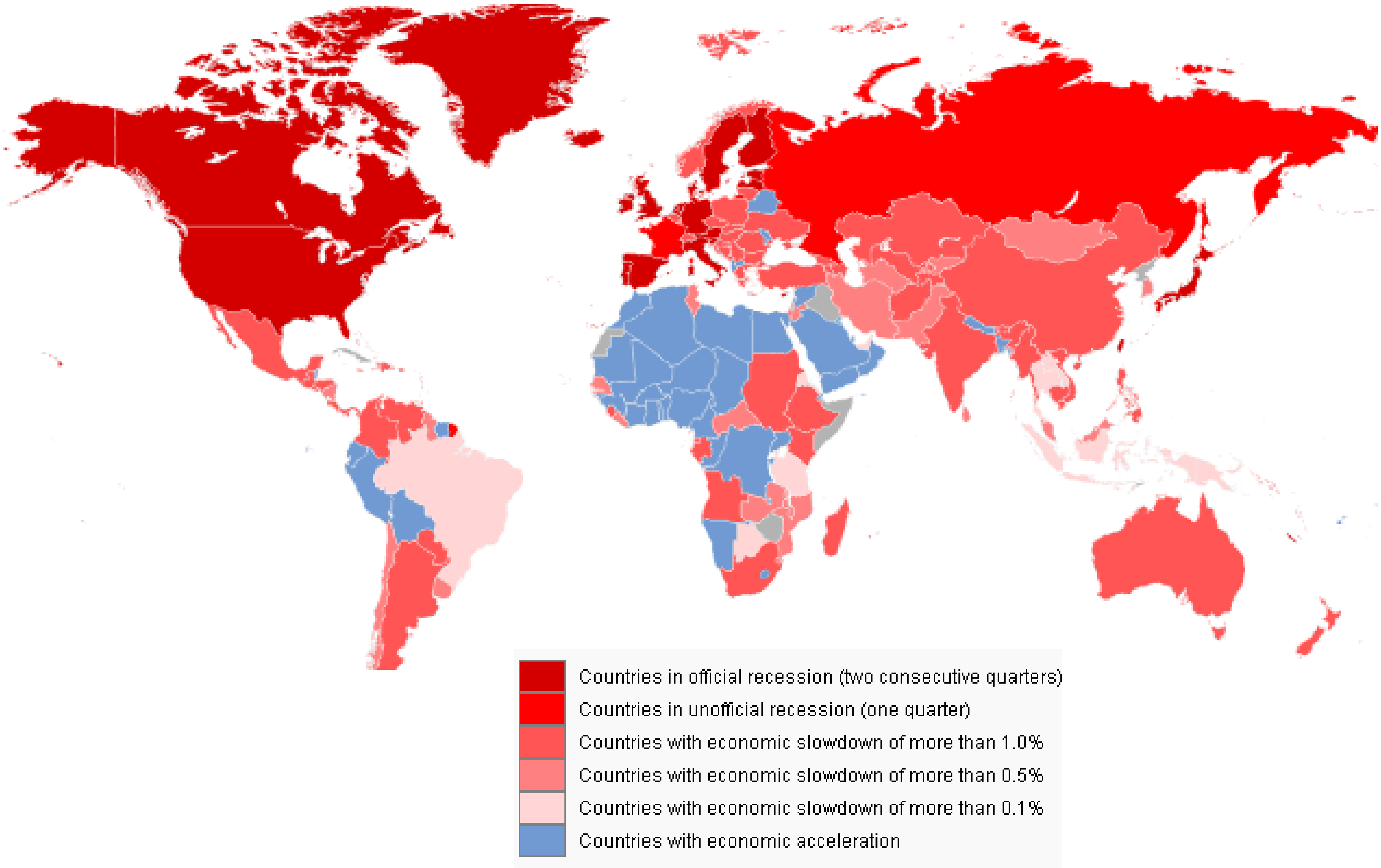
b. Government interference

c. Global recession

d. Widespread global unemployment

e. Breakdown of many Ponzi schemes

Global recession



Source: IMF; Wikipedia

4. Key Short Term Consequences

a. Lack of credit availability

b. Government interference

c. Global recession

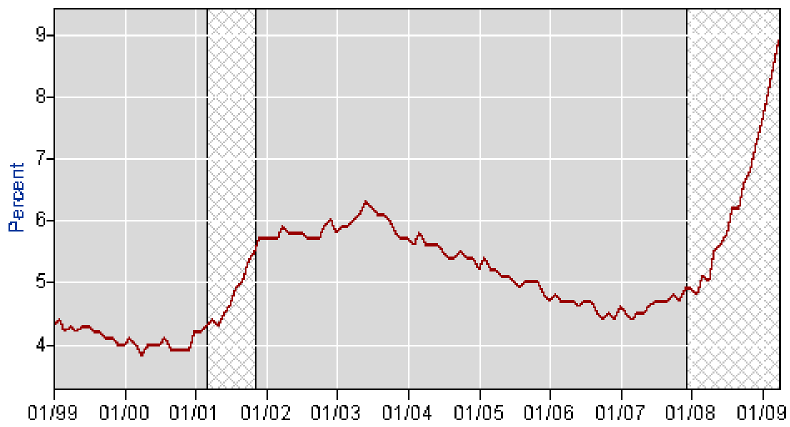
d. Widespread global unemployment

e. Breakdown of many Ponzi schemes

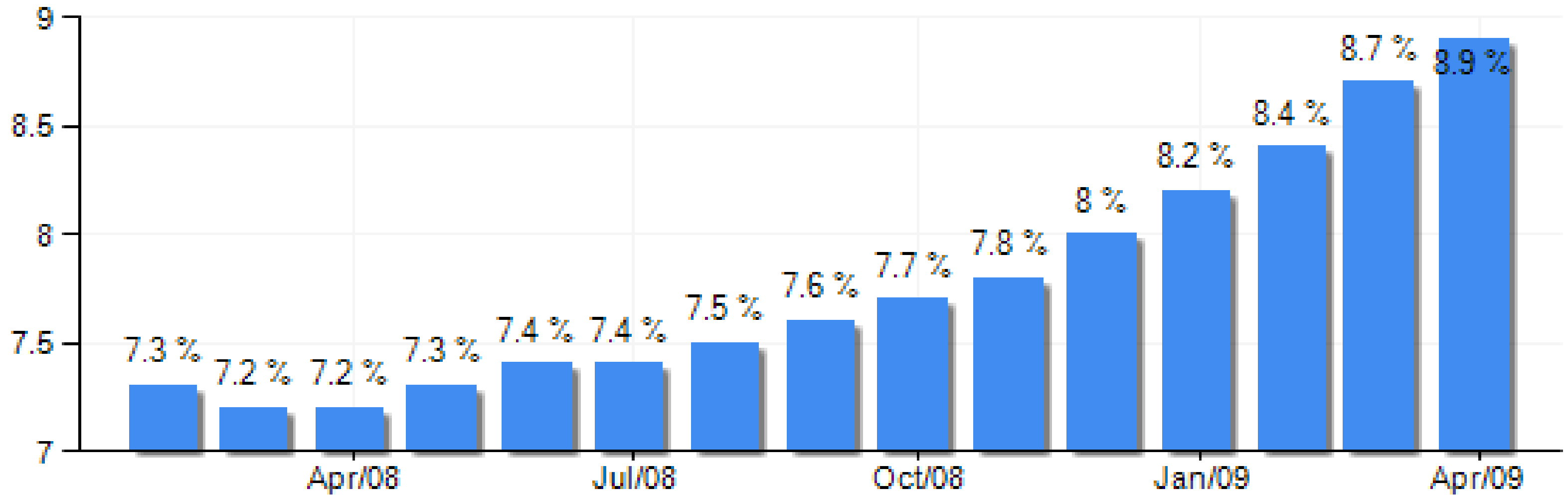
Unemployment

- Global unemployment expected to reach 6.1% in 2009 versus 5.7% in 2007
  - This represents an increase of 45 million unemployed persons

U.S. Unemployment & recesssions



EU Unemployment rate as % of labor force



Source: European Commission; BLS; ILO

4. Key Short Term Consequences

a. Lack of credit availability

b. Government interference

c. Global recession

d. Widespread global unemployment

e. Breakdown of many Ponzi schemes

Ponzi schemes flourished in recent years

- The Ponzi scheme run by Bernard Madoff stands at about $65 billion
- The withdrawals triggered by the crisis forced the end of it
- The uncovering of Ponzi schemes put tremendous pressure on a large number of hedge funds forcing them to spend additionally on third party audits
- Ponzi schemes have been facilitated by the explosion of secretive hedge funds
- The S.E.C. failed numerous times in responding to allegations regarding Ponzi schemes
- Since the onset of the financial crisis at least 40 Ponzi schemes have been uncovered by the American authorities

Source: European Commission; BLS; ILO

5. Long Term Outcome – a New Era

a. Cross-border market integration

b. Higher regulatory standards

c. Increased reliance on technology

d. Expanded financial product platforms

e. Customization of retail financial products

Va multumesc

Tony Avramescu Romani

tromani08@gsb.columbia.edu