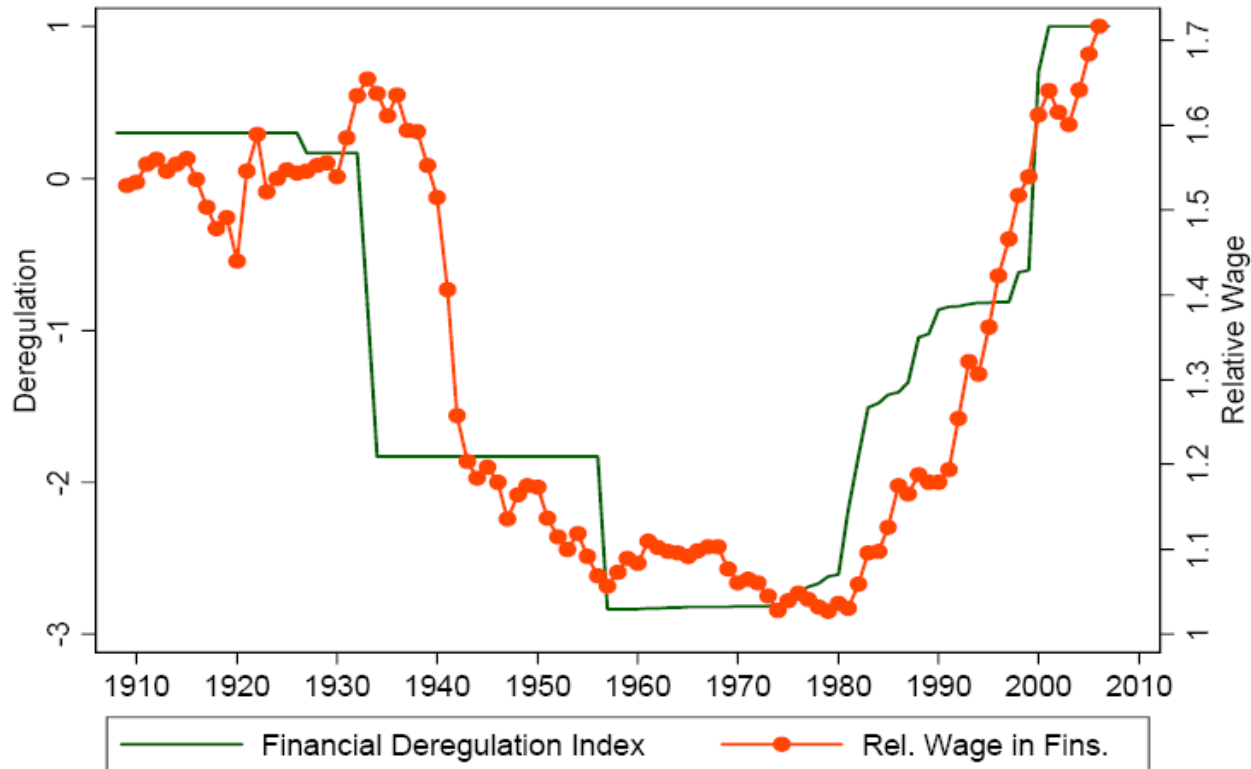


# Regulation & Financial Innovation

Figure 6: Relative Financial Wage and Financial Deregulation



# Financial Innovation, Technology and Deregulation

- «Consider the main forces that have been at work in altering the financial landscape. **Technical Change (...), Deregulation (...)** Change»
- (R.G. Rajan, November **2005**)



# Deregulation and Finance Industry: **Micro** Effect

- Deregulation produced **three** effects on finance:
  - 1) Dimension
  - 2) Complexity
  - 3) Interconnection

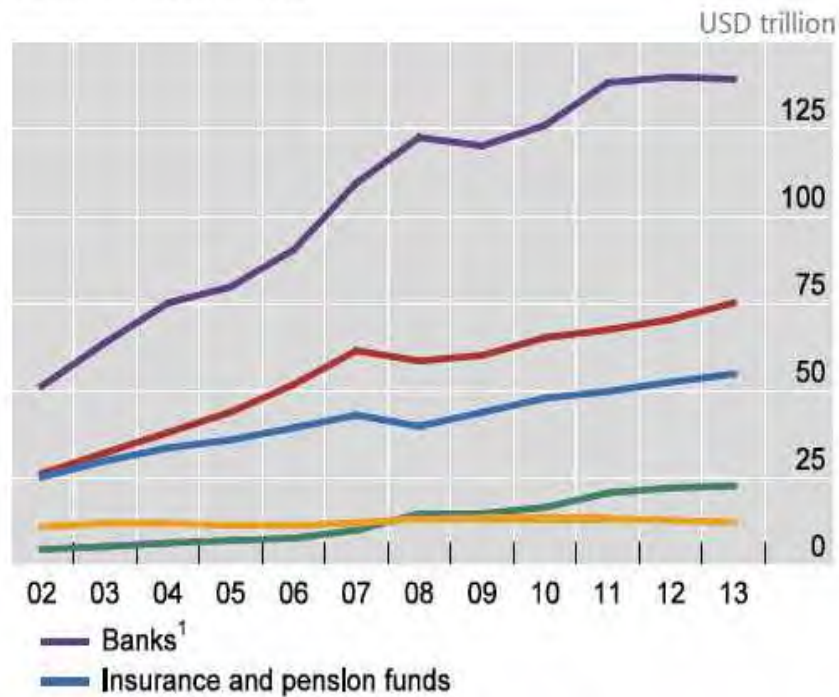
# A) More Finance

Assets of financial intermediaries

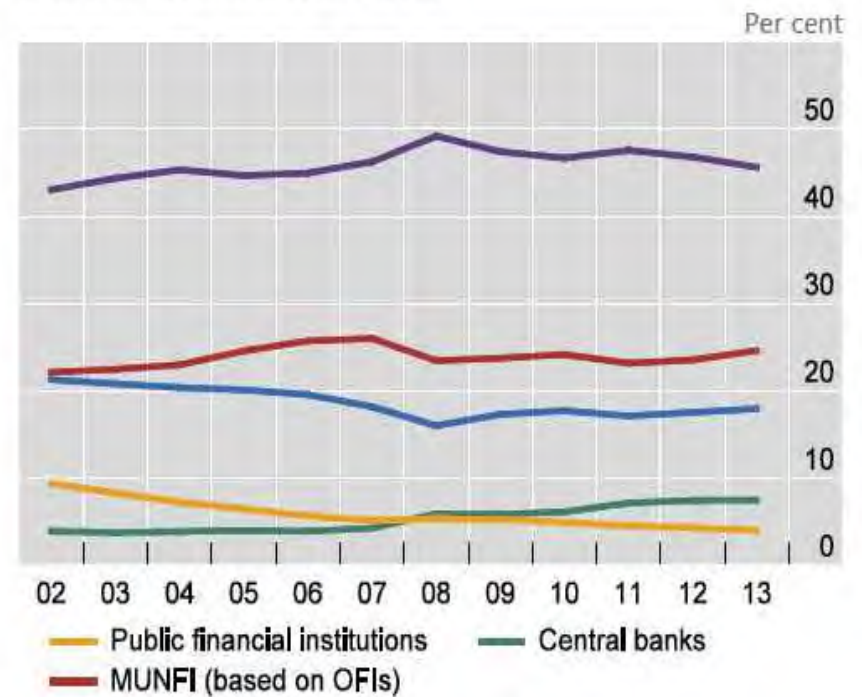
20 jurisdictions and euro area

Exhibit 2-1

Total financial assets

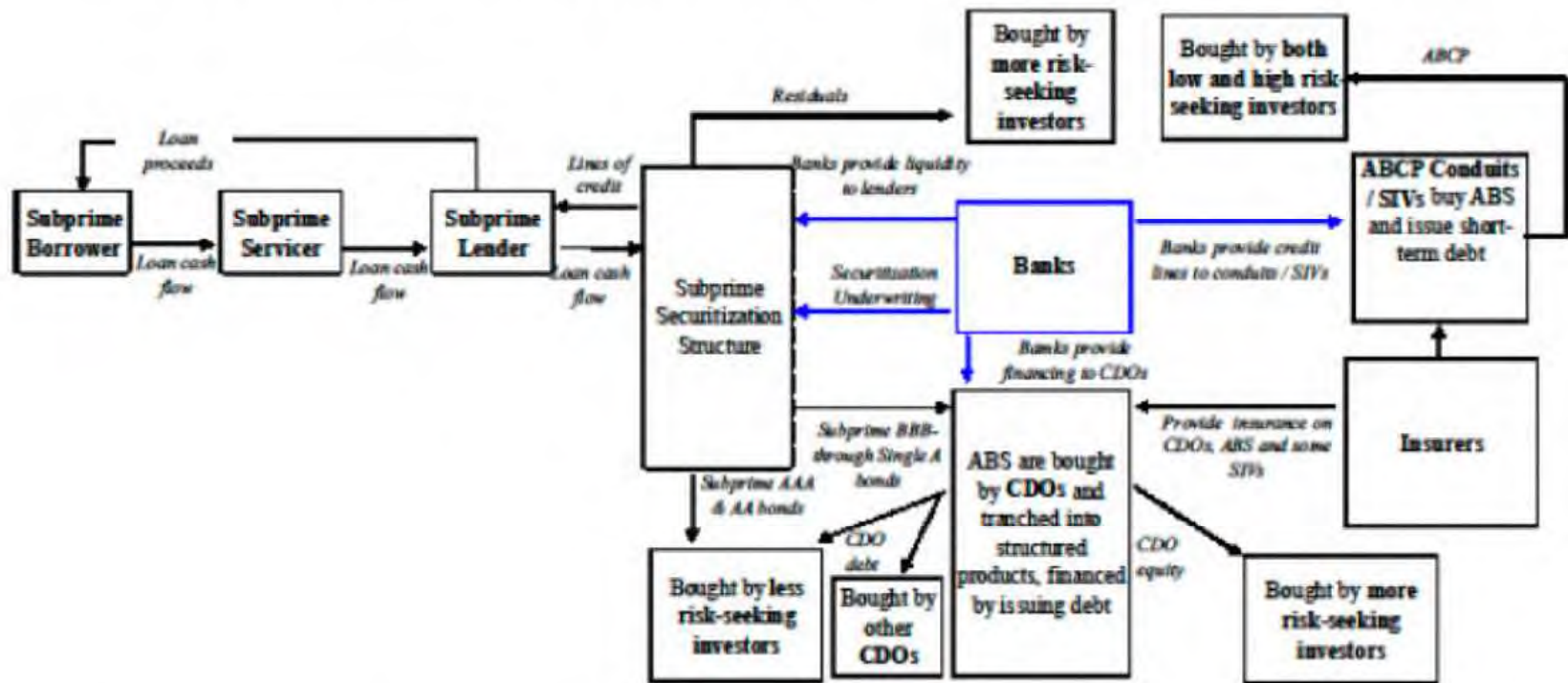


Share of total financial assets



# B) Complexity

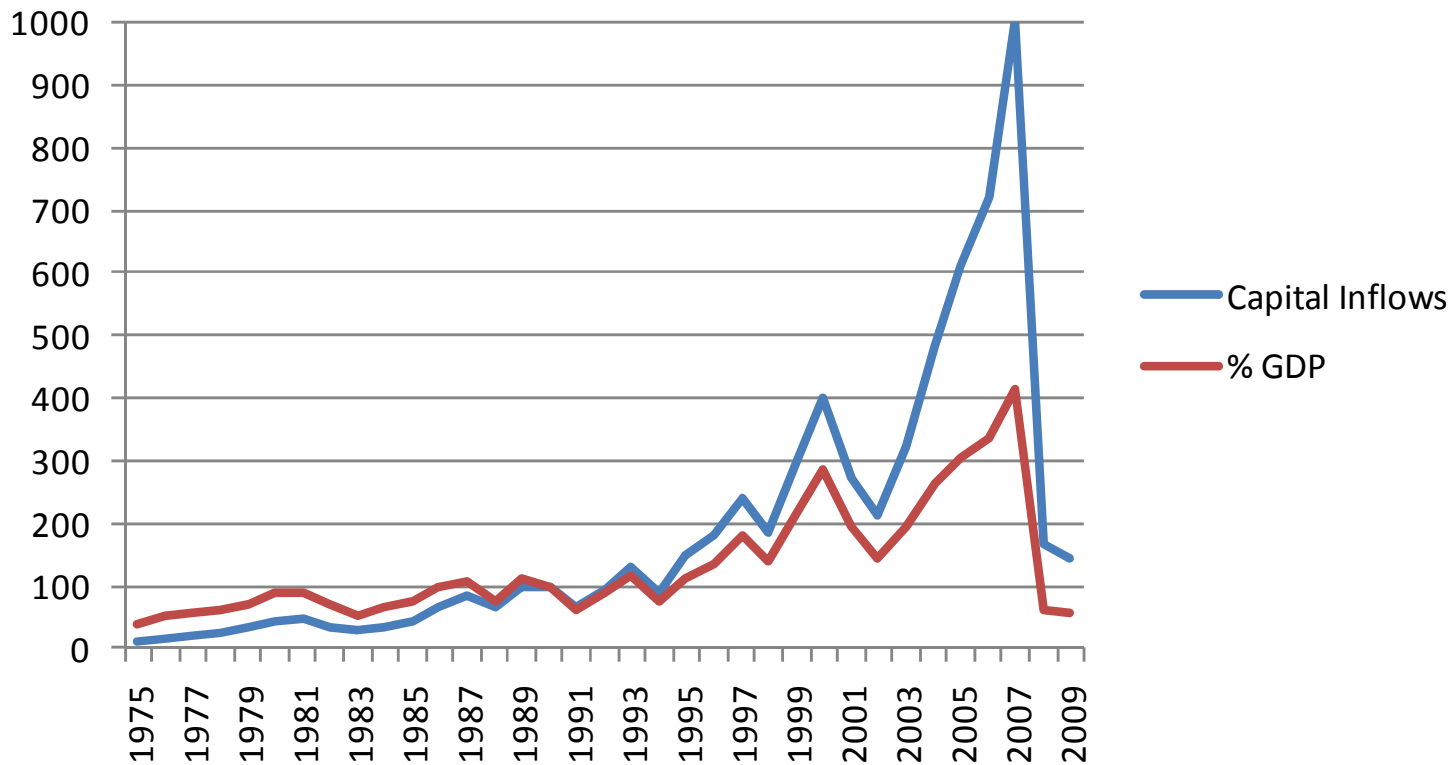
Figure 2. A Visual Sense of the Complexity: From Mortgages to Securities



Source. Adapted from Figure 1.10: Mortgage Market Flows and Risk Exposures, Chapter 1, p. 11, Global Financial Stability Report, October 2007

# C) Interconnections: Borders...

### Global Cross-Border Capital Flows, 1975-2009



# C) Interconnections: Borders...

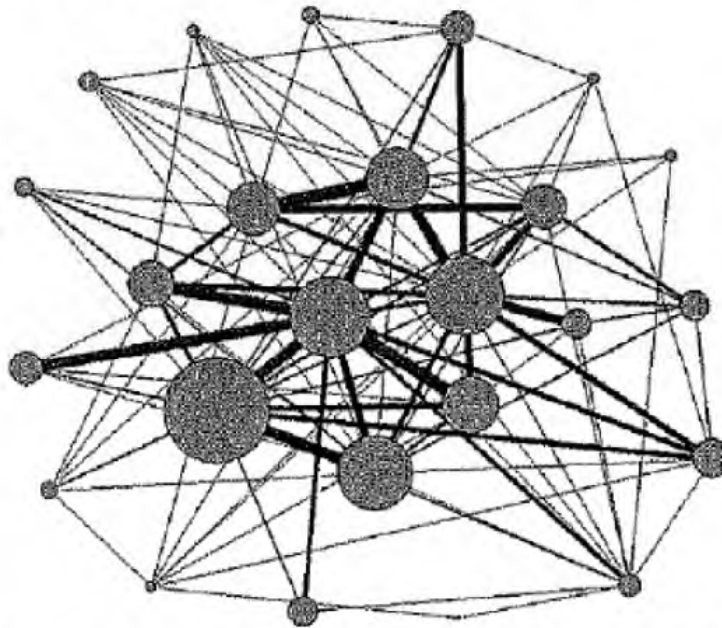
Figure 1: International capital flows



Source: Mc Quade and Schimtz, ECB, 2016

# C) Interconnections: National Banks...

Figure 14. Network of large exposures between UK banks



Note: A large exposure is one exceeding 10% of a lending bank's eligible capital. Each node represents a bank, with the size scaled in proportion to the sum of the total value of exposures to that bank and the total value of exposures of that bank to others in the network. The thickness of a line connecting two nodes is proportional to the value of the bilateral exposures between that pair of banks. Data source: FSA returns for 2009Q2



# C) Interconnections: International Banks...

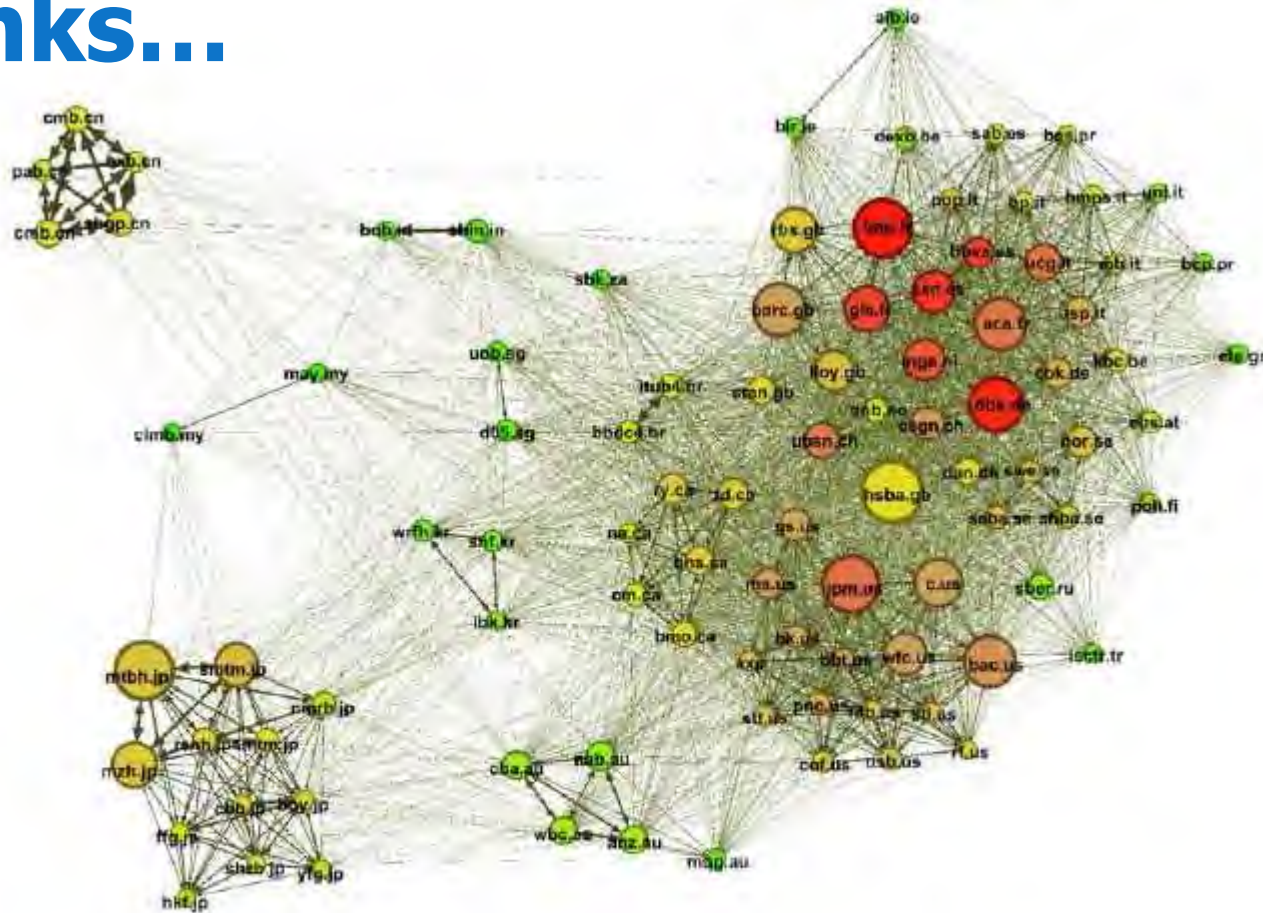
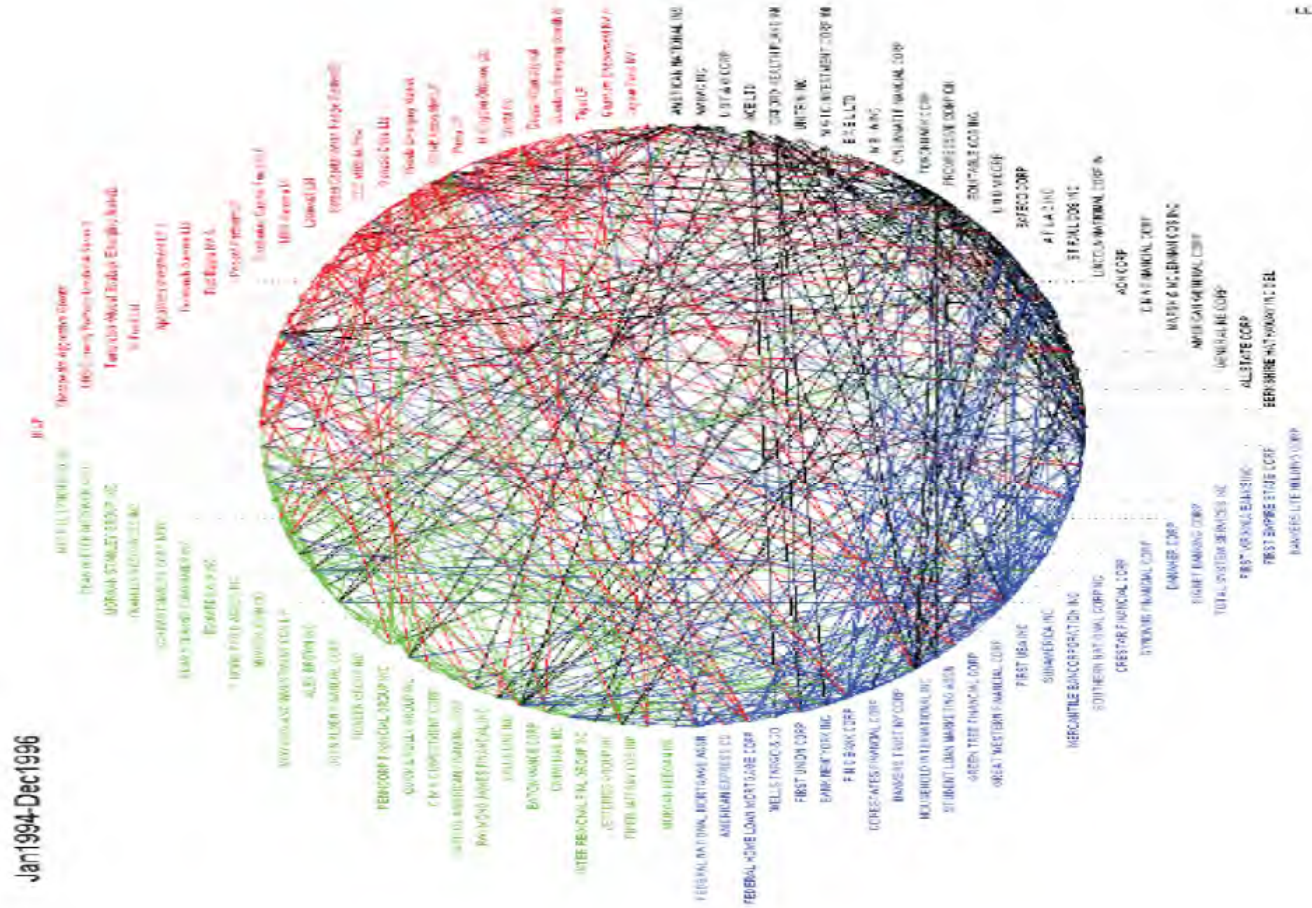


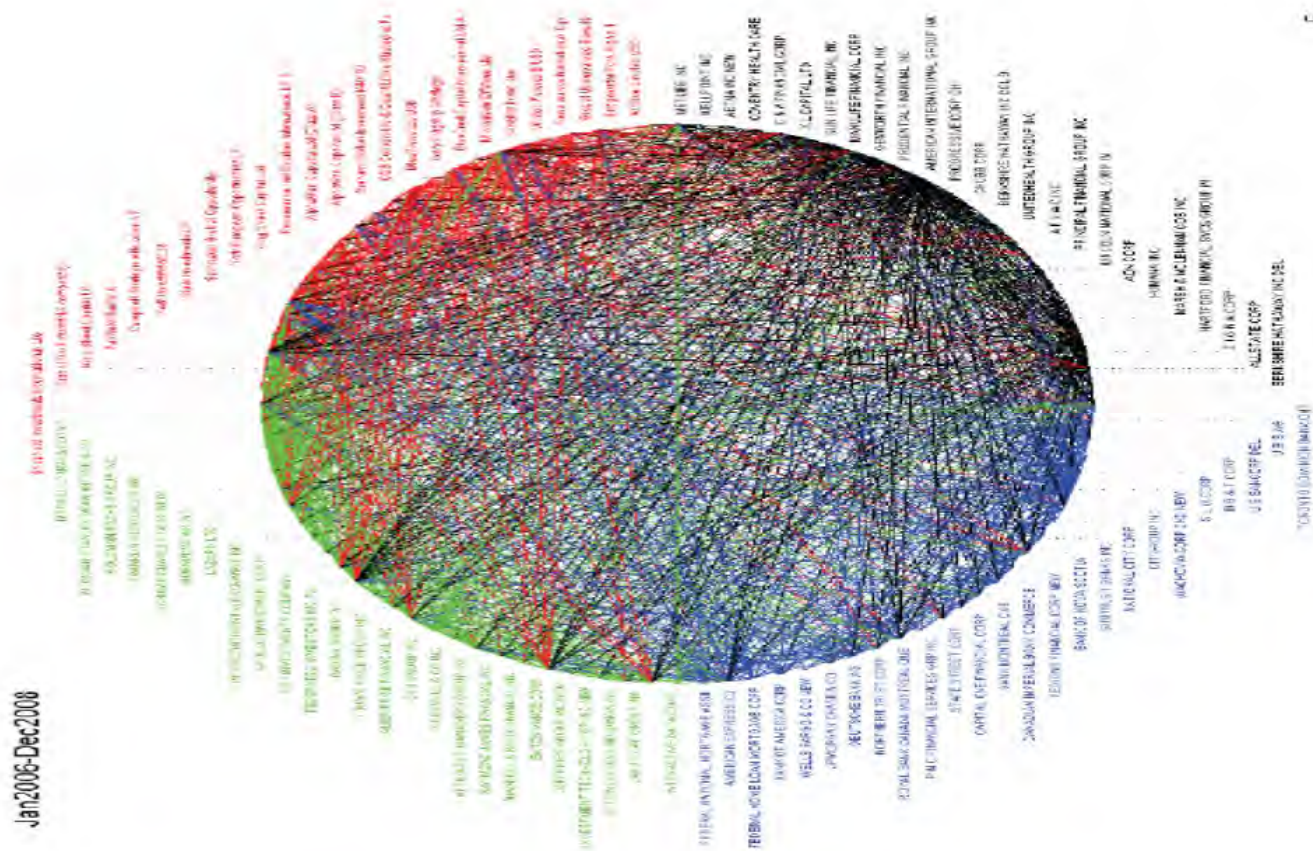
Figure 2: Individual Bank Network Graph, 2003-2014

# C) Interconnections: Markets in the '90 ...



Billio et al., WP Ca' Foscari, 2012

# C) Interconnections: Markets ten years later ...



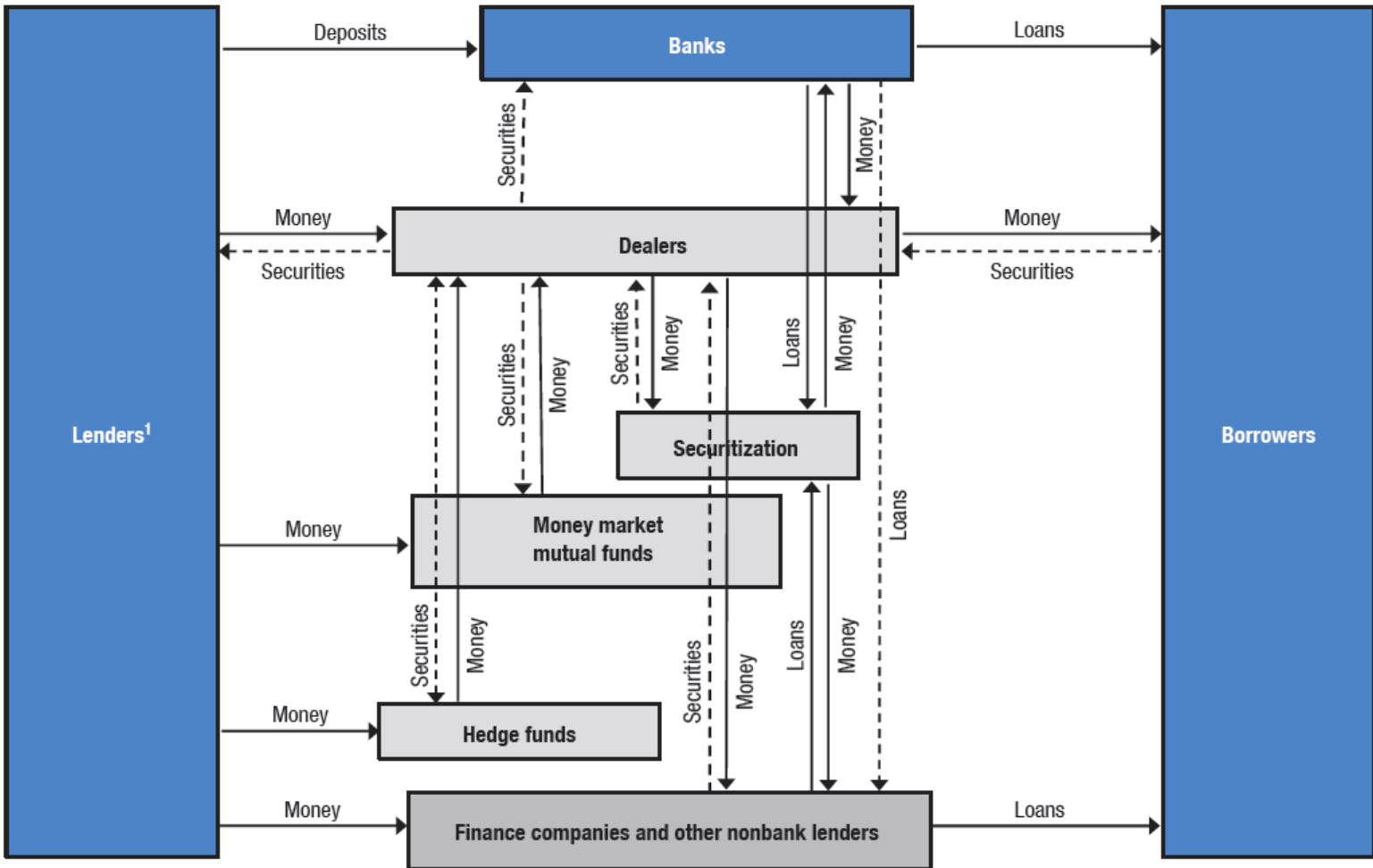
Fonte: Billio et al., WP Ca' Foscari, 2012

# Final Result: Shadow Banking and Leverage Economy

- **Shadow Banking** = Non Banking Firms which perform Banking Activities
- Banking + Shadow Banking = A Big, Complex and Interconnected Finance = **Leverage Economy**

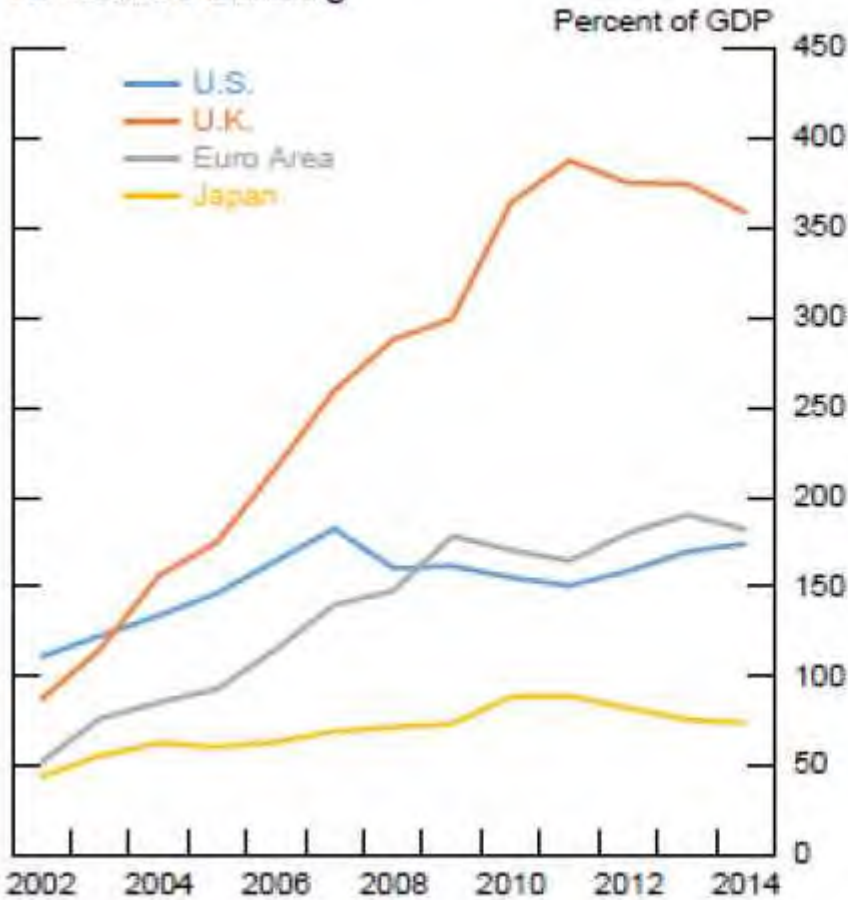
# 1) Shadow Banking

Figure 2.3. Traditional versus Shadow Banking Intermediation

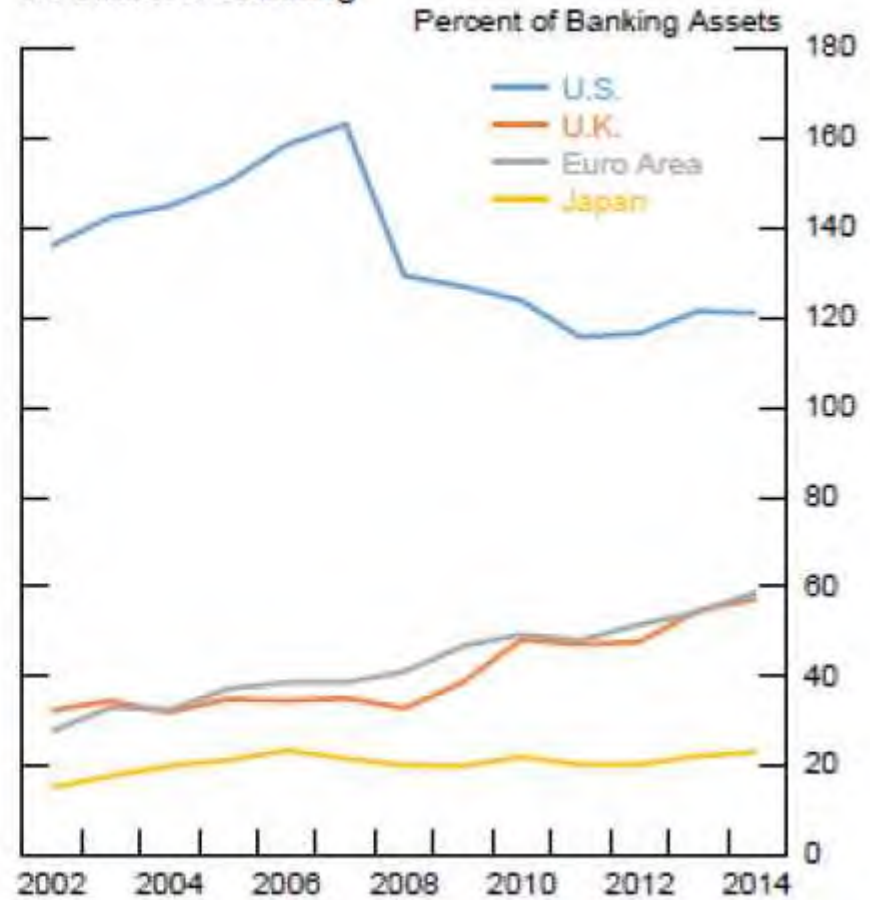


# 1) Shadow Banking

A: Shadow Banking



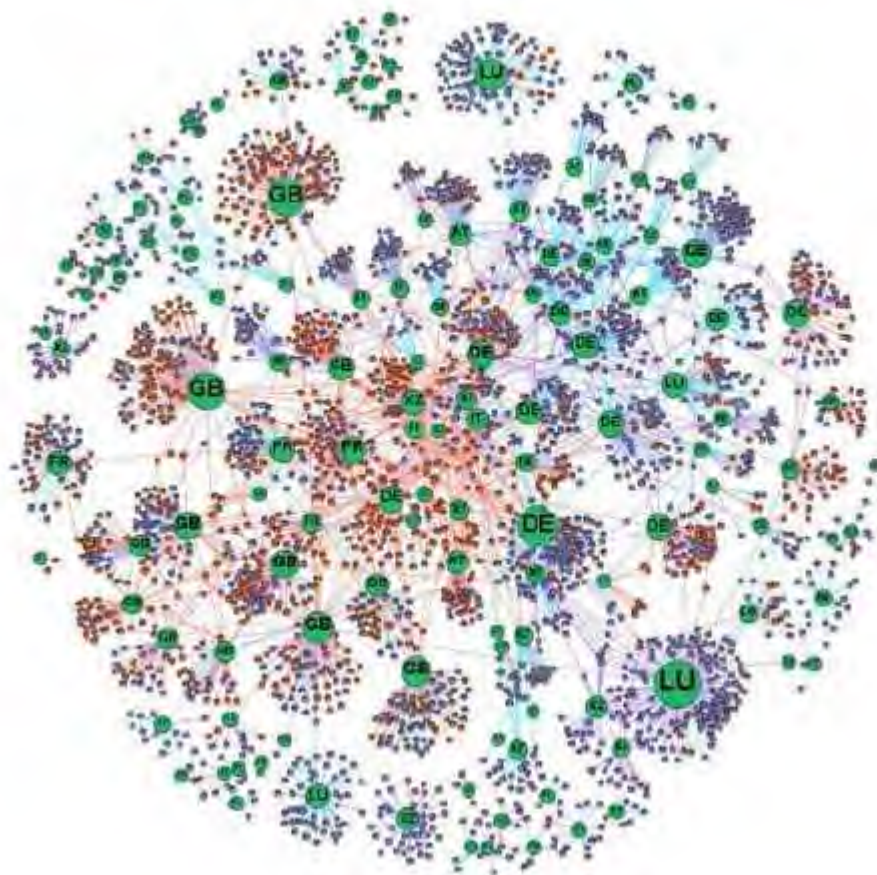
B: Shadow Banking



Source: Claessens, 2016

# 1) Shadow Banking and Banking: EU

FIGURE 4. Network of EU banks' exposures to shadow banking entities



# 1) Shadow Banking and Banking: EU

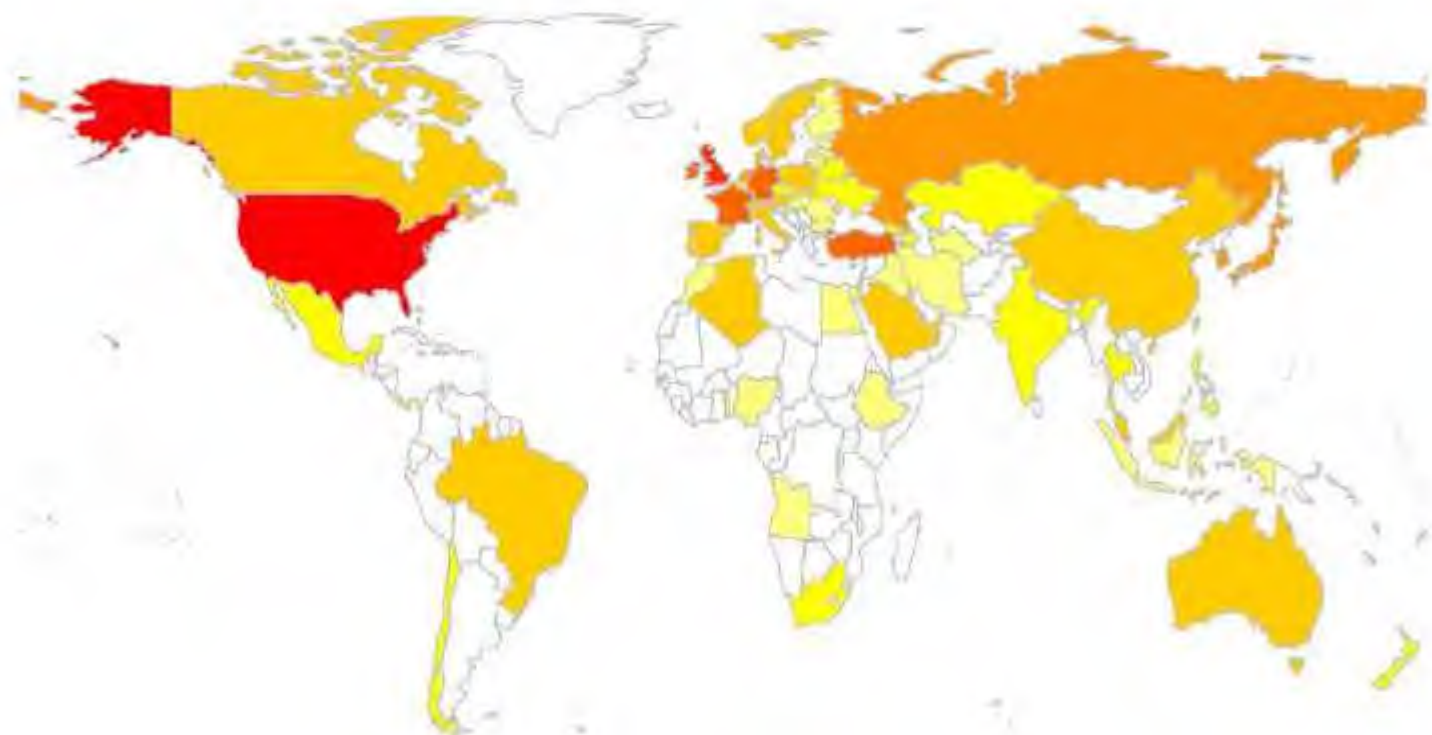
TABLE 2. Distribution of EU banks' exposures to shadow banking entities by country of reporting institution and domicile of shadow banking entity (as a % of GDP of country of reporting bank)

B / SB	DE	FR	GB	IE	JE	KR	KY	LU	NL	RU	TR	US	O-EU	RW	Total
AT	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.0	0.2	1.0	0.2	2.2
DE	1.0	0.0	0.2	0.3	0.0	0.0	0.1	0.3	0.1	0.1	0.1	1.2	0.1	0.3	3.9
FR	0.0	0.8	0.2	0.1	0.0	0.1	0.2	0.1	0.1	0.0	0.0	1.5	0.1	0.5	3.8
GB	0.3	0.3	2.4	1.0	0.8	0.4	1.3	0.6	0.2	0.1	0.2	4.4	0.2	2.9	15.0
IT	0.0	0.1	0.2	0.2	0.0	0.1	0.0	0.2	0.0	0.1	0.5	0.0	0.2	0.2	1.7
LU	2.4	1.5	1.8	1.0	0.0	0.0	0.6	5.5	6.5	0.5	0.0	0.1	2.1	0.8	22.9
O-EU	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1	1.1
<b>Total</b>	<b>0.3</b>	<b>0.2</b>	<b>0.5</b>	<b>0.3</b>	<b>0.1</b>	<b>0.1</b>	<b>0.3</b>	<b>0.2</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>1.2</b>	<b>0.2</b>	<b>0.6</b>	<b>4.3</b>

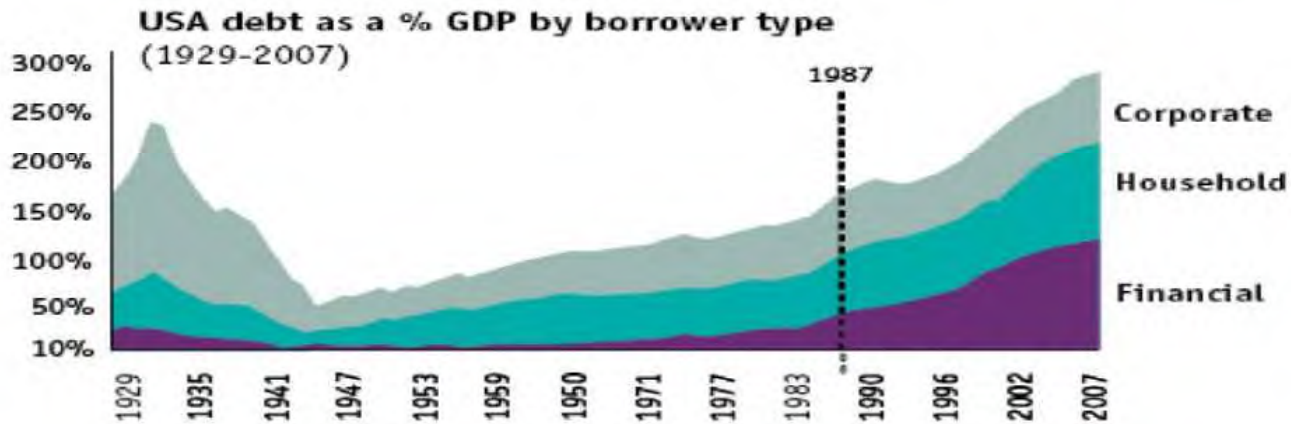
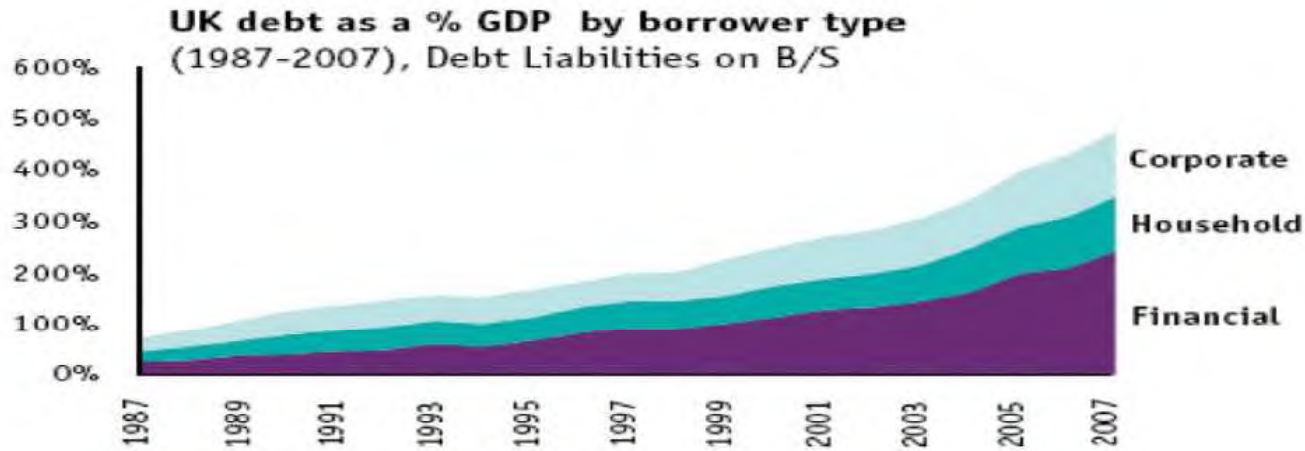


# 1) Shadow Banking and Banking: EU

FIGURE 7. Geography of risk: distribution of exposures by domicile of shadow banking entities

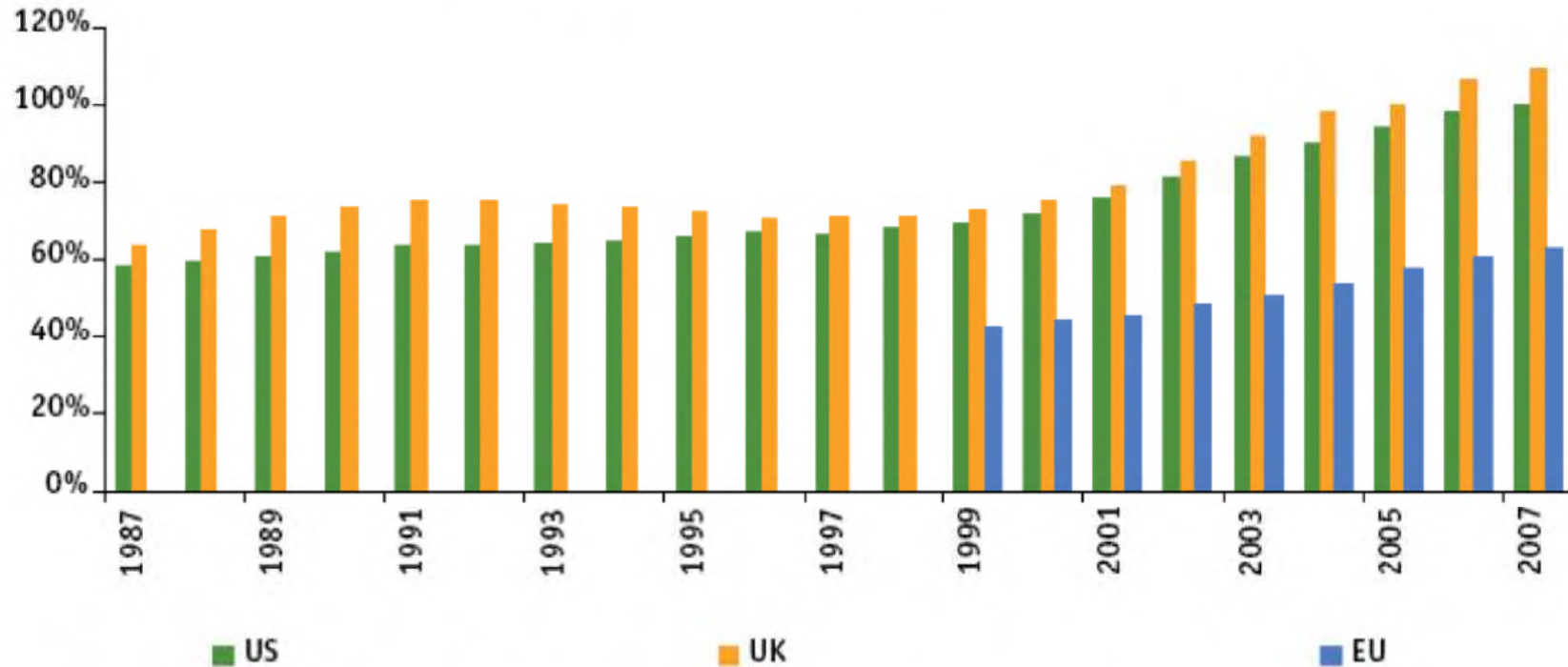


# 2) Leverage Economy



# 2) Leverage Economy

Exhibit 1.4: Household debt as proportion of the GDP



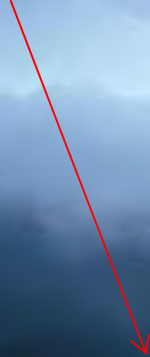
Source: ONS, Federal Reserve, Eurodata, Bureau of Economic Analysis, FSA calculations

# Summing Up

- The **Great Moderation** = a **NICE** period
- **NICE** = Non inflationary consistently expansionary = stable growth with low inflation
- With **high private debt** = a **LEVERAGED NICE** period
- The Great Moderation: **Pros** and **Cons** ...

# GM, i.e. The Quiet before the Storm ...

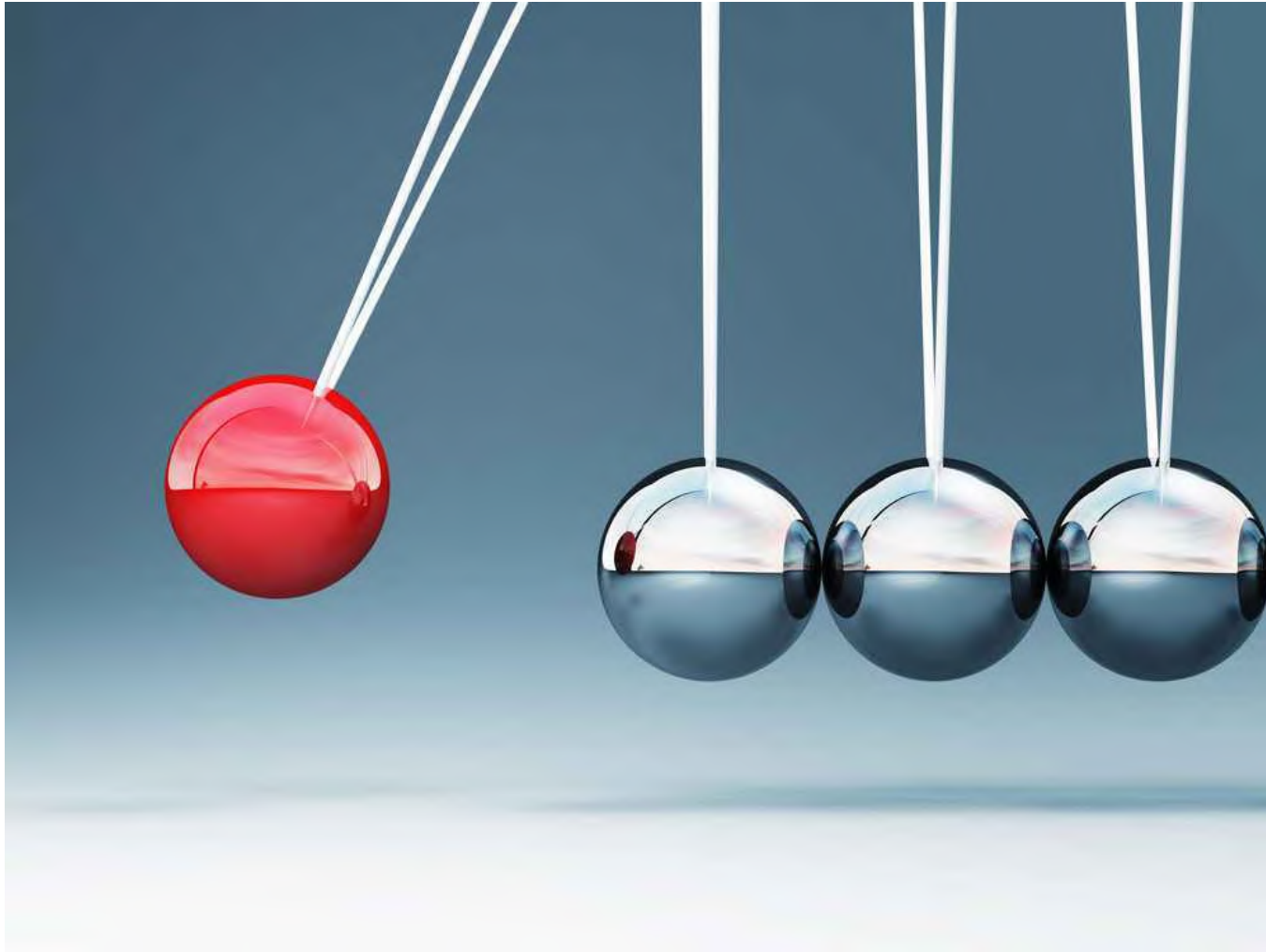
FINANCIAL  
IMBALANCES



# ... The Storm (GC)



# Today: Where Does The Pendulum Stand?



# Today: Where Do We Stand?

A stylised comparison of selected structural reform proposals

Table 1

	Volcker	Liikanen	Vickers
Broad approach	<b>Institutional separation</b> of commercial banking and certain investment activities	<b>Subsidiarisation:</b> proprietary and higher-risk trading activity have to be placed in a separate legal entity	<b>Ring-fencing:</b> structural separation of activities via a ring fence for retail banks
Deposit-taking institution may:			
- deal as principal in securities and derivatives	No	No	No
- engage in market-making	Yes	No	No
- perform underwriting business	Yes <sup>1</sup>	Yes	Restricted
- hold non-trading exposures to other financial intermediaries	Unrestricted	Unrestricted	Restricted (inside the group)
Holding company with banking and trading subsidiaries	Not permitted	Permitted	Permitted
Geographical restrictions	No	No	Limitations for ring-fenced banks in the UK to provide services outside the European Economic Area

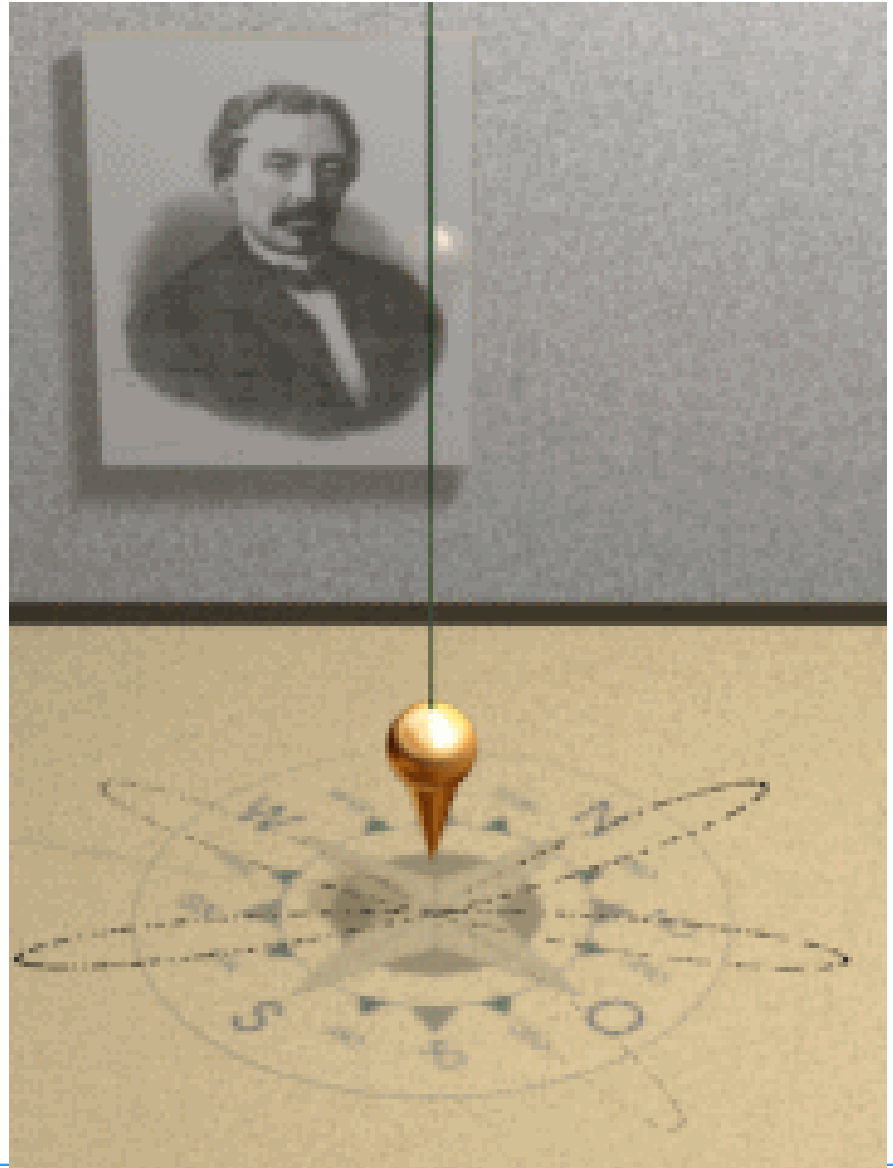
<sup>1</sup> Underwriting in response to client/counterparty demand.

Source: Gambacorta & van Rixtel, 2013 BIS WP 412



# Which Pendulum?

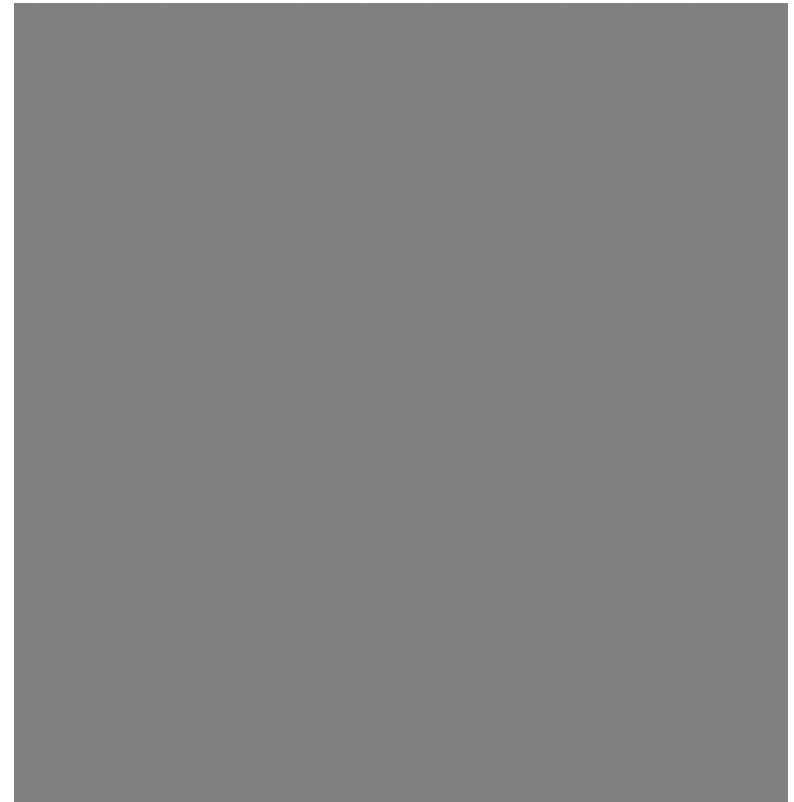
- **Main** Lesson: **One Size** doesn't Fit All
- **Insights:**
- **1) Multi** tools approach: theory, empirics and institutions
- **2) More contamination** among Fields :
- **Political** Science; **Law**
- **Zooming on the Actors...**
- 



# Policymakers or ...

□ Welfare Maximizing

Players



# Politicians

□ Career Concerned Players



# Lobbies

- 1) **Banks**
- 2) **Managers**
- 3) **Controlling Shareholders**



In this political cartoon, Jackson destroys the Second Bank of the United States by withdrawing government deposits. As the Bank crashes, it crushes the director Nicholas Biddle (depicted as the Devil), wealthy investors (with moneybags) and the newspaper editors (surrounded by paper) who opposed Jackson on this issue. SOURCE: Library of Congress

# Bureaucracies

- 1) **Regulators:**
- A) Regulators **vs** Regulators
- B) **Capture** Regulation

**Otherwise ...**



# Conclusion?

