



Central Banks as Supervisors before and after the Crisis

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Motivation

- After the **2008-2009 financial crisis** politicians in several countries claim that they are carefully reconsidering the features of their supervisory architectures and the role of the central banks
- Two **(intertwined)** key questions: How to design the supervisory architecture? How to involve the central bank?
- The speech analyses the state of affairs on the topic
- We define supervision as the activity that implements and enforces regulation. The focus is on **micro-prudential supervision**



Outline

- The speech is organized as follows.
- **Part One** discussed the role of the central banks in the financial supervision architecture in **a cross-country perspective** and **before the financial crisis**, drawing upon a database that includes **102** countries for the period **1998-2008**.
- **Part Two** discusses the topic after the crisis

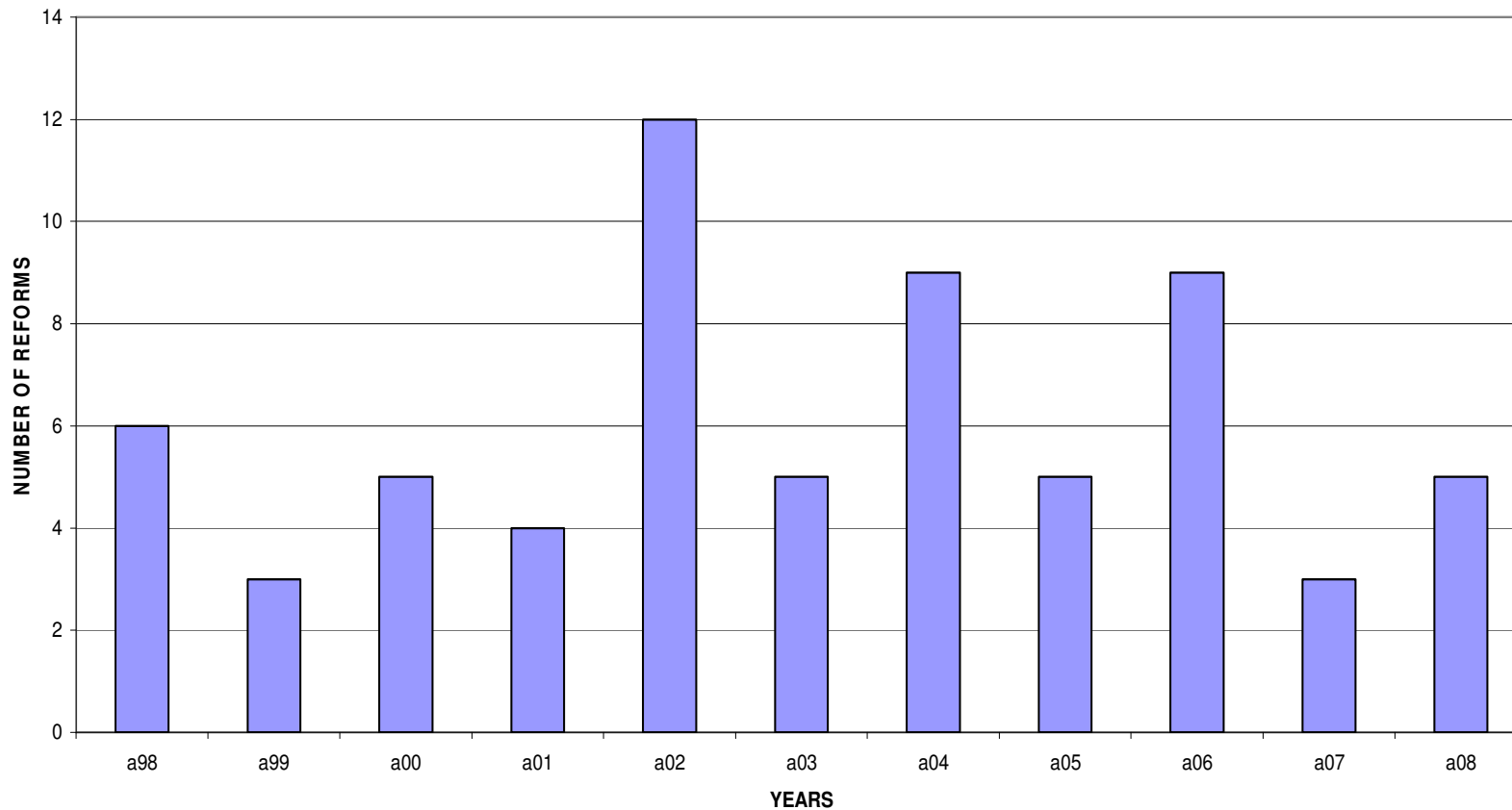
Before the Crisis: Three Stylized Facts



- **First phenomenon:** Over the decade before the Crisis (1998-2008), many countries have seen **changes** in the **architecture** of financial supervision
- Where architecture of financial supervision means: **allocation of responsibilities among authorities**

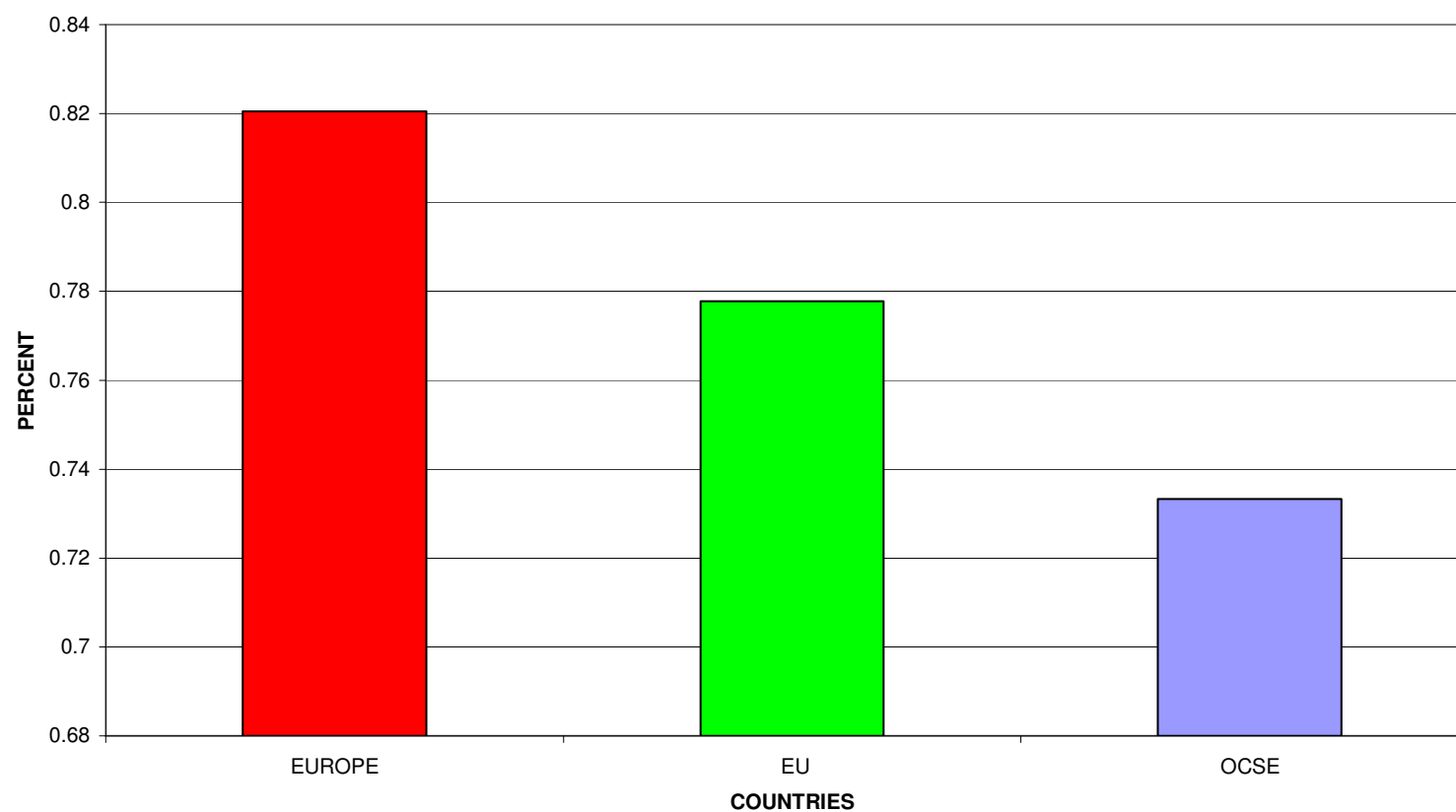
Given a sample of **102 countries**, **66** of them (**64%**) did a reform of the financial supervision architecture (Reform = establishing a new supervisory authority and/or changing the powers of one - at least – of the already existing agencies)

FIGURE 1 REFORMS OF THE SUPERVISORY ARCHITECTURES PER YEAR (1998-2008)



The reforming trend is even more evident when we add a regional and country income perspective: the European, the EU and OECD countries count for of 82%,77% and 73% of the countries that have undertaken reforms.

FIGURE 2 REFORMS OF THE FINANCIAL ARCHITECTURES (1998-2008, %)



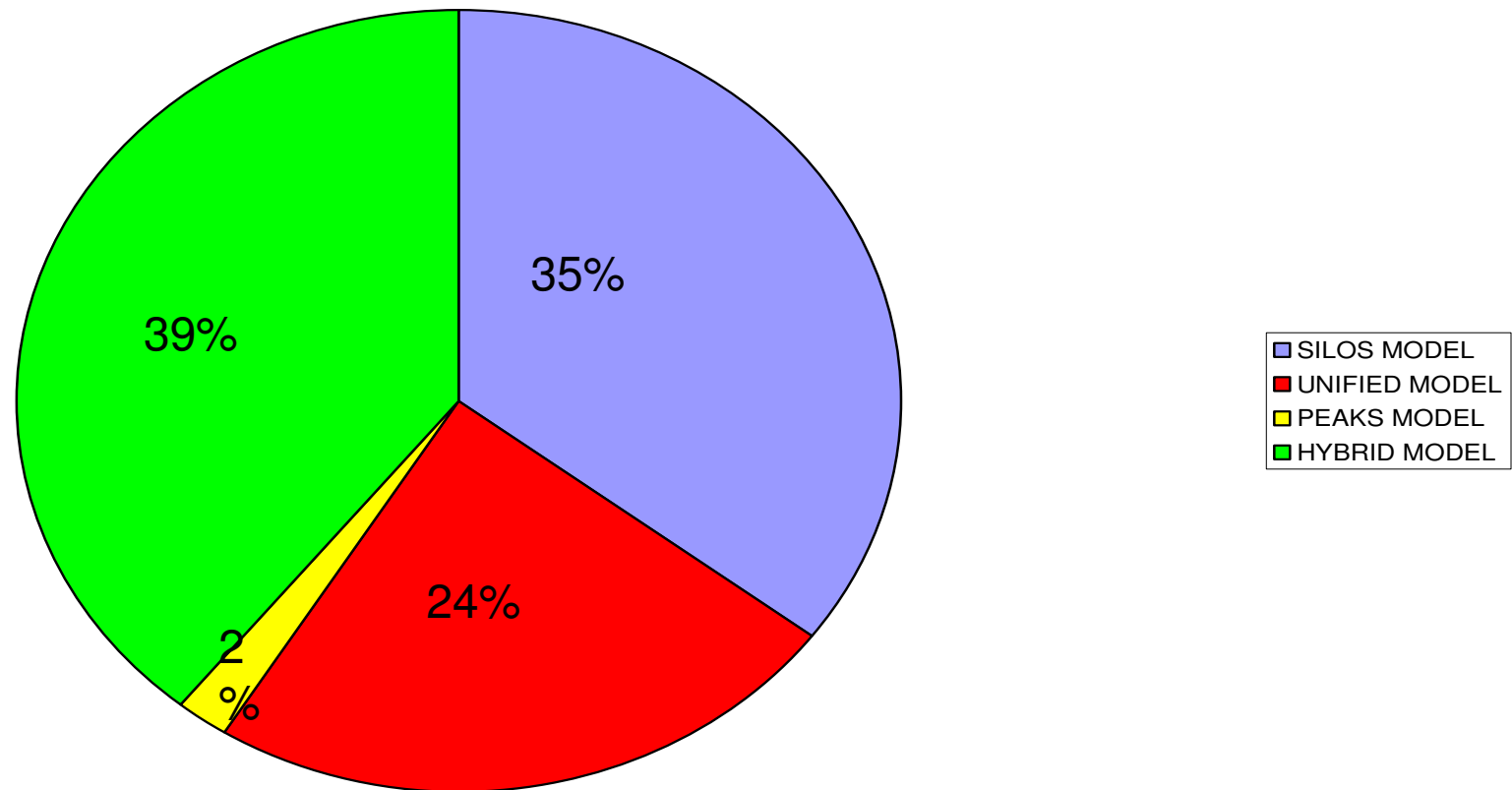


The Stylized Facts: 2

- **Second phenomenon:** given the **traditional** type of supervisory regime:
- The **multi-authorities (silos) model:** separate agencies for banking, securities and insurance supervision
- In the last decade an increasing number of countries shows a trend towards the establishment of **innovative models:** the **unified model**; the **peak model**

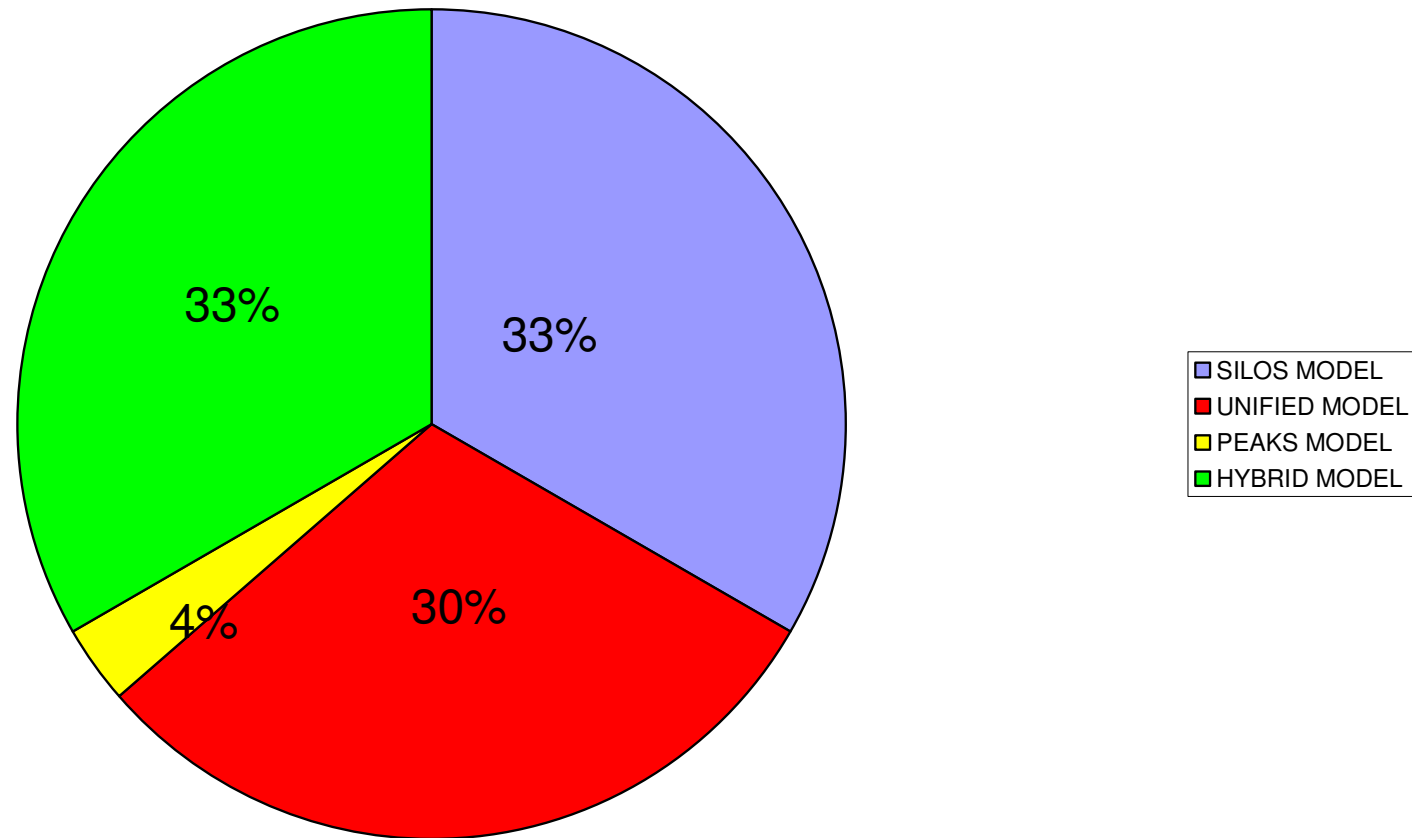
State of Affairs

FIGURE 3 MODELS OF FINANCIAL SUPERVISION ARCHITECTURES (102 COUNTRIES)



State of Affairs

FIGURE 4 MODEL OF FINANCIAL SUPERVISION REGIMES AFTER THE REFORMS (66 COUNTRIES)



State of Affairs



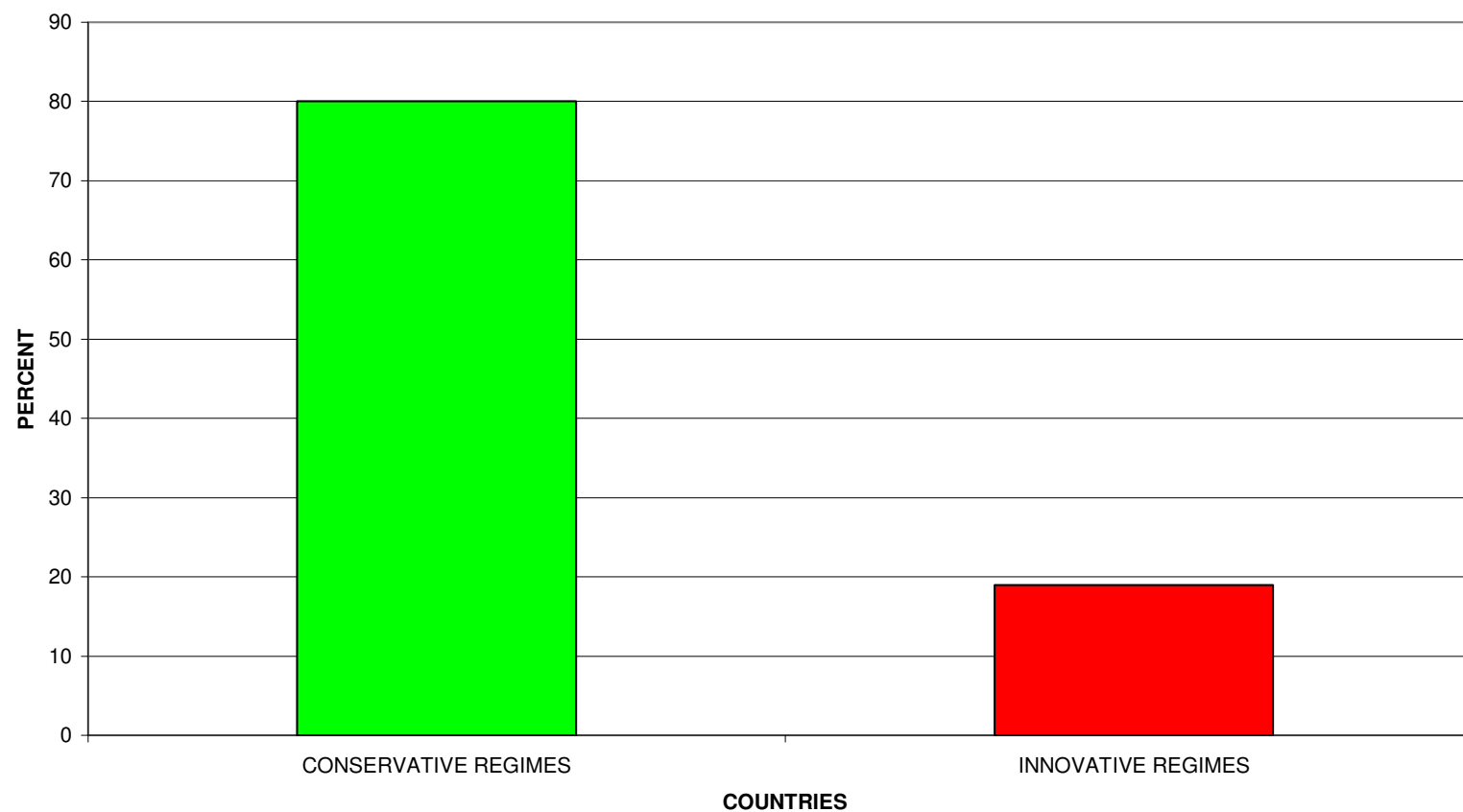
- Then: **34 percent** of the countries which implemented a reform adopted an **innovative** regime of supervision – unified or peaks regime – while the remaining 66 percent chose a “**conservative**” approach, i.e. maintaining the more traditional regime (silos or hybrid regime).



The Stylized Facts: 3

- Third phenomenon:

FIGURE 5 CENTRAL BANK AS MAIN SUPERVISOR: CONSERVATIVE VS INNOVATIVE REGIMES (%)





The Stylized Facts: 3

- **Third phenomenon:**
- the “**conservative**” countries show a common feature, i.e. the central bank is the sole (or the main) banking supervisor in the 80 per cent of the sample (61 on 76).
- At the same time, the adoption of an **innovative** model of supervision is centred on the role of the central bank in only very few cases (5 on 26 cases, 20 per cent).
- **In other words the conservative approach seems to be more likely to occur when the central bank is deeply involved in supervision, while the innovative approach seems to be more likely to occur if the main supervisor is different from the central bank.**

Key Question in 1,2,3: Supervision Unification and Central Bank



- Therefore, it is not surprising that the literature on the economics of the financial supervision architectures zoomed in on this fact:
- After a wave of reforms, an increasing number of countries seem to show a trend towards a certain degree of unification of powers, which in several cases has resulted in the establishment of unified regulators, that are different from the national central banks.
- How to measure it?



Measuring Institutions

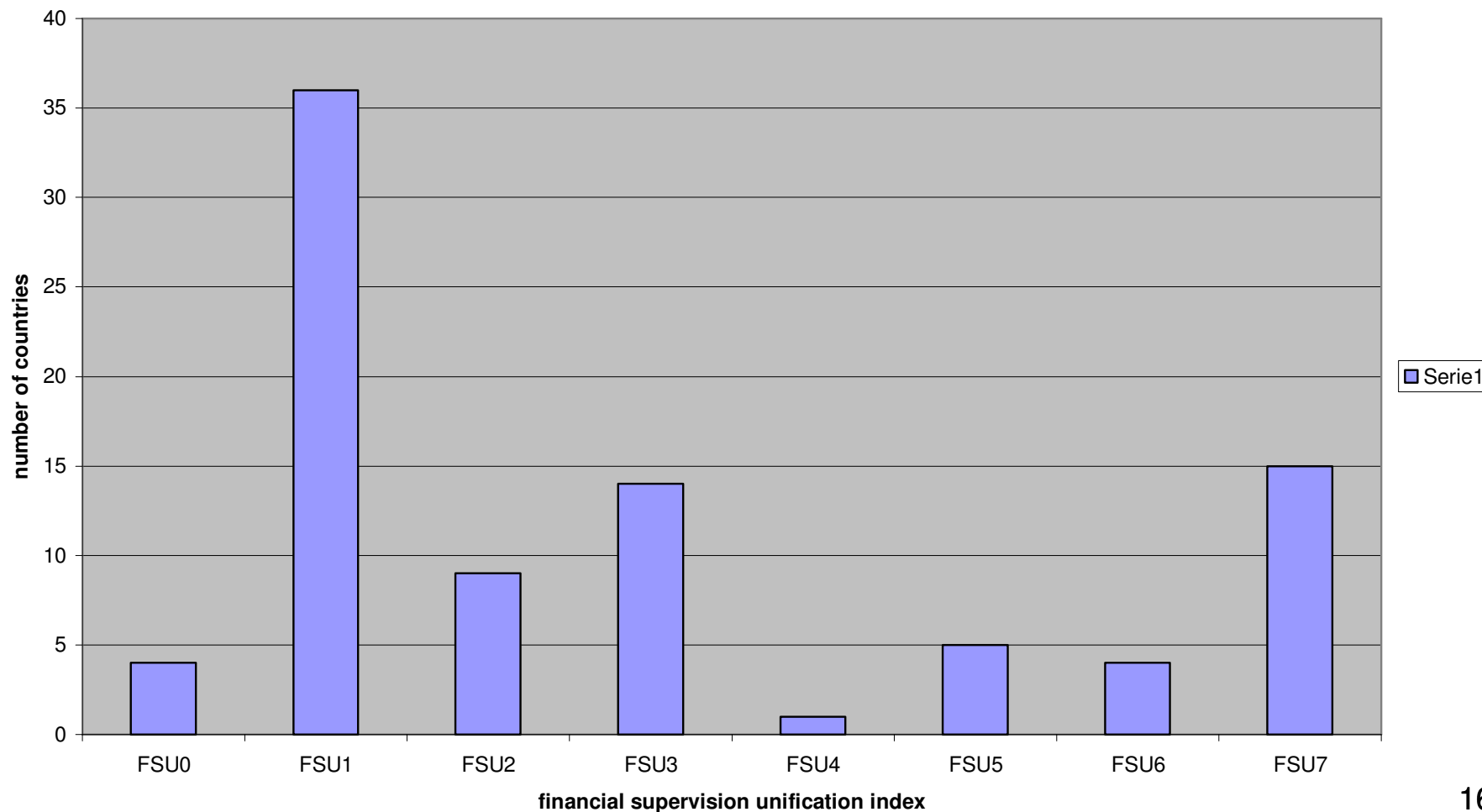
- **The institutional Analysis:** building up indexes of the features of the financial supervisory architectures
- First, how to measure the unification effect? Before the crisis...

The Financial Supervision Unification (FSU) Index



- An index was proposed (2004) analysing how many authorities in each country examined are empowered to supervise the three traditional sector of financial activity: banking, securities markets and insurance
- It was assigned a numerical value to each type of regime, considering simply the concept of unification of supervisory powers: the smaller the number of the authorities, the greater the unification, the higher the index value

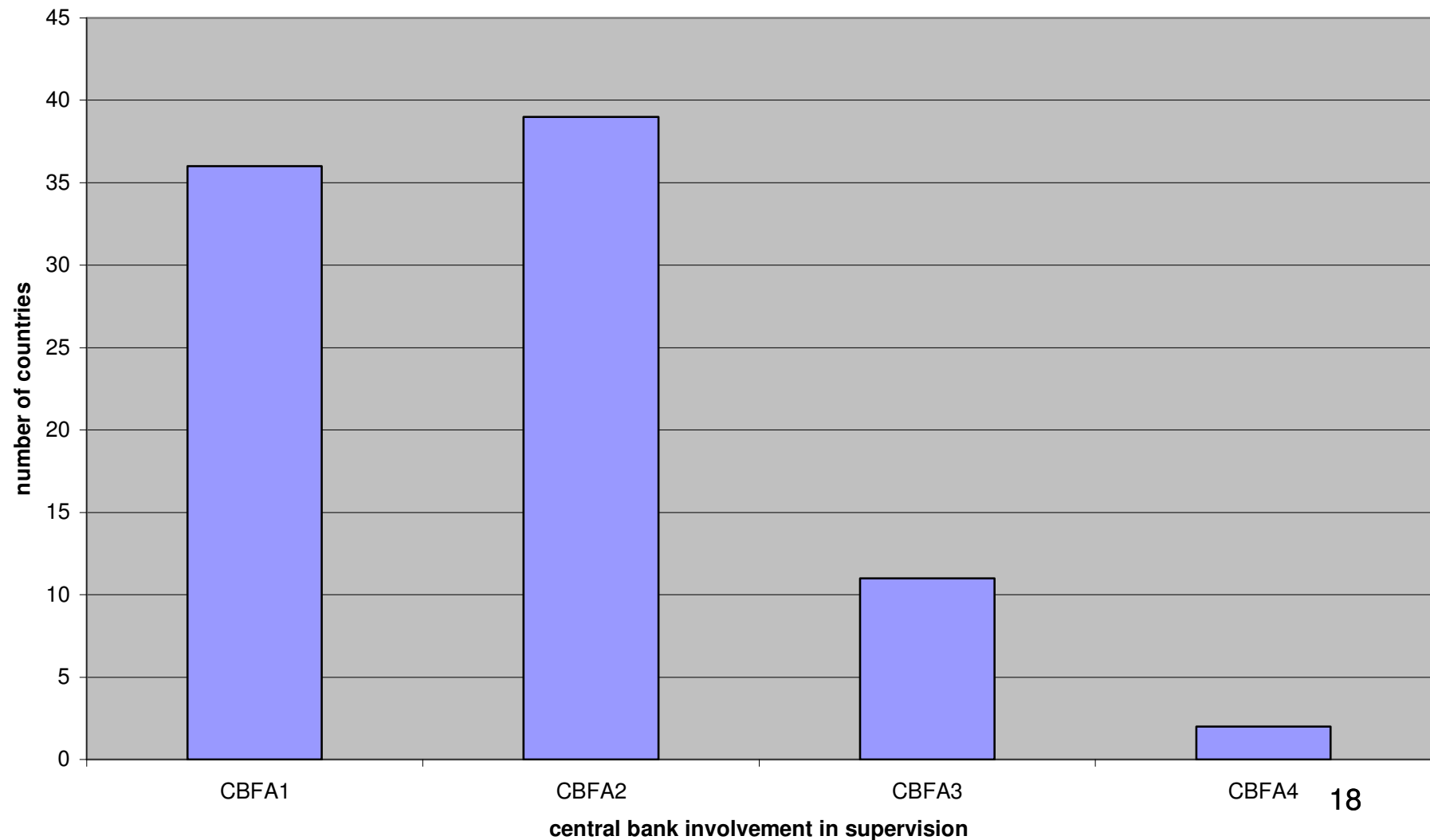
The Figure shows the distribution of the FSU Index in 2006 (countries=88). On the one hand there were countries (40) with a low unification level (0 or 1). On the other countries (15) that established a unified supervisor, with the highest level of unification (7)



The Central Bank as Financial Authority Index (CBFA) Index

- Secondly, we need an index to analyse which role the CB plays in the supervisory regime (banking, securities markets and insurance)
- An index was proposed (2004); it was assigned a numerical value to each type of regime, considering simply the concept of CB supervisory powers: the greater the number of sectors where the CB is involved, the greater the involvement, the higher the index value.

The Figure shows the distribution of the CBFA Index in 2006 .
In the majority of countries (39) the central bank was the main bank supervisor
(the Index is equal to 2), while in few countries (2) the central bank was
monopolistic in the overall financial supervision (the Index is equal to 4).

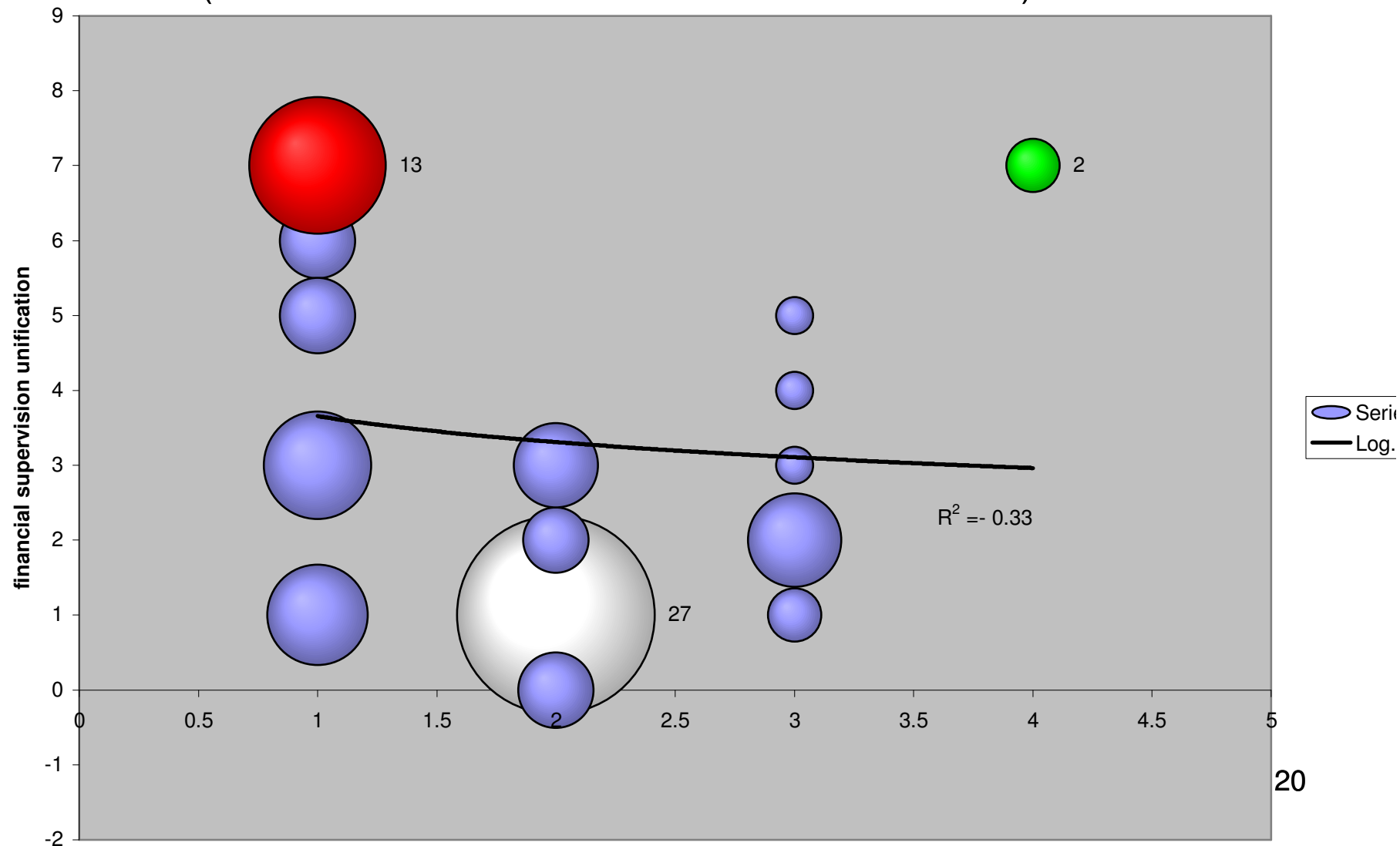


FSU & CBFA: cross section



- Finally, considering both indexes

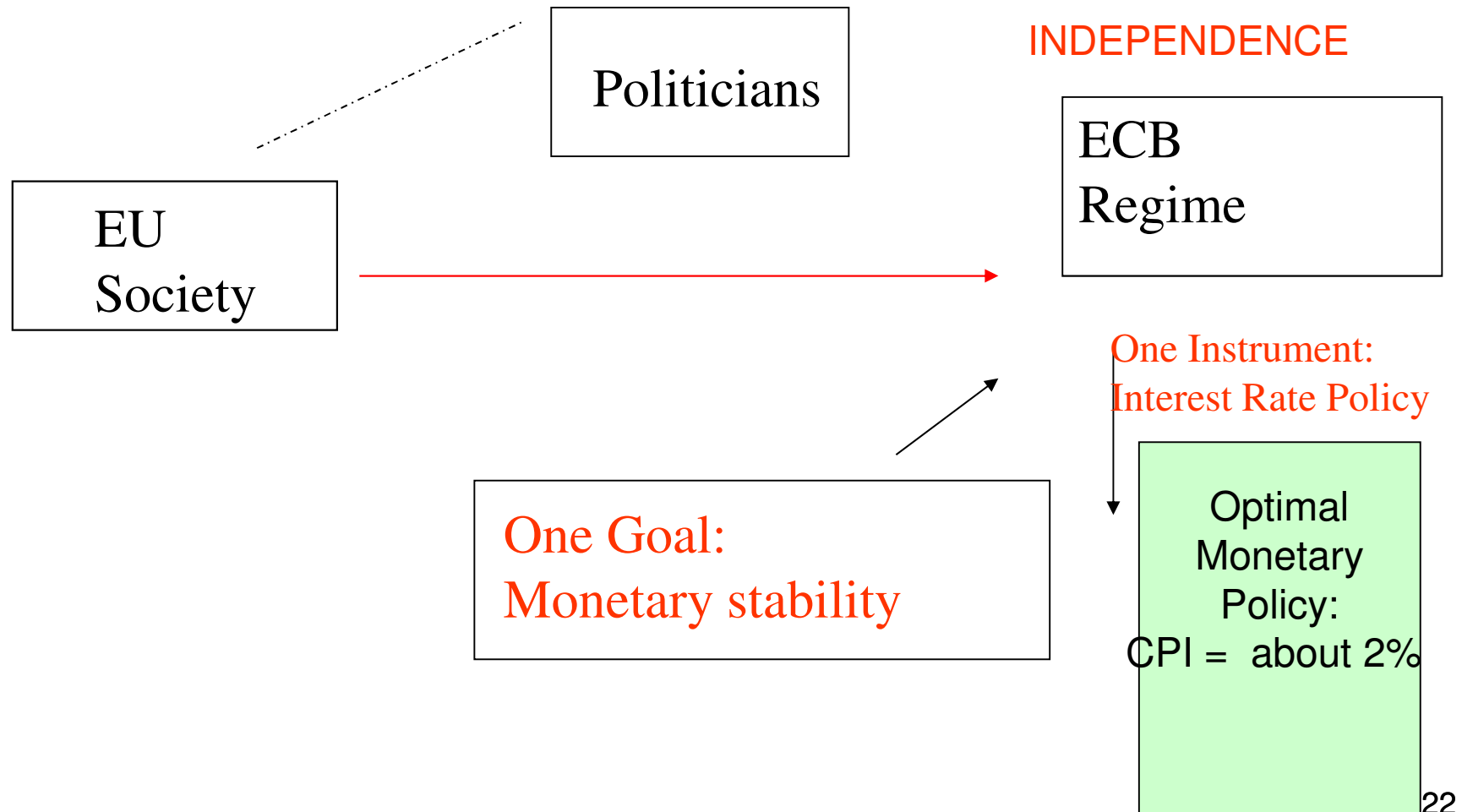
Figure 8 brings both indexes together and shows that the two most frequent regimes were polarised: on the one hand, Unified Supervisor regime (13 cases, red ball); on the other, Central Dominated Multiple Supervisors regime (27 cases, white ball). The Figure seems to depict a trade off (**CENTRAL BANK FRAGMENTATION effect**).



BEFORE THE CRISIS: CB OUTSIDE SUPERVISION

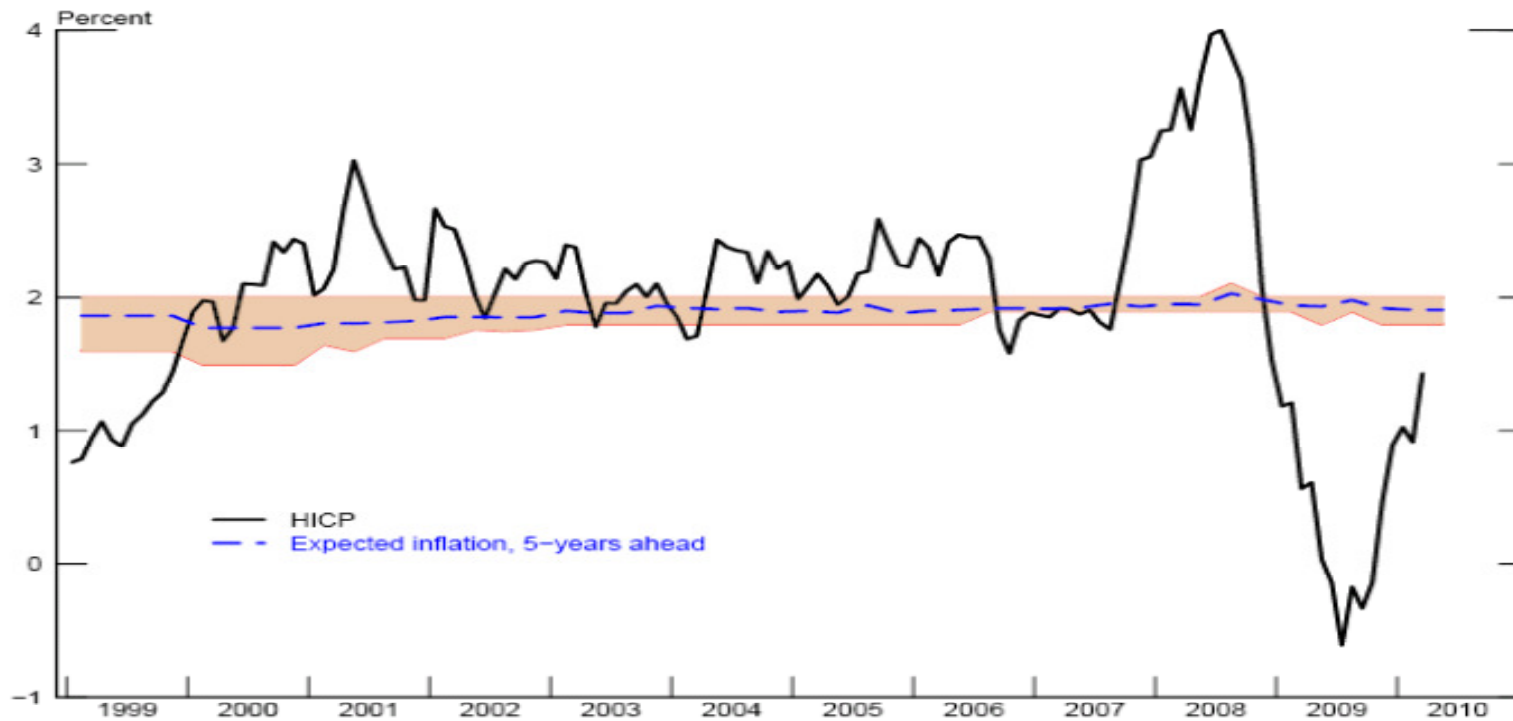
- In conclusion, two trends:
- A) supervisory **unification outside the central bank**
- B) central bank **specialisation** as monetary agency:
- Central Bank, as independent authority (**rules of the games**) cares about monetary stability (**one goal**) using the interest rate policy (**instrument**): see below ...

CB outside SUP: the ECB



The ECB: a success story

Inflation and Long-Term Inflation Expectations



Notes: HICP shows the rate of increase of the index over 12 months. Expected inflation is the average five-year ahead forecast reported in the ECB SPF. The thin red lines denote the 25% and 75% percentiles and the shaded area reflects the interquartile range of the cross-sectional distribution of the individual responses.

During the Crisis

- Key Phenomenon: Be a Central Bank (monetary agent) in ordinary times can mean to care about financial stability in extraordinary times

Central banking and supervision today

- Open questions in
- A) goal setting
- B) instrument setting
- C) rule setting

Goal Setting: Open Questions

	MONETARY STABILITY AS UNIQUE GOAL: INDEXES AND LEVELS	CENTRAL BANK GOALS: HOW MANY?
NORMAL TIMES		
EXTRAORDINARY TIMES		

Goal setting: Open Questions

- Then:
- **a)** What Monetary Stability mean? **a1)** Which level of Consumer Price Index (2 o 4%)? **a2)** How many indexes? Consumer Price, Asset Price
- **b)** How may goals? Inflation, financial stability, growth as well...
- **c)** Contingent goals? How to distinguish between NT and ET?

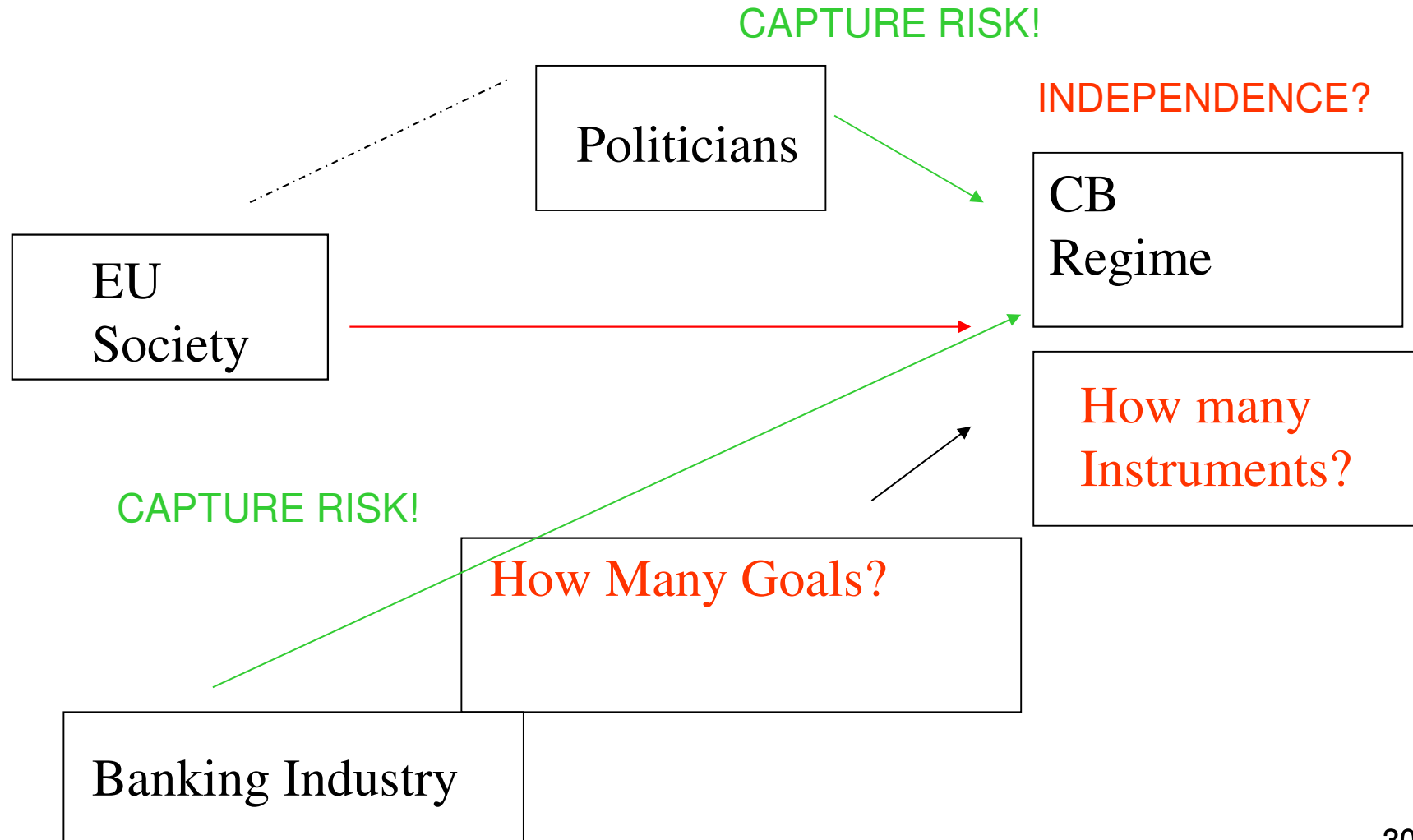
Instrument Setting: Open Questions

	MONETARY POLICY TOOLS: HOW MANY?	NEW DIMENSION: FINANCIAL INDEPENDENCE
NORMAL TIMES		
EXTRAORDINARY TIMES		

Instrument Setting: Open Questions

-
- **a)** How many instruments? Interest rates, BS composition, capital ratio
- **b)** Contingent goals? How to distinguish between OT and ET?
- **c)** Furthermore: new dimension of economic independence: financial independence
- **But ...** Given 1),2) how to design the relationships between government, parliament and CB? (see below)
-

Rule Setting: Open Questions

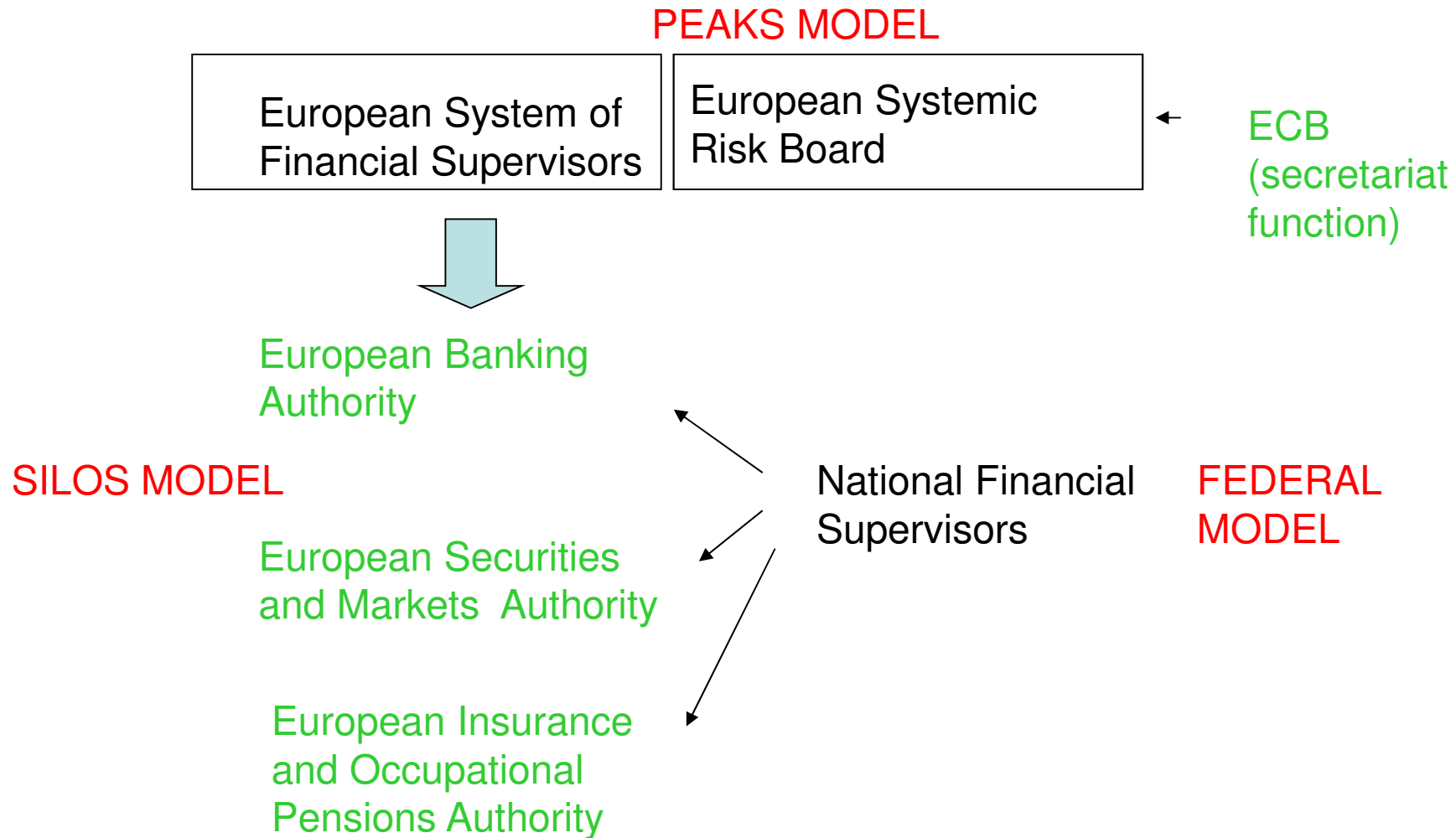


Trends after the crisis

- Two emerging trends:
- A) stop in supervisory **unification**
- B) **central bank involvement** in macro supervision

- Let me consider the EU and US new regimes

The EU Regime: hybrid model





The EU Regime

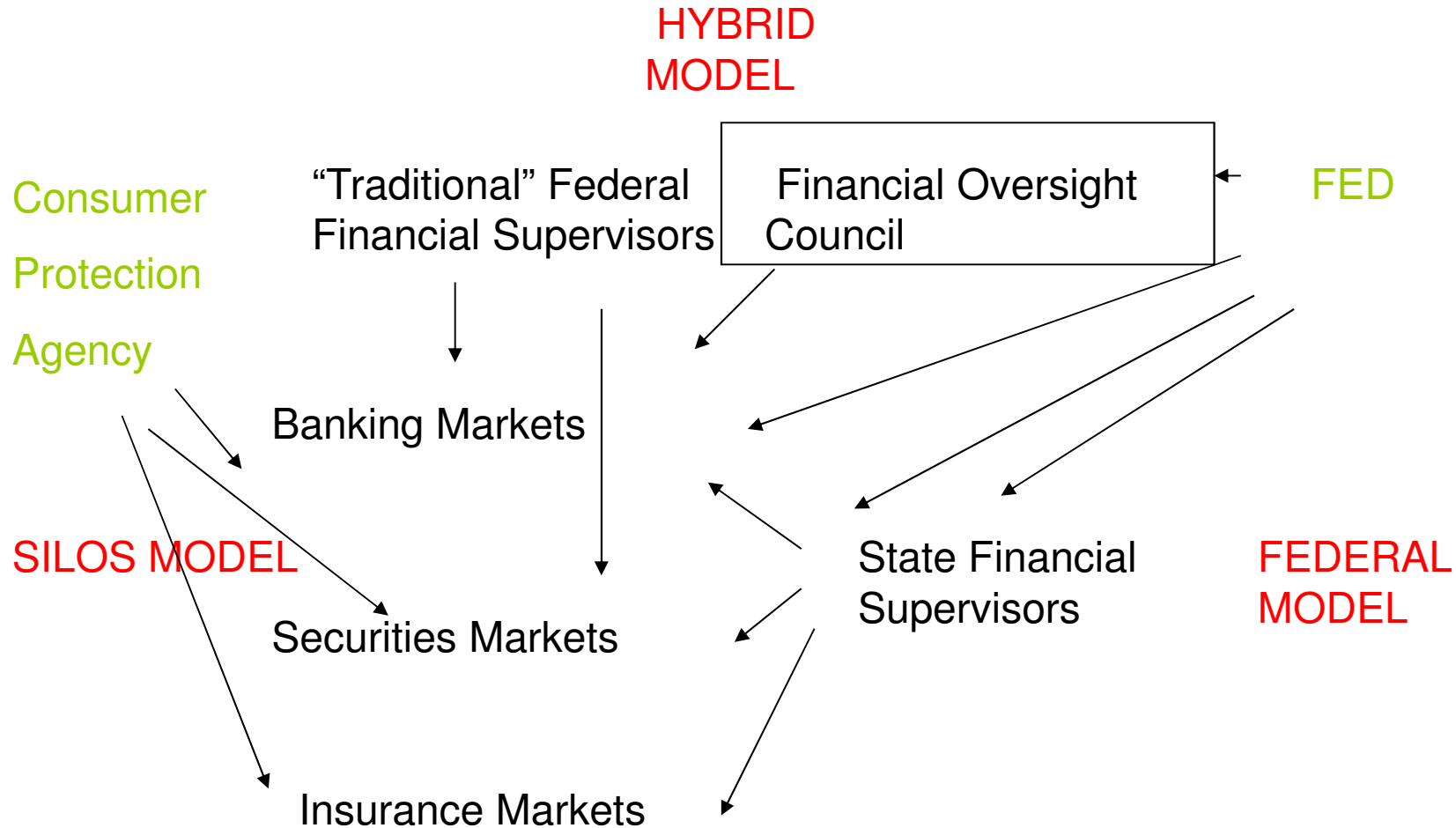
- * We focus on the European System of Financial Supervision (**ESFS**), the micro prudential framework.
- * The framework, consisting of three sectoral authorities at the supranational level, belongs to the category of the **silos approach** to supervision.
- * The European policymakers chose a conservative approach instead of an innovative one.



The ECB role

- * Regarding the position of the central bank, on the one hand the European Central Bank (ECB) is formally **outside** the ESFS.
 - * But on the other hand the Commission creates the **European Systemic Risks Council** (ESRC), and
 - * The ECB will provide the Secretariat to the ESRC as well as analytical, administrative and logistic support .
-
- * If we consider the ESFS – ESRC framework as an **integrated EU supervisory structure**, we can say that the European Commission model is a **new and original case of central bank fragmentation effect**: a multiple authorities regime with a powerful central bank.

The US Regime (2010): hybrid model





The US Regime

- The US law confirmed the **hybrid regime with many authorities**, which has traditionally characterized the US system, with some supervisors monitoring more than one segment of the market (such as the FED or the new Consumer Protection Agency) and others only one.
- The US law **does not follow the trend toward supervision consolidation**, notwithstanding the strong impression during the crisis that the fragmented supervisory setting was in fact incapable of monitoring the integrated, interconnected and complex reality of US financial markets. The proposal preferred to promote **interagency cooperation, instead of agency consolidation**.



The FED role

- * Regarding the position of the central bank, the FED is more deeply involved in supervision.
- * Again a **new case of central bank fragmentation effect**: a multiple authorities regime with a powerful central bank.



(Tentative) Conclusion

* Before the crisis: CBEF = where several authorities are present, the central bank is likely to be deeply involved in supervision.

* The new proposals seem to follow the same pattern, although in a original shape: in both cases settings with multiple authorities are proposed, with an increasing involvement of the central banks – the ECB and the FED - using the “new” territory of the macro prudential supervision.