The Elephant in the Basel Room

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Elephant in the room

Elephant in the room is an English metaphorical idiom for an obvious truth that is being ignored or goes unaddressed.

It is based on the idea that an elephant in a room would be impossible to overlook; thus, people in the room who pretend the elephant is not there have chosen to avoid dealing with the looming big issue.

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- Basel Committee recommendations ignore generally accepted principles and standards in the economics of regulation
- This presentation justifies this statement with reference to
  - → Treatment of procyclical effects of regulation
  - → Computation of risk-weighted assets
  - → Political economy of bank supervision

Part 1

Procyclical effects of regulation

Early concerns about procyclicality

→ Kashyap and Stein (2004)

> "In a downturn, when a bank's capital is likely to be eroded by loan losses, its existing (non-defaulted) borrowers will be downgraded (…) forcing the bank to hold *more* capital against its current loan portfolio. To the extent that it is difficult or costly for the bank to raise fresh external capital in bad times, it will be forced to cut back on its lending activity, thereby **contributing to a worsening of the initial downturn**."

The response of the regulators (i)

- Before onset of crisis: Almost complete neglect

> "In the discussion on the possible effects of Basel II, the issue of procyclicality has often been center stage (…) I continue to think that this is an important issue, which needs to be monitored but that many times **it has been exaggerated**."
>
> Jaime Caruana (2007)

The response of the regulators (ii)

- At the beginning of crisis: High profile in G-20 statements

> "The IMF, the expanded FSF, and other regulators and bodies should develop **recommendations to mitigate procyclicality**, including the review of how valuation and leverage, bank capital, executive compensation, and provisioning practices may exacerbate cyclical trends."
>
> *G-20 Washington Summit*, November 2008

The response of the regulators (iii)

- Follow up by Basel Committee: Very disappointing
- Addressing procyclicality in Basel III → stated objectives
  - Dampen any excess cyclicality of minimum requirements
  - Promote more forward looking provisions
  - Conserve capital to build buffers that can be used in stress
  - Protect banking sector from excess credit growth

The response of the regulators (iv)

- My assessment
  - Dampen any excess cyclicality of minimum requirements
  - Promote more forward looking provisions
  - Capital conservation buffer
  - Countercyclical capital buffer

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  - Countercyclical capital buffer

    → Very poorly designed

The countercyclical capital buffer

- Extension of capital conservation buffer (up to 2.5% of RWAs)

  → Restrictions on distributions if requirement is not met

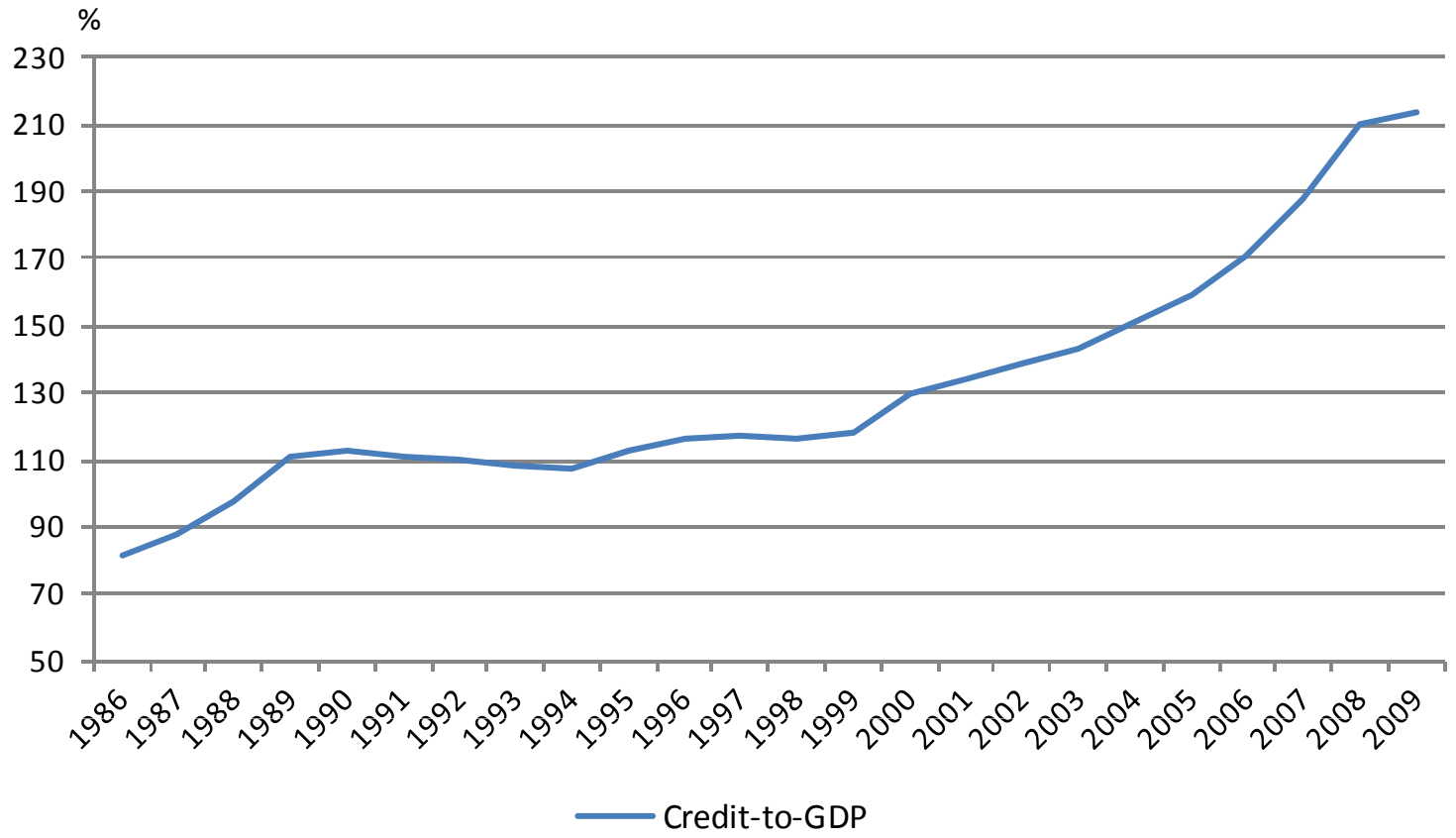
- Common reference point for taking buffer decisions

  → Aggregate private sector **credit-to-GDP gap**

The problem with the credit-to-GDP gap

- Results is Repullo and Saurina (2011)
- Negative correlation with GDP growth
  - → Gap would signal to reduce capital in good times
  - → Gap would signal to increase capital in bad times
- Conclusion: It would exacerbate procyclicality of regulation

Credit-to-GDP ratio (UK)



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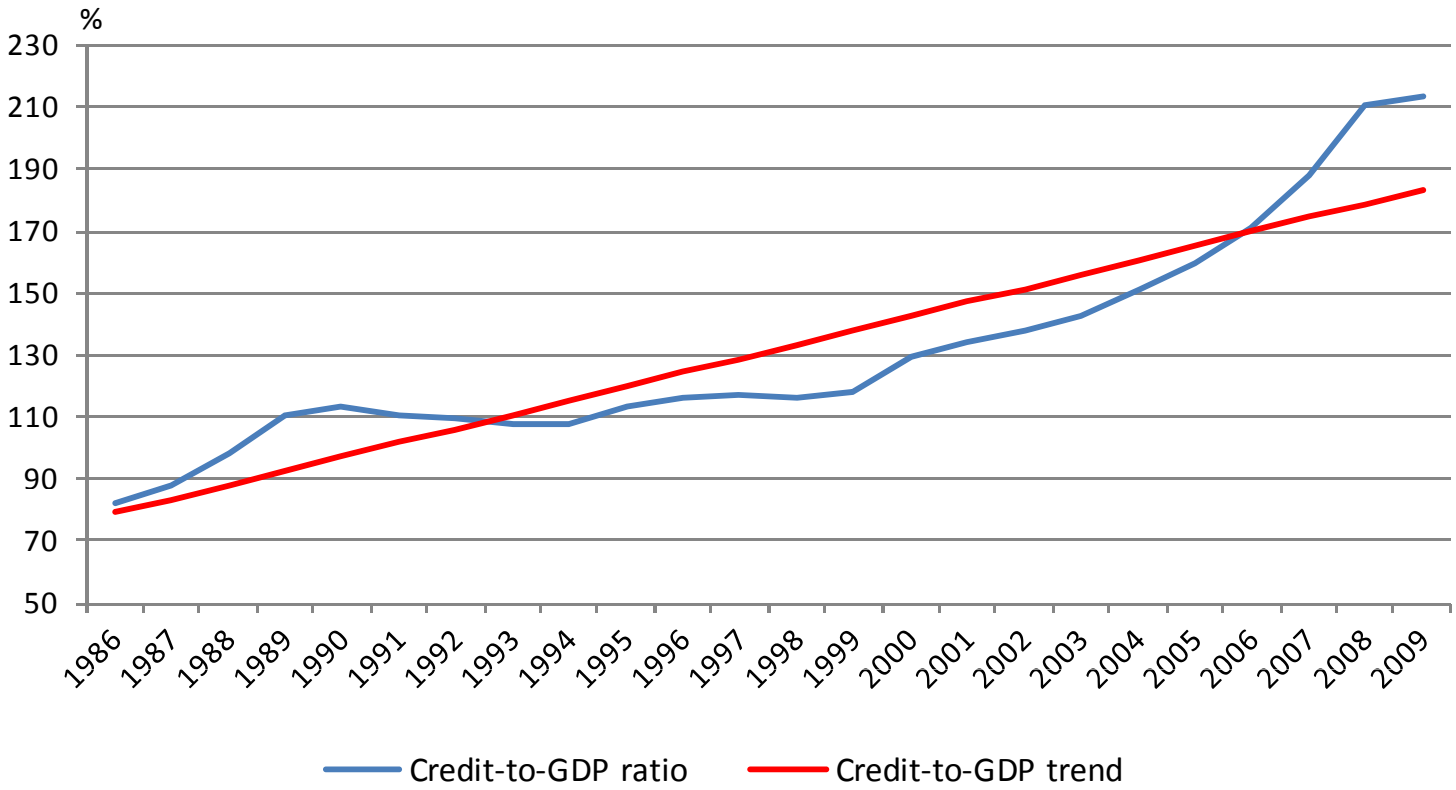

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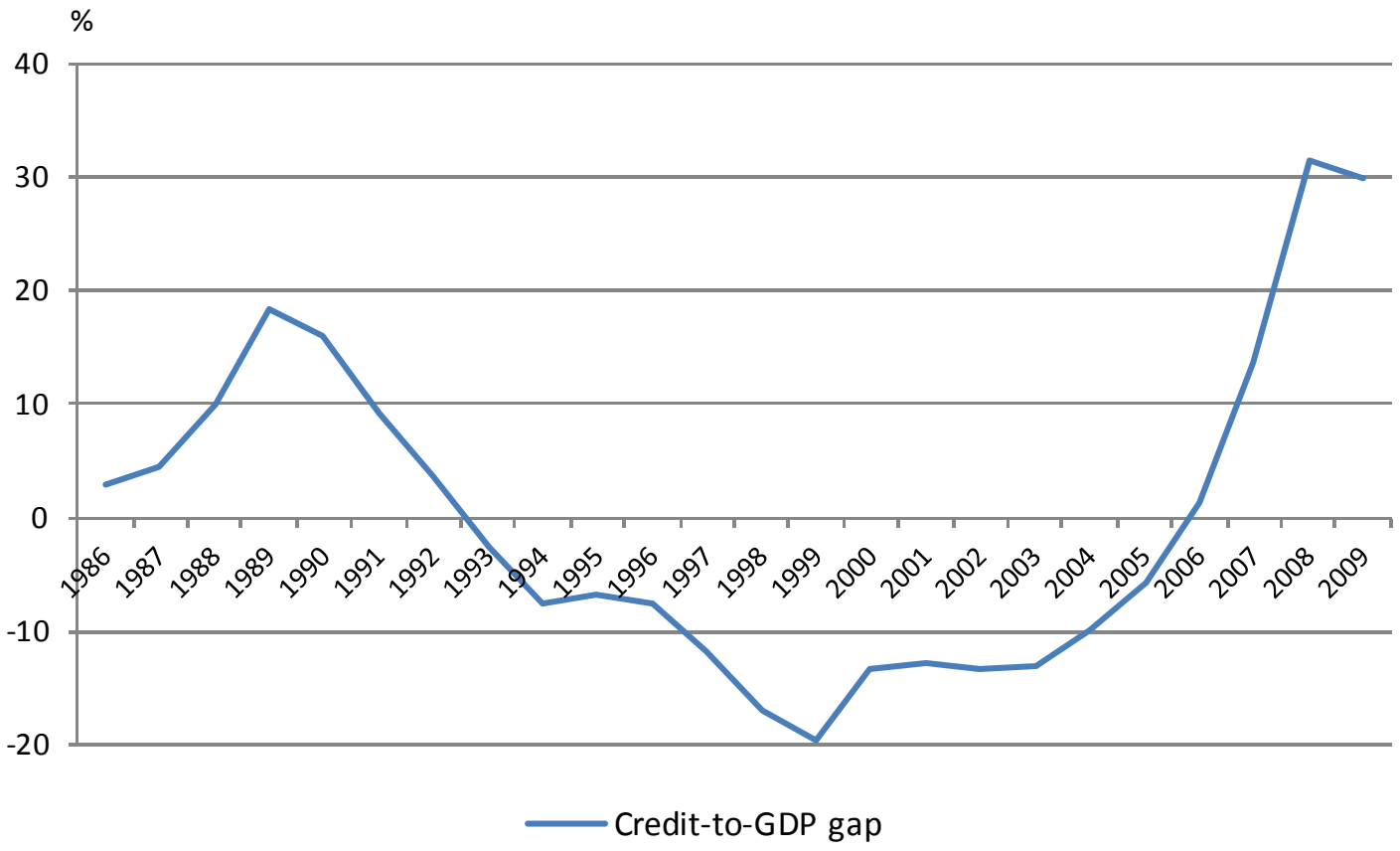
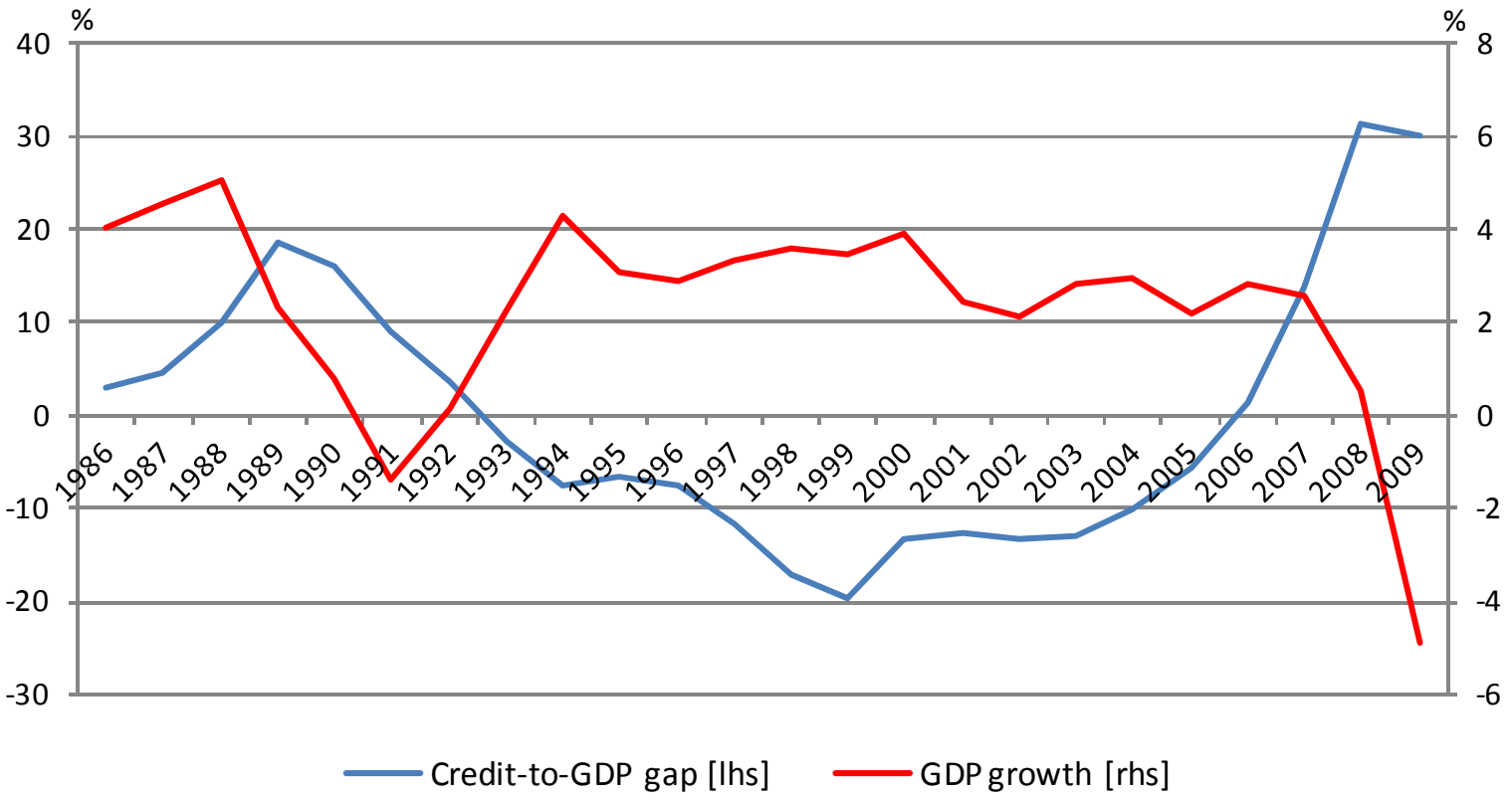


Credit-to-GDP gap & GDP growth (UK)



Correlations with GDP growth

World Bank data, 1986-2009

	Gap	Buffer
France	– 0.61	– 0.65
Germany	0.07	– 0.10
Japan	– 0.26	– 0.28
Spain	– 0.43	0.05
UK	– 0.72	– 0.67
USA	– 0.23	– 0.18
Average	**– 0.36**	**– 0.31**

An alternative approach

- Smooth output not inputs of Basel II formula

  → Adopt idea of "automatic stabilizers"

- Proposal in Repullo, Saurina and Trucharte (2010)

  → Use point-in-time ratings to compute requirements

  → Use multiplier (scaling factor) based on GDP growth

    – Multiplier greater than 1 in expansions

    – Multiplier smaller than 1 in recessions

Key question: Why did they get it so wrong?

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- There is no economics in Basel II

  → Purely statistical approach

  → Capital requirement k defined by condition

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- Need to bring economics into the picture

  → Maximize suitable social welfare function

  → Kashyap and Stein (2004) and Repullo and Suarez (2012)

Part 2

Computation of risk-weighted assets

Basel I and Basel II

- Basel I was based on coarse classification of bank assets

  → Too little risk-sensitivity

  → Possibility of regulatory arbitrage

- Basel II was explicitly designed to be risk-sensitive

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- **First problem:** Supervisors do not have relevant information
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- **First problem:** Supervisors do not have relevant information
- **Solution:** Delegate to the banks the calculation of risk-weights
- **Second problem:** How do we ensure that banks tell the truth?
- **Solution:** Check models used to compute risk-weights

Could this work in theory?

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- If banks know more about the risks in their portfolio
- Banks also know more about their models
- Significant scope for manipulation

The elephant revisited

- Again, there is no economics in Basel II

  → Implementation problem is basically ignored

- Need to look into **mechanism design theory**

  → Leo Hurwicz, Eric Maskin, and Roger Myerson

2007 Nobel Prize press release

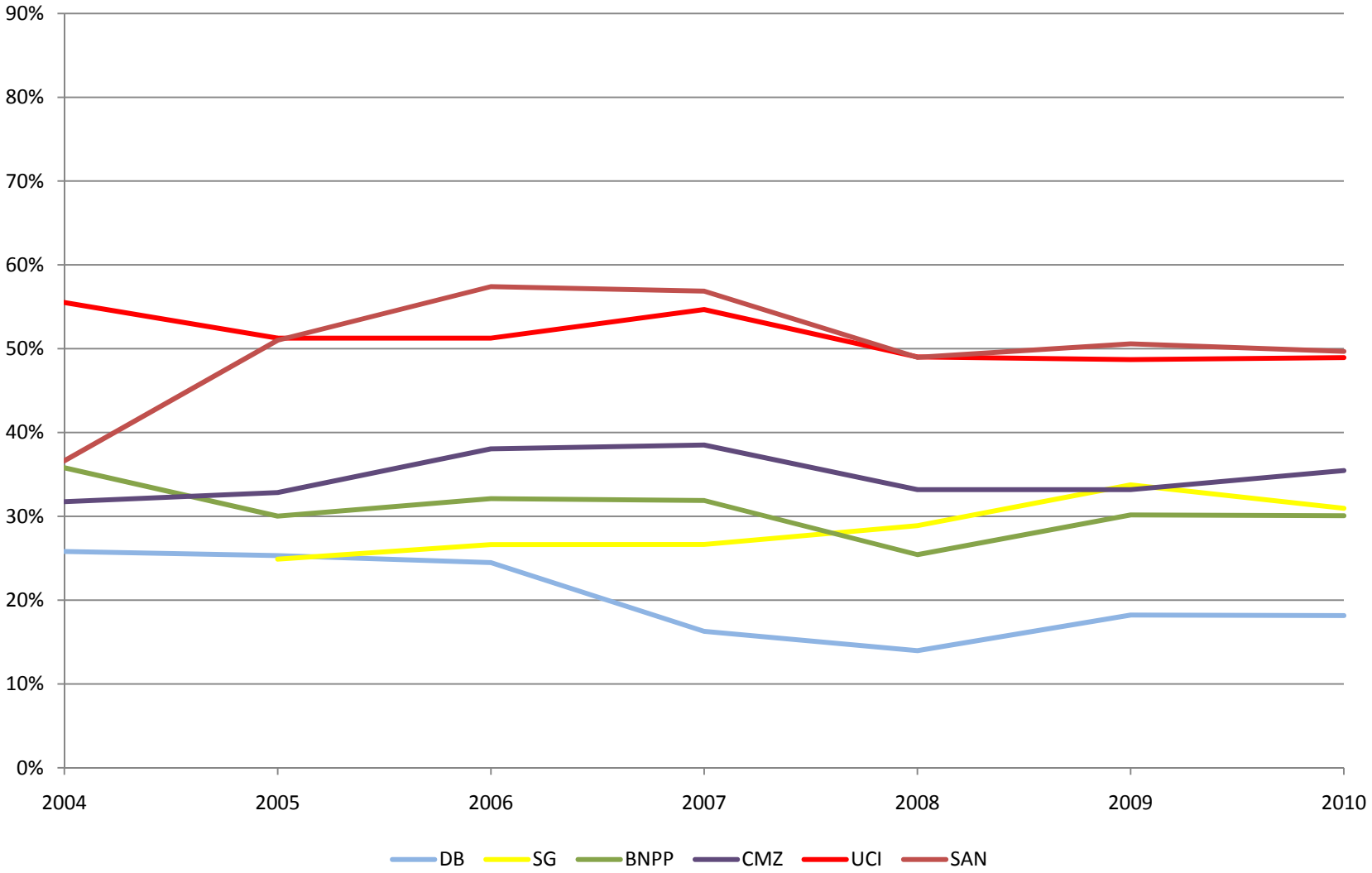
"How well do different institutions perform? What is the optimal mechanism to reach certain goal? **Is government regulation called for, and if so, how is it best designed?**

These questions are difficult, particularly since information about individual preferences and available production technologies is usually dispersed among many actors who may **use their private information to further their own interests**"

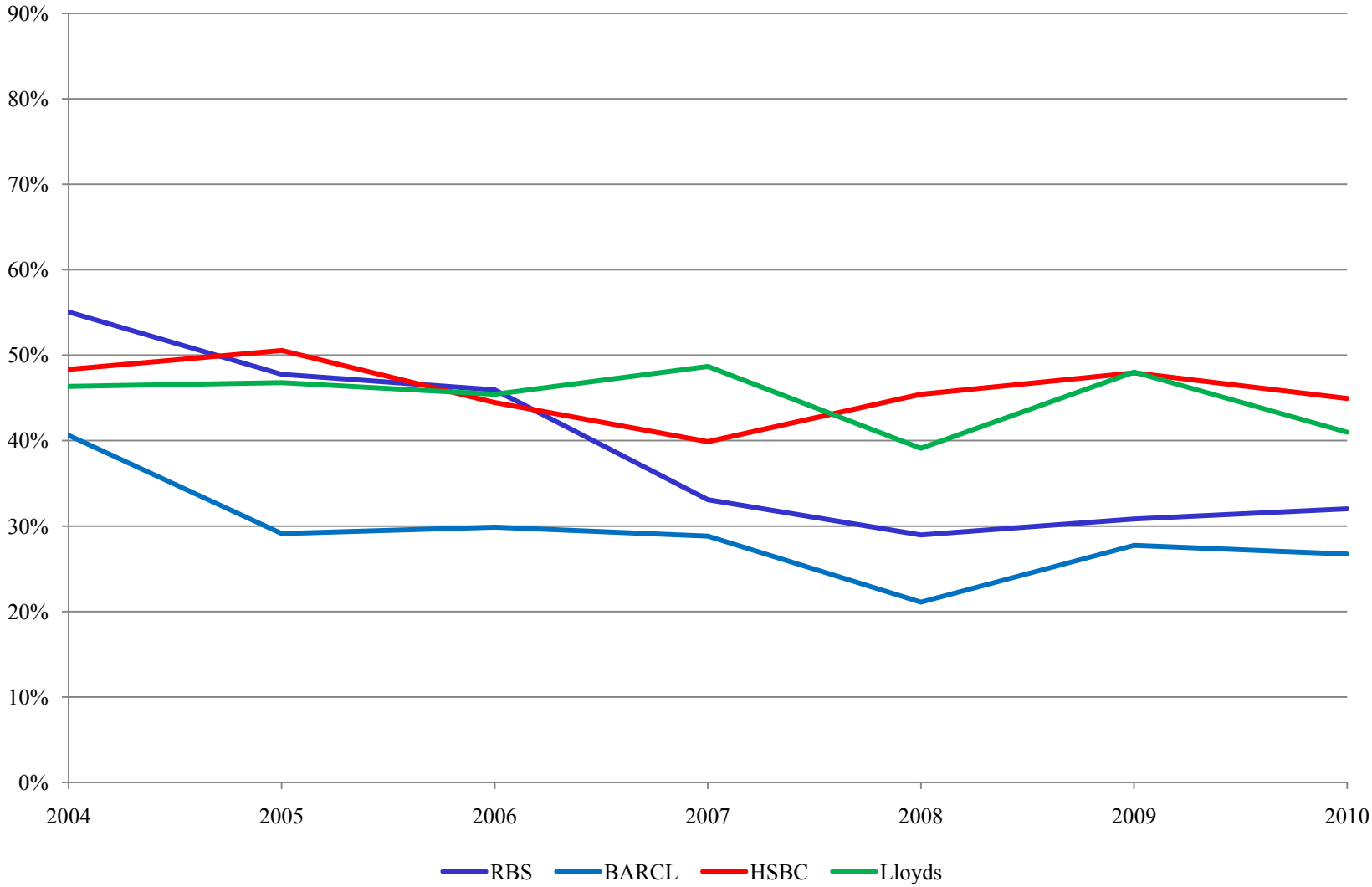
Could this work in practice?

- Loot at ratio of risk-weighted-assets (RWA) to total assets (A)
- Sample of banks in EUR, UK, CH, and US
- RWA/A should have increased dramatically with crisis…

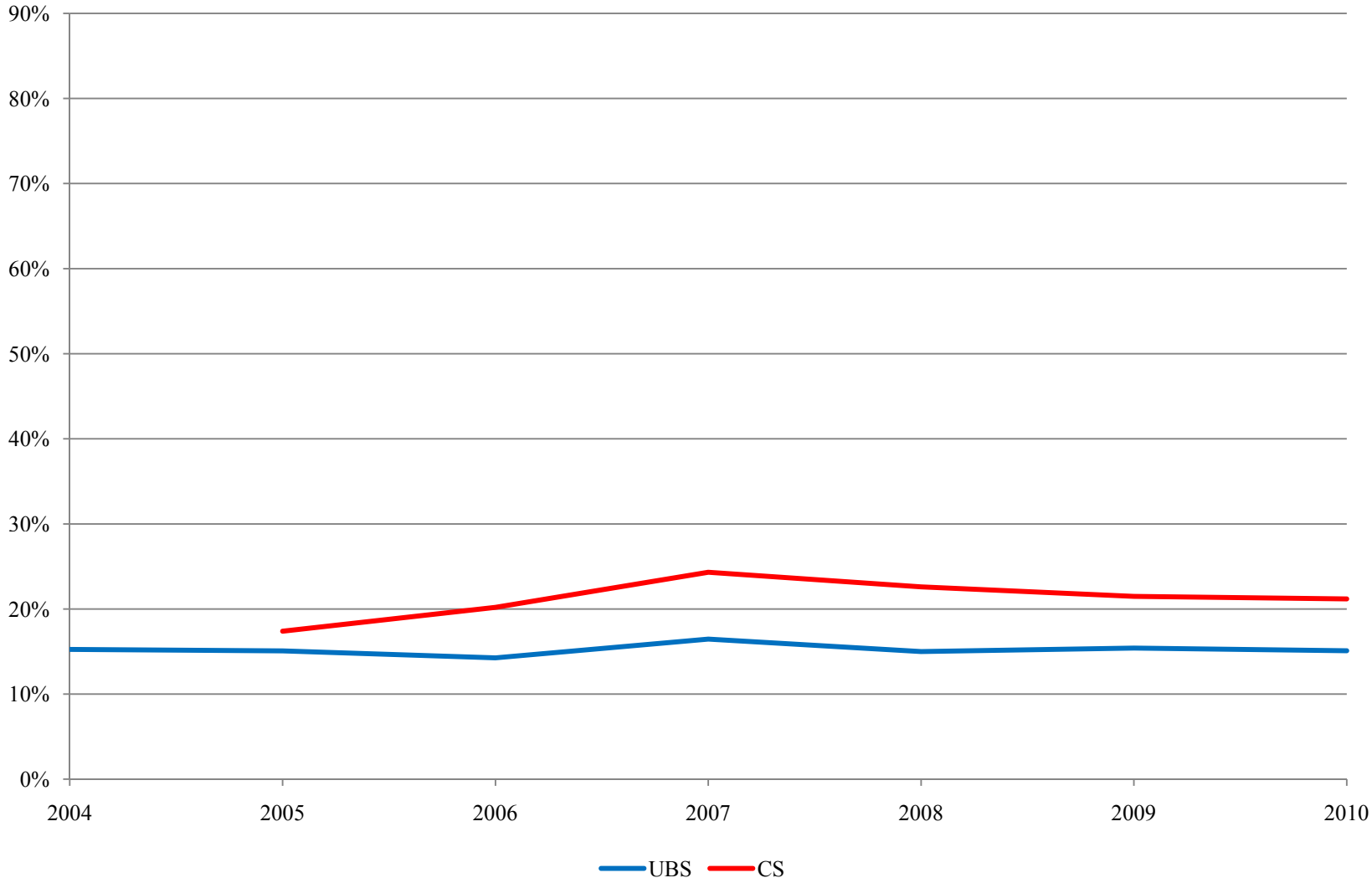
RWA/A: EUR banks



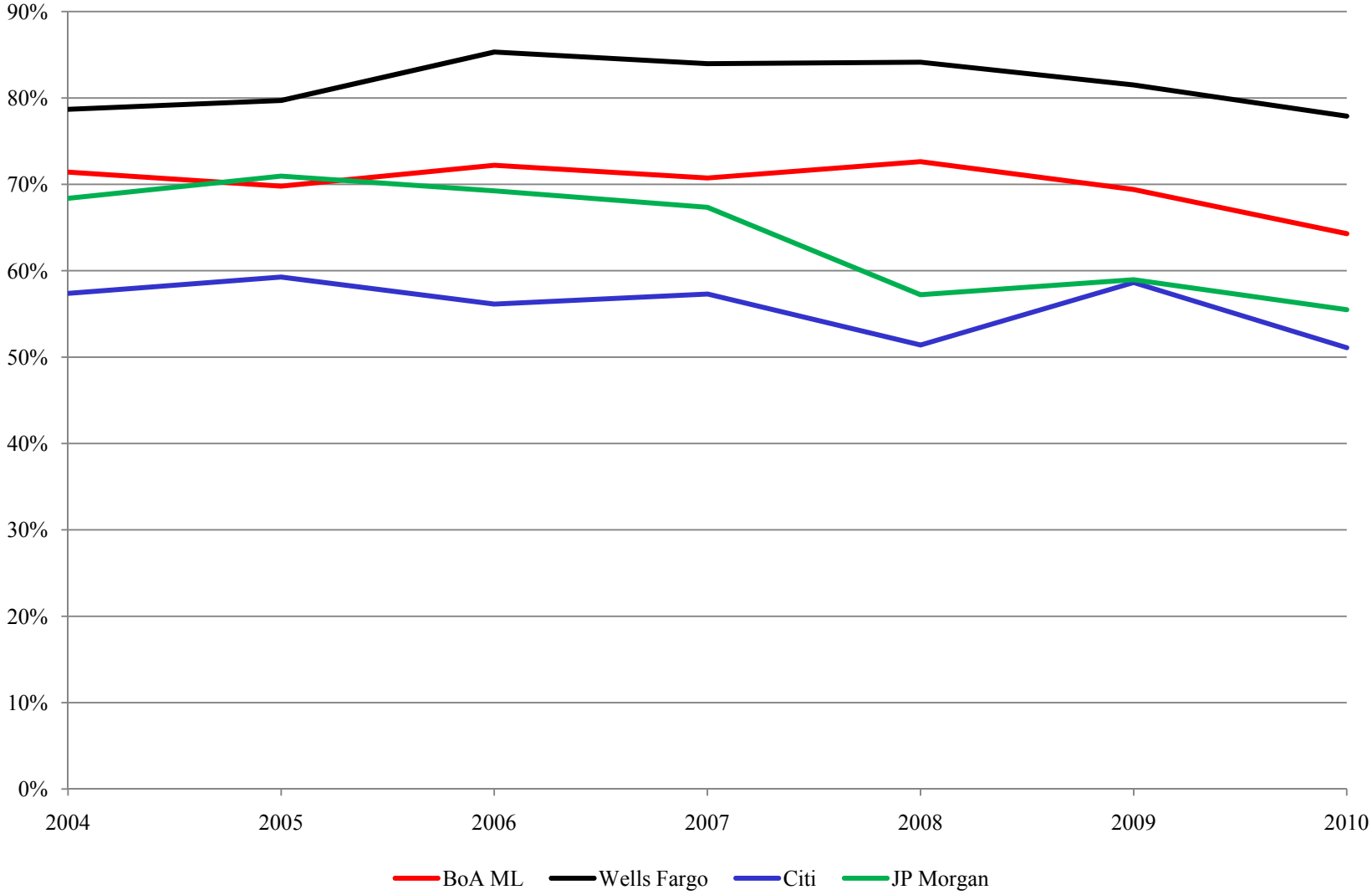
RWA/A: UK banks



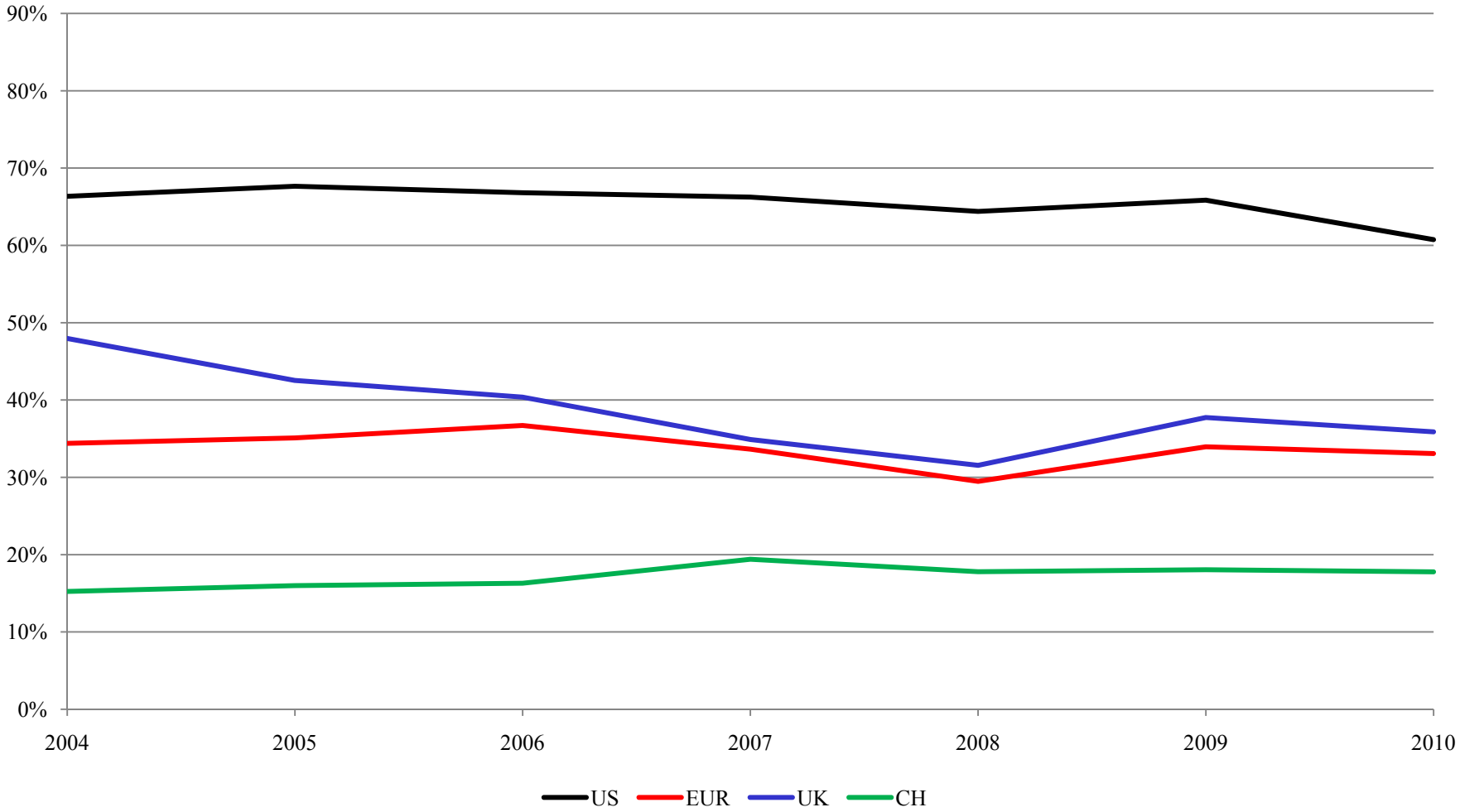
RWA/A: CH banks



RWA/A: US banks



RWA/A: Regional averages



RWA/A: Summing up

- During worst financial crisis since Great Depression…

  → Ratio RWA/A has remained stable!

- How can we account for this?

  → Maybe portfolio reallocation toward safer assets

  → Most likely use of through-the-cycle (TTC) approaches

  → Accepted (and even encouraged) by supervisors

Part 3

Political economy of bank supervision

The supervisory leg of regulation (i)

- Basel II leaves a significant amount of discretion to supervisors

  → Validation of internal risk models

- Basel III introduces even more discretion

  → Operation of the countercyclical capital buffer

The supervisory leg of regulation (ii)

- Problem: can we trust supervisors?
- Two views of government agencies/public officials
  - → Benevolent social welfare maximizers
  - → Agents that pursue their own objectives that may or may not coincide with maximization of social welfare

Theories of regulatory capture

→ Laffont and Tirole (1991)

"A major task of economics is to explain the pattern of government intervention. The **public interest theory** emphasizes the government's role in correcting market imperfections. While regulatory agencies may face informational constraints, they are viewed as benevolent mazimizers of social welfare. The **capture or interest group theory** emphasizes the role of interest groups in the formation of public policy."

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- Need to look into these issues

  → Especially considering threat of capture

  → Introduce additional implementation constraints

- Possible rationale for favoring

  → Tight mandates for supervisors

  → Rules rather than discretion

Concluding remarks

Summing up

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  → The fact that risk-sensitivity in the cross-section dimension implies procyclicality in the times series dimension

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  → The fact that risk-sensitivity in the cross-section dimension implies procyclicality in the times series dimension

  → The fact that regulation needs to incorporate incentive compatibility constraints in implementing IRB approach

  → The fact that one cannot presume that supervisory agencies are benevolent social welfare maximizers

A way forward

- Basel Committee should bring the elephant to the table

  → **Good regulation requires good economics**

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- Seriously engage academics

  → Invite them to participate in the Research Task Force

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- Seriously engage academics

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- Set up an independent panel of academic experts

  → Review recommendations before public consultation


Thank you!


Thank you!
And Happy Birthday FMG!