

# Distinguishing between fundamentally sound banks and those characterized by endogenous problems

## Empirical questions

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## Problem

- Banks may misuse improved access to state funds to cover long-lasting problems and/or to pursue overly expansive strategies
- Hence, post crisis prices for banking services will be higher not only because of higher market concentration, because of higher regulatory burdens and hence higher costs, but also because of inefficient banks being kept afloat:
  - Inefficient banks may be hit hardest by the financial crisis, and hence receive most of the support
  - Inefficient banks may reduce their structural, long-term restructuring efforts and focus on “cleaning the books”
  - Willingness of governments to impose “political” restraints on banks and to prolong their support of an inefficient market structure
- ➔ European Commission important safeguard to circumvent such an scenario
- Key question: Can the Commission retain sufficient control?
 

At this stage of the crisis this translates into the question whether the Commission can credibly distinguish between fundamentally sound and unsound banks
- Focus of this presentation: *What are the empirical issues and pitfalls for this distinction?*

## ▶ On step back – is there any need/ justification for the Commission to intervene?

- Two different justifications exist in support of a European State Aid Control System
    - Negative spillovers between MS
    - Commitment problems of individual MS

Note: both are interlinked
  - At least on short term aid granted towards banks has positive spillovers, not negative ones
  - Commitment problems exist though: support national decision makers not to waste too much of taxpayers' money
  - The rules of the game will change in the mid to long term in the banking sector and already in the short term regarding aid to the real economy
- 
- ➡ Different standards are required for the financial sector than for the real economy
  - ➡ It has to be assured that aid to the banking sector does not infect the real economy

## Overview

- Legal environment
- Empirical issues and questions
- Conclusions

## Legal environment – indicators put forward by the Commission

- Regulatory solvency requirements and prospective capital adequacy
- Pre-crisis and current CDS spreads
- Ratings
- Share prices
- Overdependence on short-term financing or abnormal leverage

Source: The recapitalization of financial institutions in the current financial crisis, Communication from the Commission, 5. 12. 2008, paragraph 12 to 15 and Annex

## Structurally healthy banks – alternative approaches

- Simple indicators vs. multiple regression analysis
  - Predictability vs. accuracy
- Performance before the crisis vs. performance during the crisis
  - Only the crisis may reveal healthiness of a bank
  - May result in circularity if implemented wrongly

## Remark 1: indicators are reasonable, but imperfect

- In general, indicators put forward by the Commission are reasonable indicators
- These indicators have been used in the Commission's practice in the past

### Problem:

- Experience of the Landesbanken cases show that (even / in particular) at normal times it is difficult to assess the quality of a bank under these indicators
- Risk is hard to measure – crisis is built on bankers' incentive to increase short term profitability by moving risks into the future
- Financial crisis partially due to the fact that those indicators did not properly reflect the economic position of a bank

## Analysis of one indicator - Credit Default Swap spreads ("CDS spreads")

- Buyer of a CDS makes periodic payments to seller
  - Buyer receives payoff if the underlying financial instrument defaults
- ⇒ can be considered an insurance against default (higher spread means higher default risk)
- ⇒ in theory CDS spreads reflect rating, stock price change and volatility, and leverage (see Kool 2006)

Remark 2: In general, a multiple indicator approach is superior, as the relationship between the various variables is not always positive and might be non-linear, e.g. CDS spread might increase in parallel with stock prices as creditors' and shareholders' perspectives do not coincide

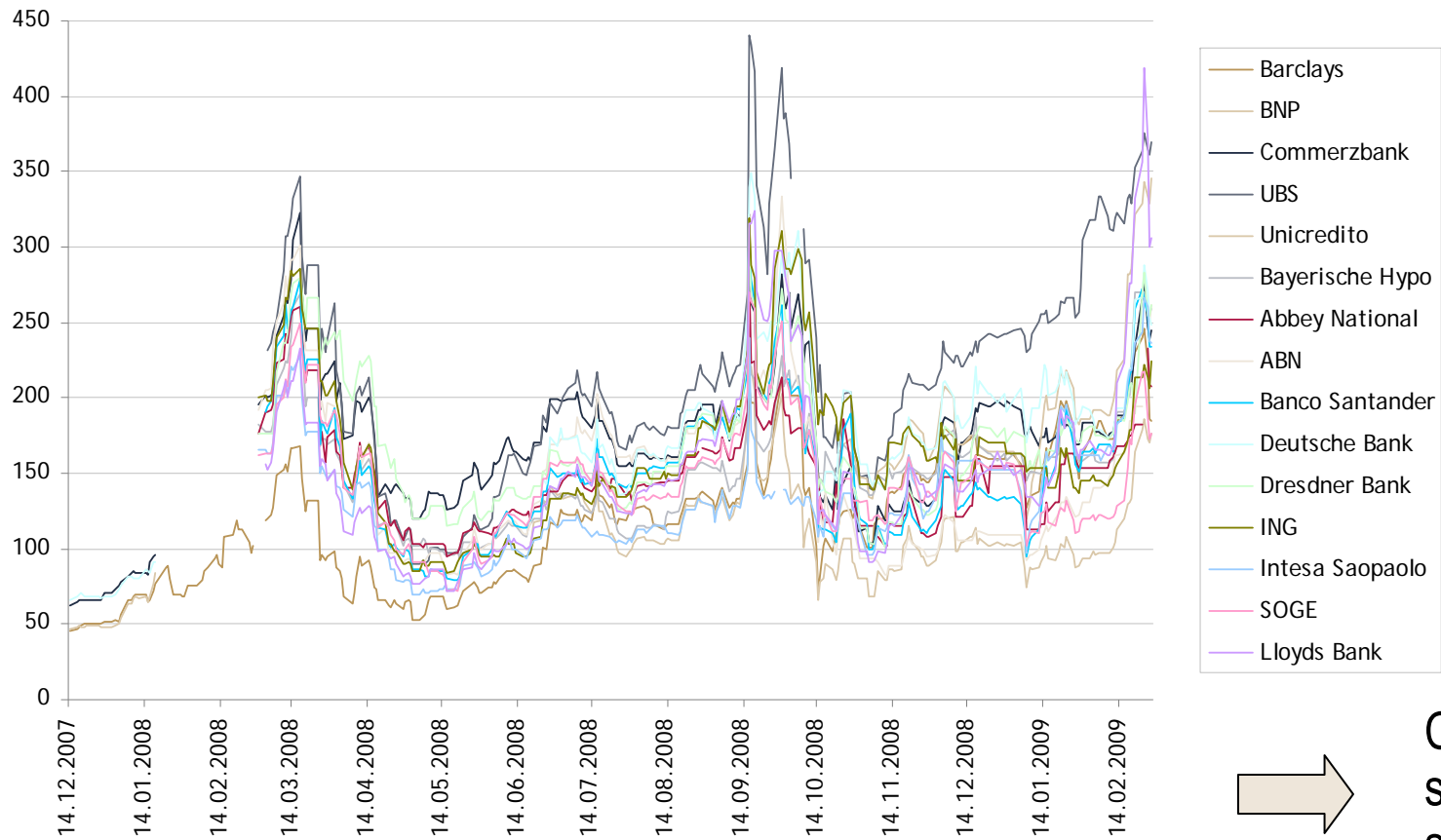
## Bank sample analyzed

Name	Country	Date	Amount (mio. €)	Short description	European rank (total assets)	National rank (total assets)
UBS AG	Switzerland	10. Feb 09	39,100	Swiss state aid package	1	1
		16. Okt 08	48,000	Swiss state aid package		
		28. Feb 08		Capital injection		
DEUTSCHE BANK AG	Germany	05. Feb 09		No government assistance	2	1
BNP PARIBAS SA	France	19. Jan 09		Second bailout plan	3	1
		21. Okt 08	2,550	State cash injection		
BAYERISCHE HYPO-UND VEREINSBANK AG	Germany	12. Nov 08		No government assistance	4	2
BARCLAYS BANK PLC	United Kingdom	10. Feb 09		No government assistance	5	1
ABN AMRO BANK NV	Netherlands	03. Dez 08	(11,200 for Fortis)	Indirect government assistance, via Fortis	6	1
SOCIETE GENERALE	France	24. Jan 09		No further government assistance	7	4
		21. Okt 08	1,700	State cash injection		
ING BANK NV	Netherlands	13. Nov 08	10,000	State cash injection	8	2
COMMERZBANK AG	Germany	11. Dez 08	8,000	State cash injection	9	3
		07. Nov 08	15,000	Financial guarantees		
DRESDNER BANK AG	Germany	08. Jan 09		Government assistance expected	10	4
LLOYDS TSB BANK PLC	United Kingdom	20. Okt 08		Debt guarantee	15	4
BANCO SANTANDER CENTRAL HISPANO SA	Spain	06. Feb 09		No government assistance	16	1
INTESABCI SPA	Italy	25. Feb 09		Bank bond package	18	1
		16. Okt 08		No government assistance		
BANCO BILBAO VIZCAYA ARGENTARIA SA	Spain	30. Jan 09		No government assistance	21	2
CREDIT LYONNAIS (now LCL)	France	21. Okt 08	(3,000 for CA)	Indirect government assistance, via Crédit Agricole	24	8
UNICREDITO ITALIANO SPA	Italy	09. Dez 08		No government assistance	32	2
SANPAOLO IMI SPA	Italy	16. Dez 08		No government assistance	35	3
ABBEY NATIONAL PLC	United Kingdom	06. Feb 09		No government assistance	41	6

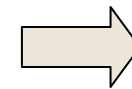
Annotation: Sample like in Kool et al. (2006)

Source: CA press recherché

## CDS spreads show strong common trend plus bank specific effects

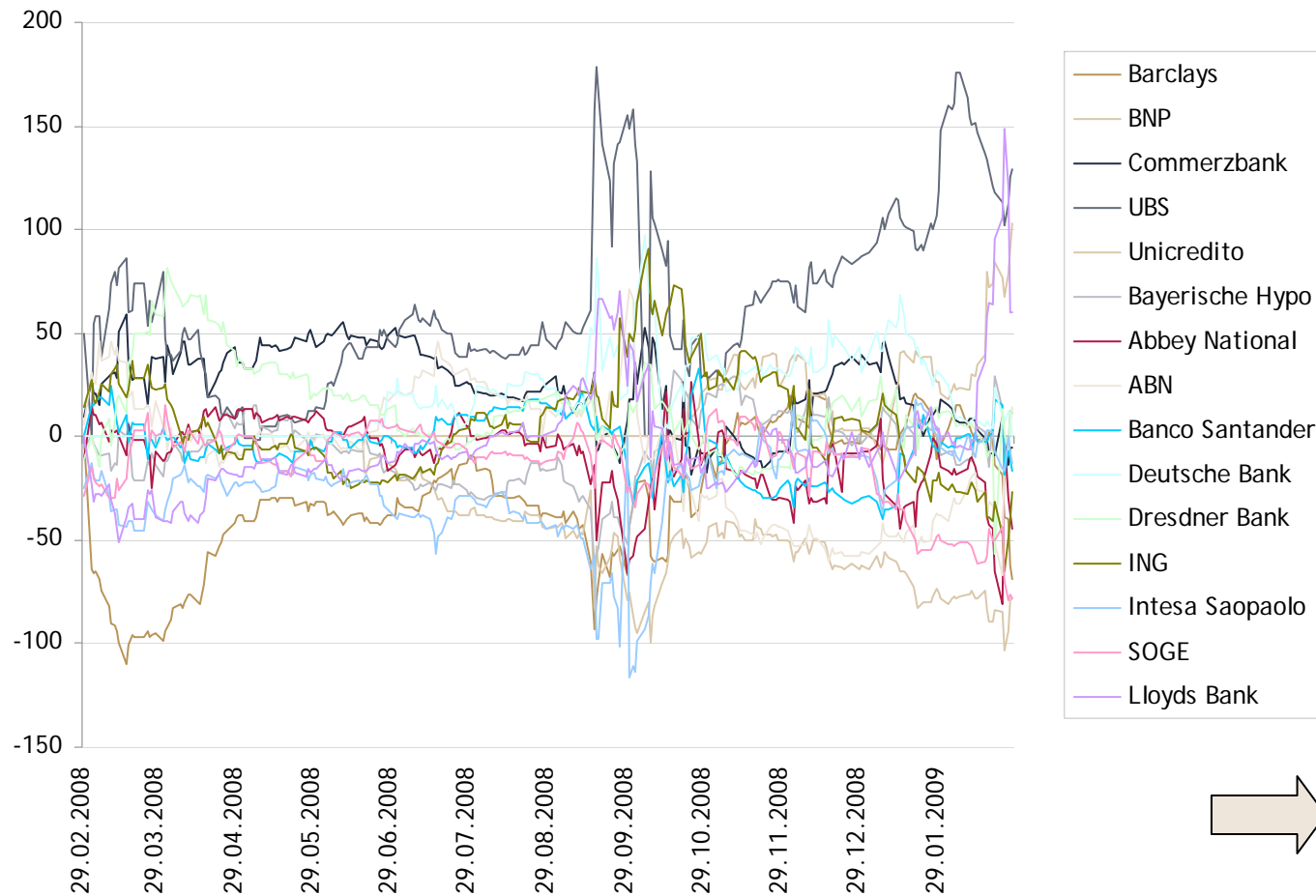


Annotation: CDS for 10 years subordinated dept; Sample like in Kool et al. (2006)  
 Source: Reuters

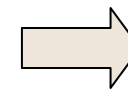


Common trend shows high level of systemic risk

▶ CDS difference show strong firm specific effects; variation between CDS differences vary strongly over time



Annotation: CDS for 10 year subordinated dept; Differences to non-weighted average  
Source: Reuters



Market seems to exaggerate difference between individual banks during periods of turmoil

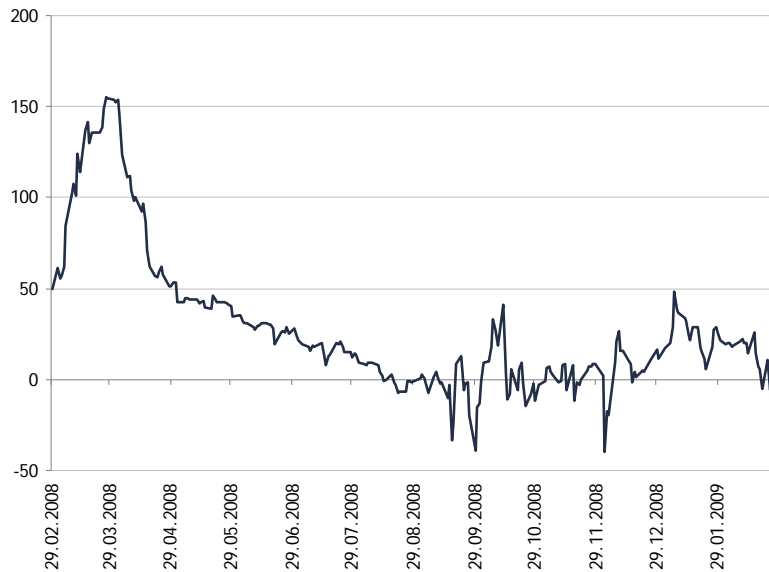
## Development of CDS differences - two examples

Before August 2008 WestLB realized an above average CDS spread; Barclays a below average spread

However, during the crisis both observe more or less the same CDS spread

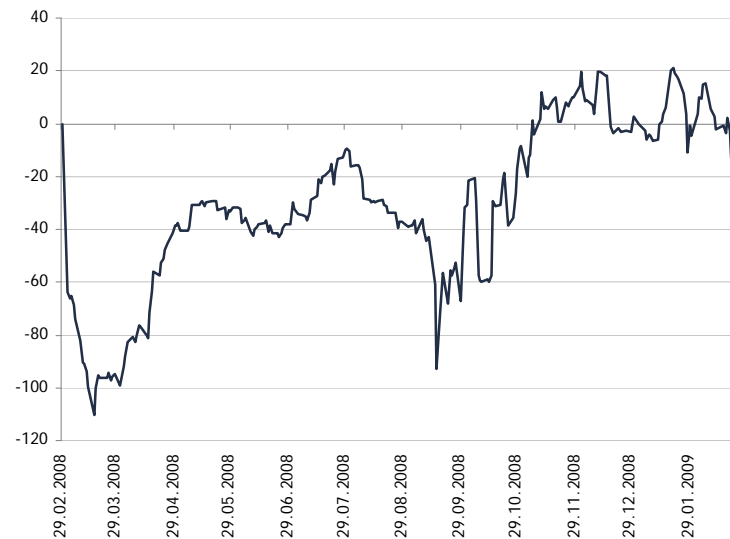
### WestLB

Ranking of Credit Spread (Bank vs. Average)



### Barclays

Ranking of Credit Spread (Bank vs. Average)

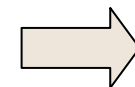


## Remark 3 – Banks relative performance varies over different market phases

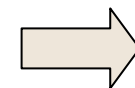
- One observes different events influencing the CDS spreads
- These relate to different risks
- Which ones are considered systemic? Which are considered individual business risk?

Bank	Ranking Credit Spread	Bank	Ranking Credit Spread
UBS	165.9	UBS	233.7
Deutsche Bank	165.6	Deutsche Bank	184.8
Commerzbank	165.3	Unicredito	173.9
Dresdner Bank	145.9	Commerzbank	162.9
ABN	143.5	Bayerische Hypo	158.6
Banco Santander	134.9	ING	157.2
<i>Average</i>	<i>134.6</i>	Barclays	156.6
Abbey National	133.2	Dresdner Bank	153.1
SOGE	128.3	<i>Average</i>	<i>151.9</i>
ING	128.2	Intesa Saopaolo	146.1
Lloyds Bank	126.2	Lloyds Bank	144.0
Bayerische Hypo	120.5	Banco Santander	134.6
BNP	119.5	Abbey National	133.6
Intesa Saopaolo	103.9	SOGE	133.4
Barclays	103.6	ABN	109.8
Unicredito	n/a	BNP	96.1

*Period*                      *1 May 2008 - 10 Sep 2008*      *Period*                      *3 Nov 2008 - 10 Feb 2009*



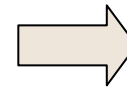
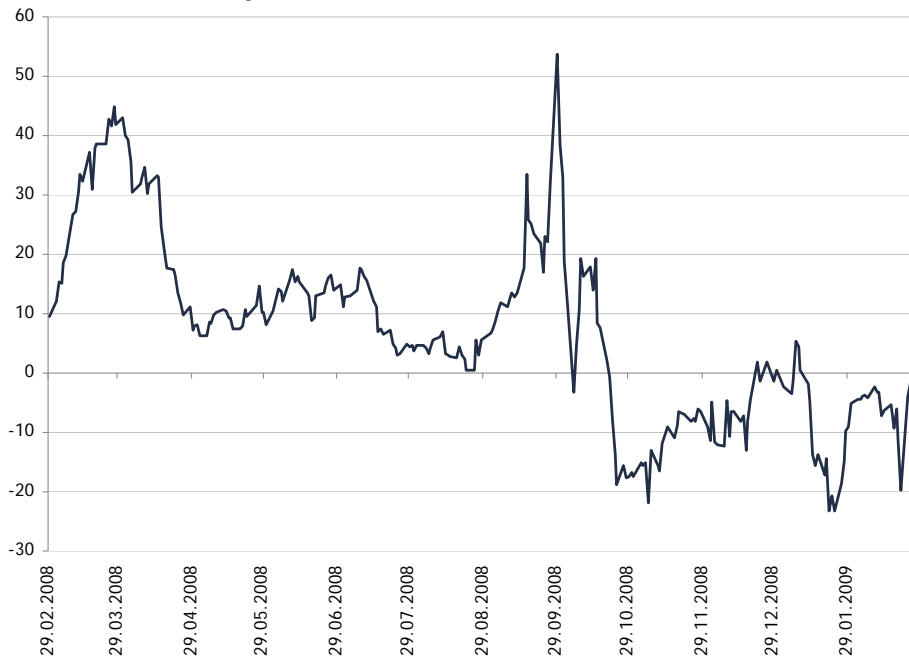
Bayerische Hypo,  
ING und Barclays  
show up only in the  
second time window



In conclusion, banks seem  
to perform differently well  
with respect to default risk  
in various market phases

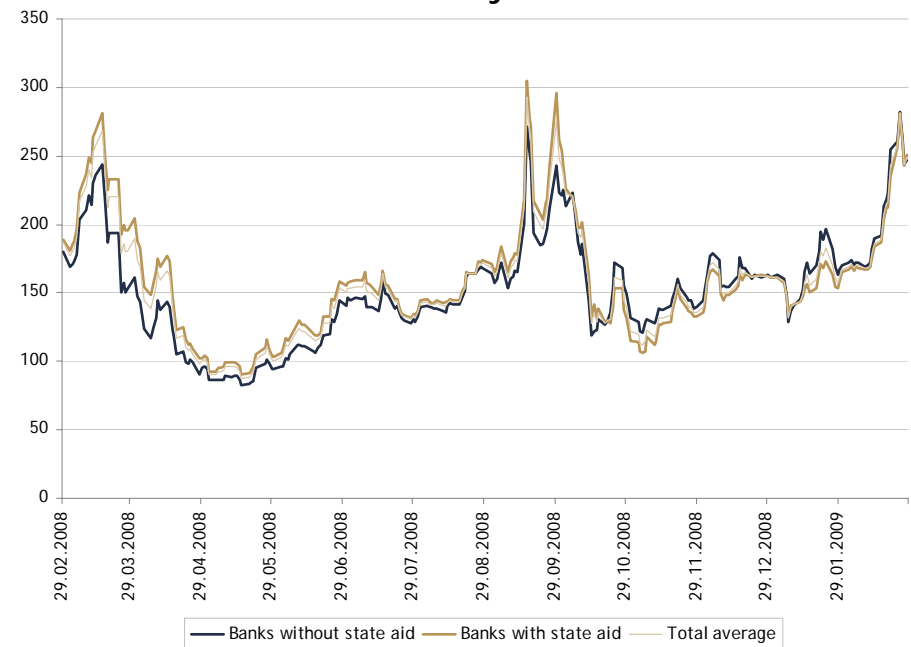
## Remark 4: Effectiveness of State intervention

CDS spread of Banks with aid minus spread of Banks without aid

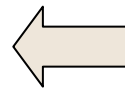


Roughly 20 basis points reduction

CDS spread average February 2008 to February 2009



But unbroken positive trend!



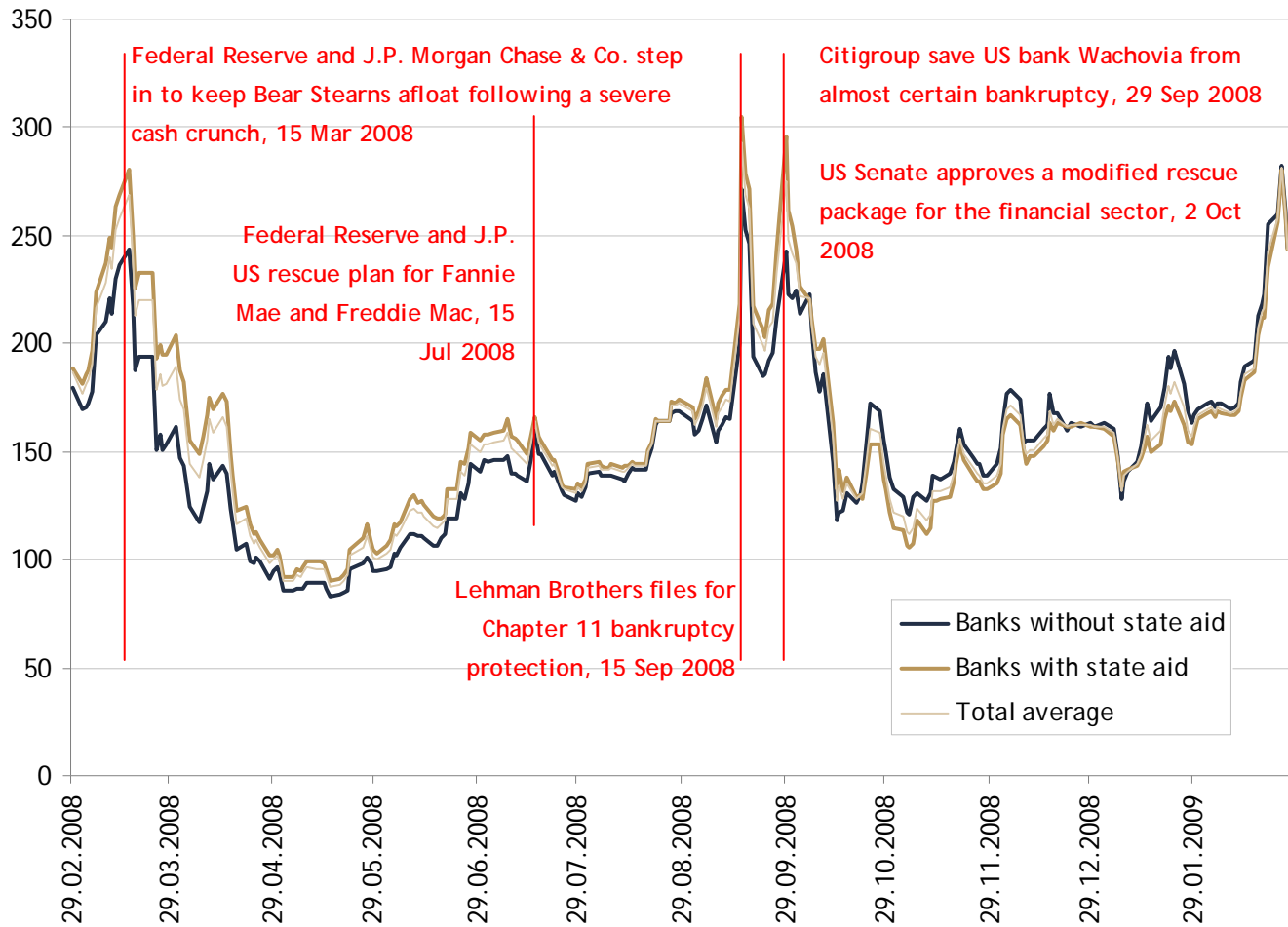
## Conclusion

- Indicators put forward by the Commission are reasonable
- This does not lead to a simple tool set though
  - Standard indicators have proven unreliable in the past
  - Multiple indicators have to be applied (with potentially contradictory results)
  - Performance of banks will vary over the time horizon and under the actual stress test put on them under the current crisis
- Infection of real economy has to be avoided

## › Literature

- **Commission Guidelines**
  - Bank Guidelines: The application of State aid rules to measures taken in relation to financial institutions in the context of the current global financial crisis, Communication from the Commission, 13. 10. 2008 (OJ 25.10.2008)
  - Recap Guidelines: The recapitalization of financial institutions in the current financial crisis, Communication from the Commission, 5. 12. 2008
  - Toxic Assets Guidelines: The Treatment of Impaired Assets in the Community Banking Sector, Communication from the Commission, 25. 02. 2009
- **Databases**
  - Reuters
  - Factiva
- **Scientific Literature**
  - Clemens J.M. Kool (2006): Financial Stability in European Banking: The Role of Common Factors. Open Economies Review 17: 525-540

# Major Events



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