Financial Market Crisis:

Lessons, Future Prospects and Policy Responses

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The views expressed in this presentation are the personal views of the author and not those of any institution to which he is affiliated

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1.
EU Objectives and Tools

CONSOLIDATED VERSION
OF THE TREATY ESTABLISHING
THE EUROPEAN COMMUNITY

Tools

Article 2 (ex Article 2)

The Community shall have as its task, by establishing a common market and an economic and monetary union and by implementing common policies or activities referred to in Articles 3 and 4, to promote throughout the Community a harmonious, balanced and sustainable development of economic activities, a high level of employment and of social protection, equality between men and women, sustainable and non-inflationary growth, a high degree of competitiveness and convergence of economic performance, a high level of protection and improvement of the quality of the environment, the raising of the standard of living and quality of life, and economic and social cohesion and solidarity among Member States.

Objectives

Growth – Stability – Cohesion as the main EU objectives

2.

Financial Services Policy and EU economic integration:

2.1 FSAP

2.2 Results in the Market Place

The FSAP 99-05

FSAP (99-2005) Policy has been very innovative and courageous:

- A bold and comprehensive plan
- An unrivalled wide consultation with all possible stakeholders
- A new method (Lamfalussy)

Impact on wholesale markets

Eliminating barriers for cross border investments

Pension Funds (IORP)
Prospectuses
UCITS III
Take-Over Bids & X-border Mergers
European Company
MiFID

Improved transparency and quality of information

MiFID
IAS Reg. + 4th & 7 th CL Directives
Transparency
Prospectuses

Integrity

Market Abuse
2nd & 3rd Money Laundering

Containing risks

CRD (Basel II)
Financial Collateral Directive
Financial Conglomerates
Implementation Settlement finality
Solvency I
Pension Funds (IORP)

Other landmark measures

Retail

Payments (Regulation 2560/2001) **X-border redress (FIN-NET)**

Consumer Protection (Distance marketing, Insurance mediation, MiFID)

Supervision/Regulation

Reinsurance supervision **E-Money**

Winding-up of banks & insurance companies **New securities committee (Lamfalussy)**

Taxation

Taxation of savings in form of interest income

Lamfalussy Process

Level 1: Broad Framework Principles in Directive/Regulation

Level 2: Implementing Rules delegated to Commission, assisted by Regulators and Securities Committees

Level 3: Strengthened Co-operation between Supervisors to Improve Implementation

Level 4: Strengthened Enforcement of Community Law

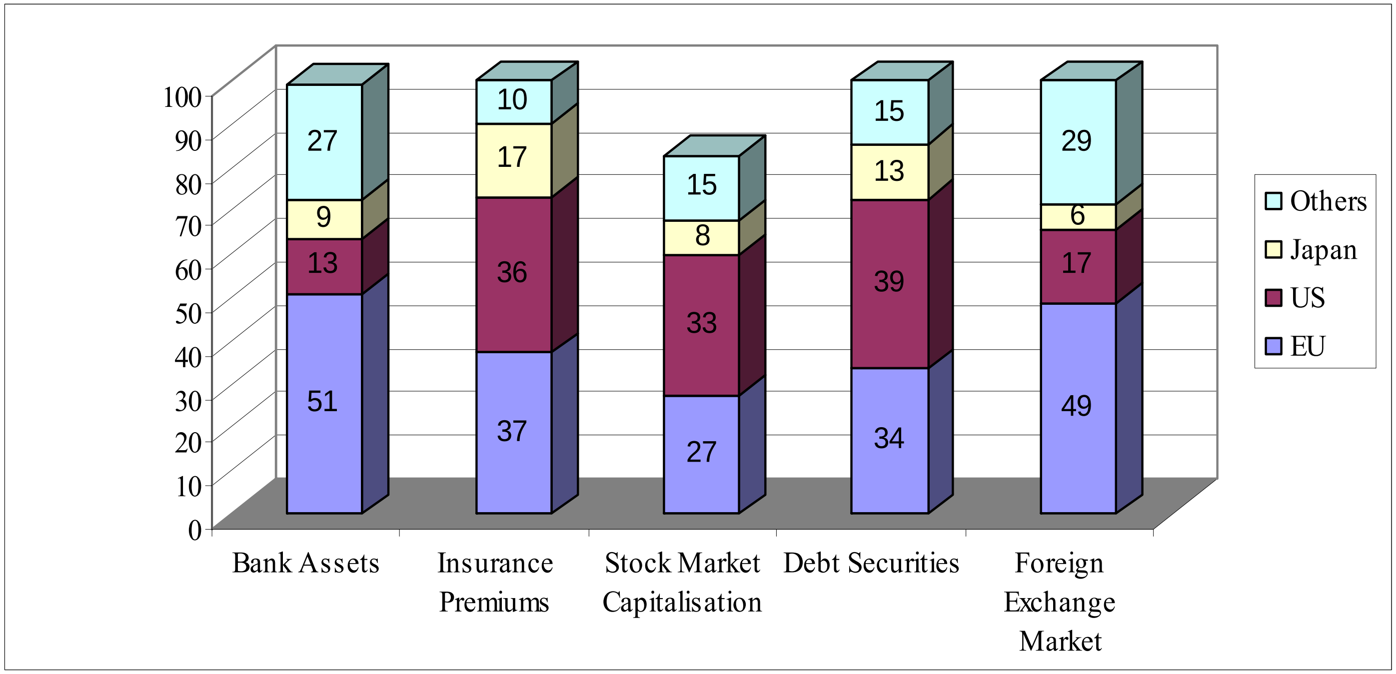
Objective: Improve Efficiency and Transparency in the regulatory framework for the financial sector, ensuring wide public consultations before mesure are adopted.

Lamfalussy committees

	Securities and Investment Funds	Banking	Insurance and Pension Funds	Financial Conglomerates
Level 1	**Commission, Council and Parliament**			
Level 2	**European Securities Committee (ESC)** Chair: Emil Paulis (EC) Site: Brussels	**European Banking Committee (EBC)** Chair: David Wright (EC) Site: Brussels	**European Insurance & Occupational Pensions Committee (EIOPC)** Chair: Karel van Hulle (EC) Site: Brussels	**Financial Conglomerates Committee (FCC)** Chair: Mario Nava (EC) Site: Brussels
Level 3	**Committee of European Securities Regulators (CESR)** Chair: Eddy Wymeersch Site: Paris	**Committee of European Banking Supervisors (CEBS)** Chair: Giovanni Carosio Site: London	**Committee of European Insurance & Occupational Pensions Supervisors (CEIOPS)** Chair: Thomas Steffen Site: Frankfurt	Cooperation of CESR, CEBS and CEIOPS
Level 4	**Commission, MS Governments, European Court of Justice**			

2.2
Which results in the Market Place?

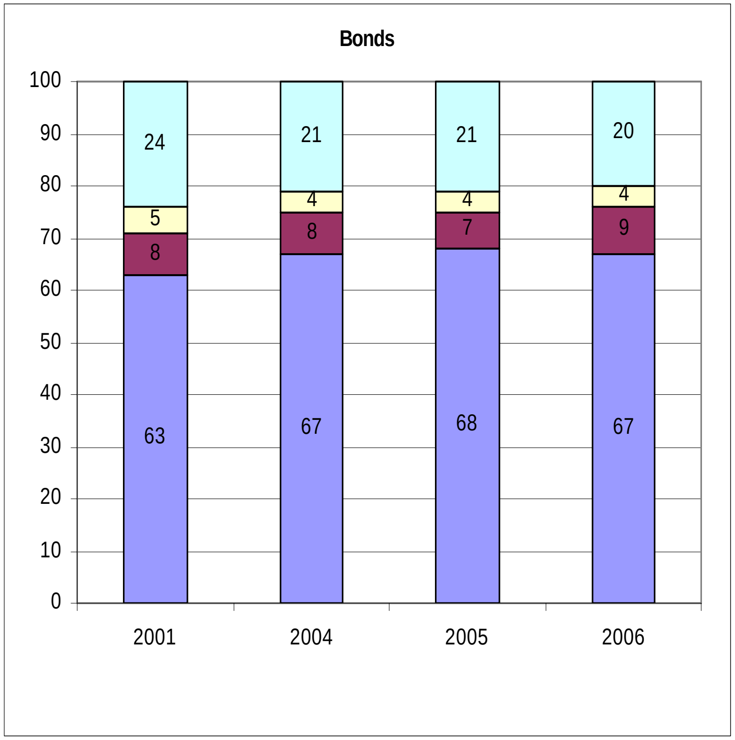
EU-15 contribution to world financial activity



Sources: BIS (2008), IMF (2008) and SwissRe (2007)

Data reflects that EU financial system is strongly bank-based.
EU has also a dominating position in the Forex with 49% of Mkt share (av. daily turnover) US 17%, Japan 6%.

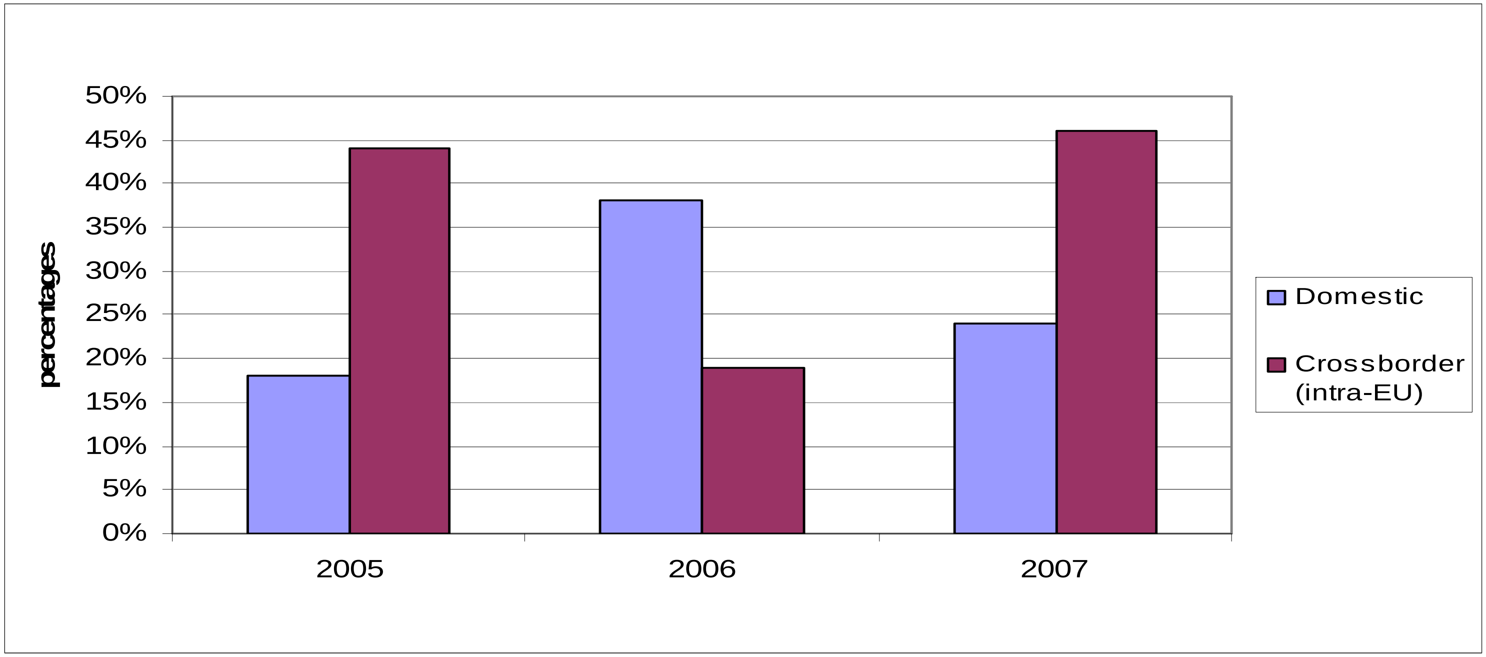
Foreign investment in the EU markets by origin of investors



Source: IMF (2006-2008). Data for 2006 are provisional

While the most recent data (2004-2006) on EU foreign equity and bond investments shows a steady situation, the percentage of investments that originated from another EU country has increased for both types of assets when compared to 2001

European Financial Services M&A. Domestic vs cross border



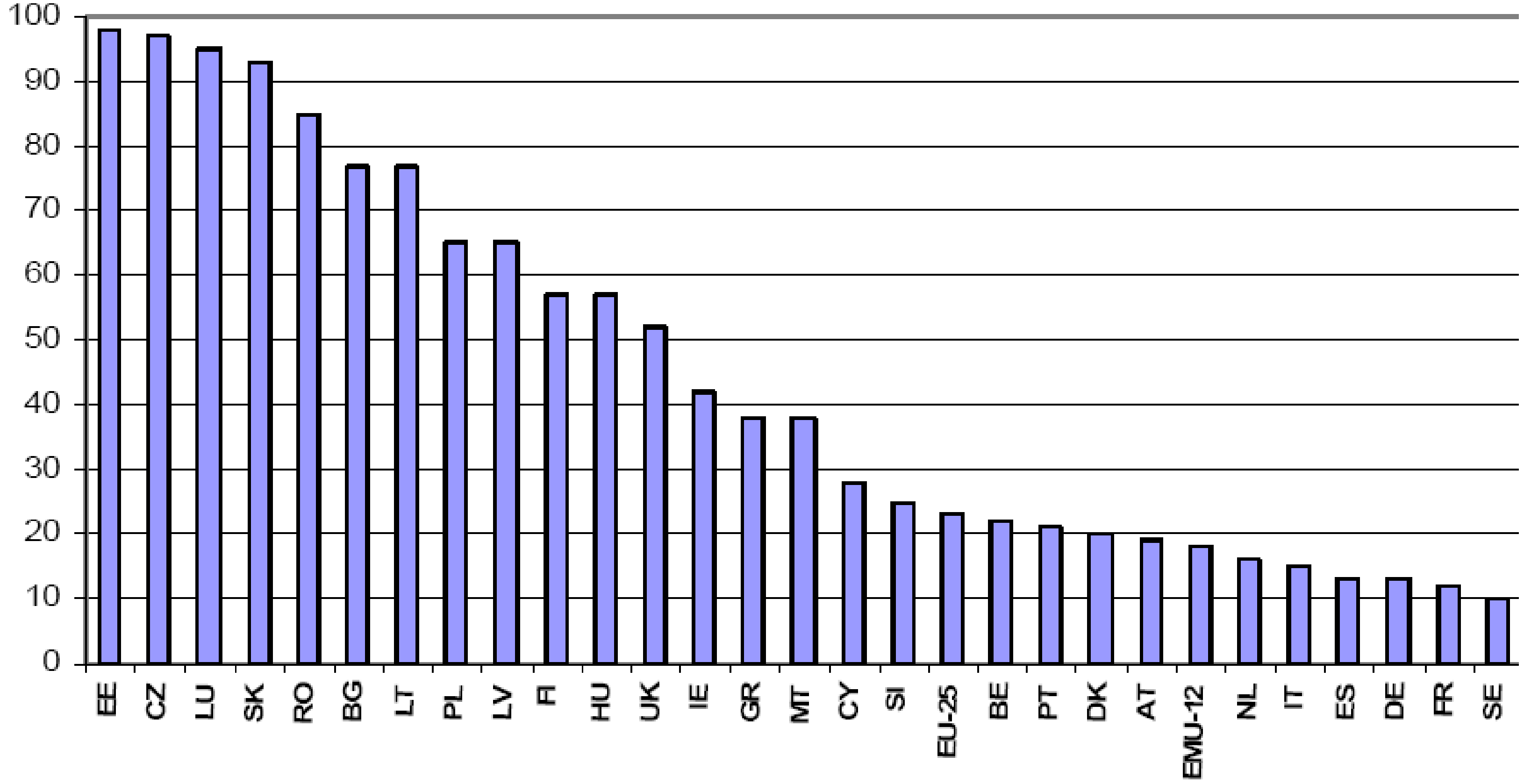
Source: PWC (2006-2008), Commission services calculations. Data refers to top 20 european FS deals announced for each year

Cross-border consolidation has been a significant feature for banking M&A activity over 2007 and has been driven by the significant size of the acquisition of ABN-AMRO by RBS, Fortis (now partly nationalized) and Banco Santander.

Integrating financial markets in the EU

- Wholesale segment shows a high degree of integration;
- 45 banking groups represent 70% of EU banking assets;
- Markets in New Member States dominated by foreign banks;
- Insurance: Allianz, AXA, Generali, Aviva
- Equally equity markets, money markets, investment funds

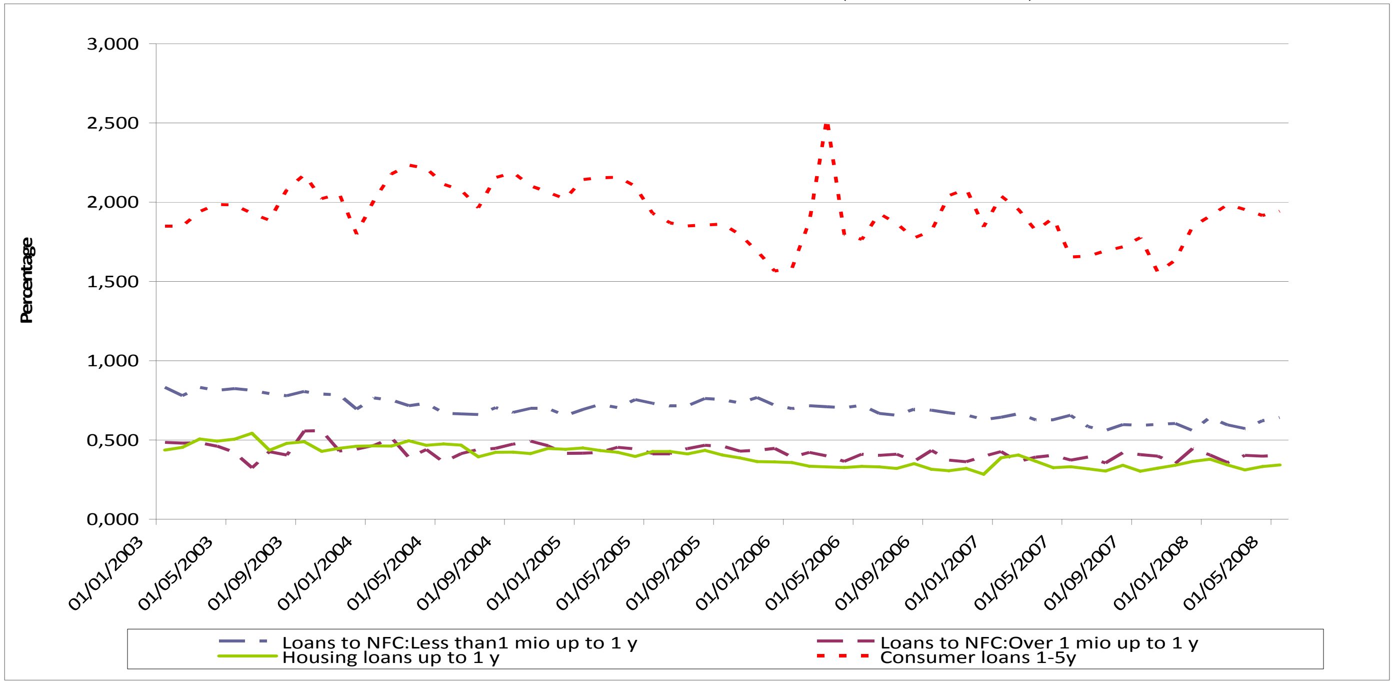
Market share of foreign owned banks (% of assets, 2006)



Cross-border activities

Banking Group	Assets (EUR million)	# Host countries in Europe
Deutsche Bank	1,308,481	16
BNP Paribas	1,258,078	16
HSBC	1,233,950	11
Barclays	1,216,729	10
Crédit Agricole	1,061,443	16
Royal Bank of Scotland	924,021	8
Société Générale	848,417	16
ING Bank	834,035	17
Unicredit	786,419	20
Santander Central Hispano	767,070	10

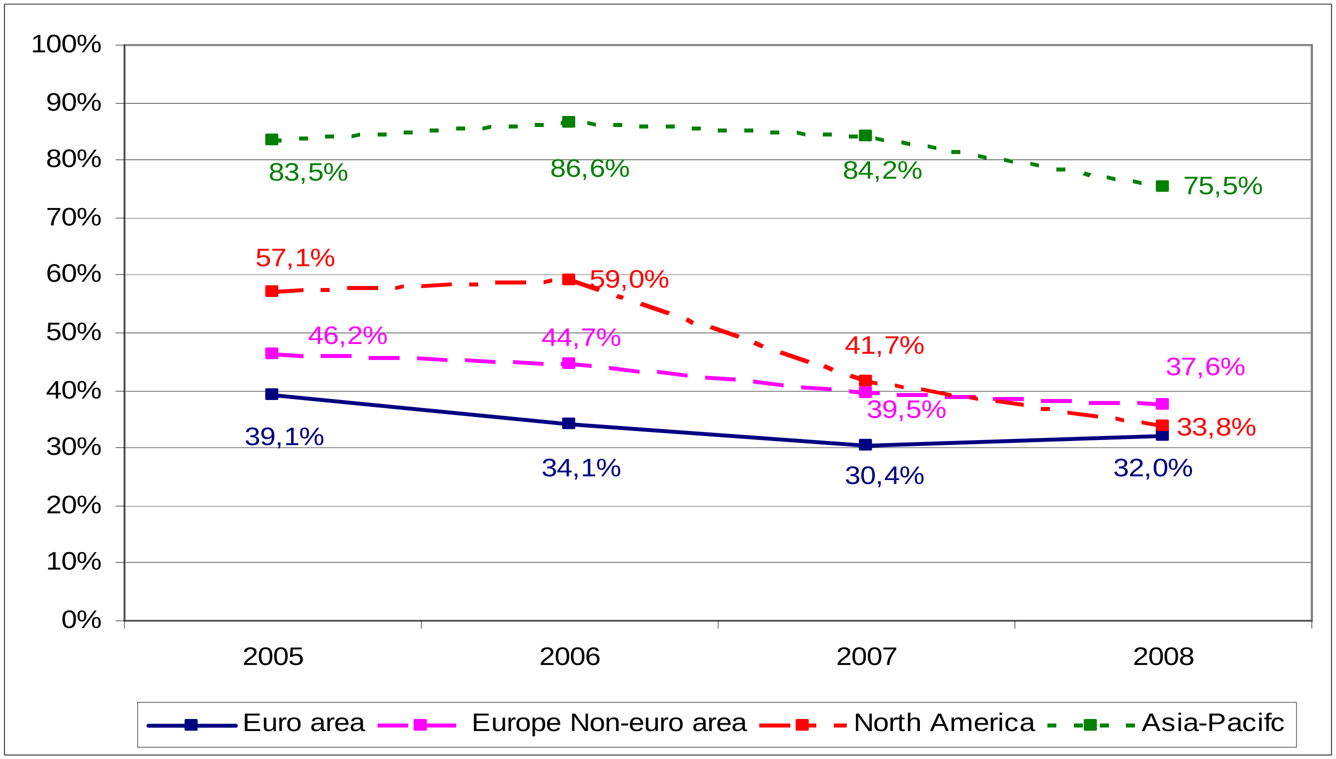
Standard deviation of euro area retail interest rates (in %)



Source: ECB data, L. Vajanne (2007).

Note: data refers to a) loans to non-financial corporations up to an amount of € 1 million; variable rate and up to 1 year initial rate fixation; b) loans to non-financial corporations over an amount of € 1 million; variable rate and up to 1 year initial rate fixation; c) loans to households for house purchases; variable rate and up to 1 year initial rate fixation; d) loans to households for house purchases; over 5 and up to 10 years initial rate fixation.

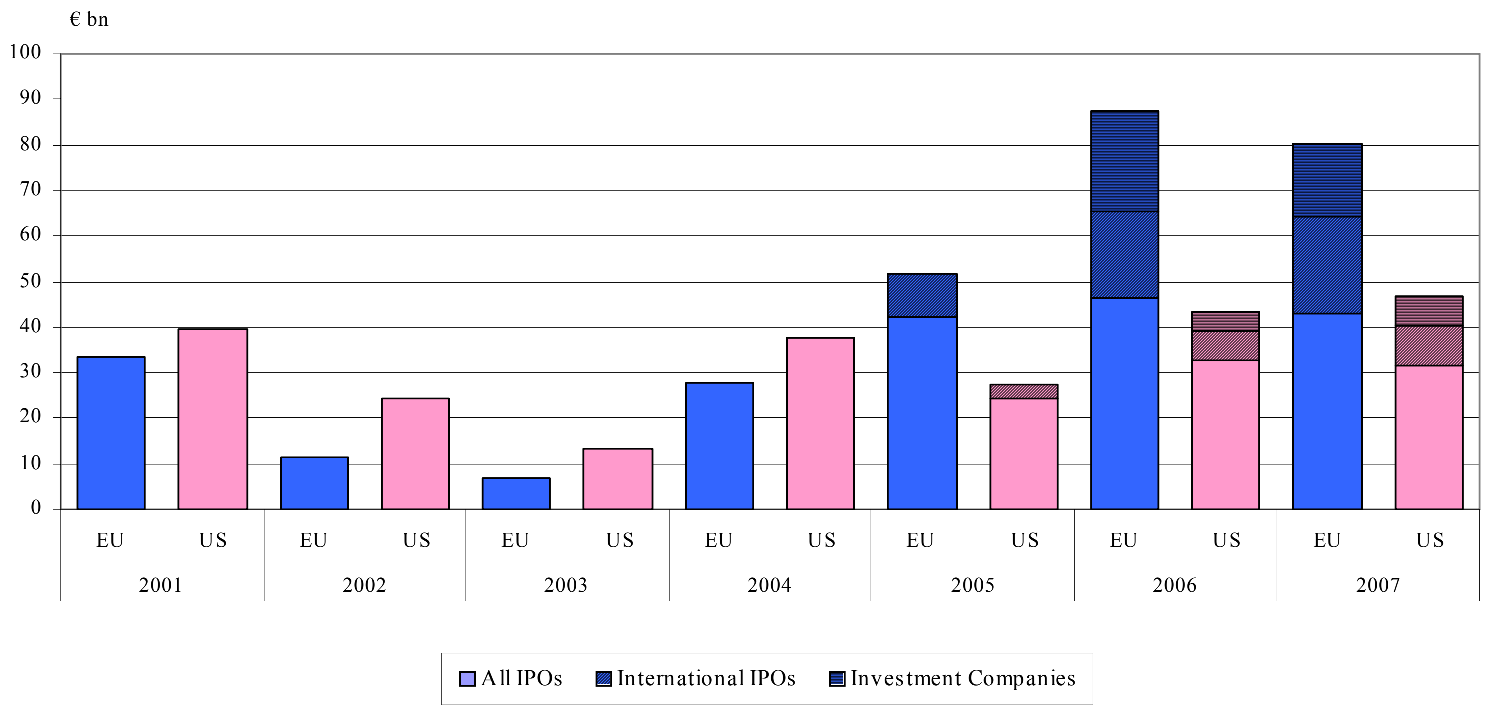
Regional price discrepancy for local active users of banking services



Source: Capgemini (2008).

Note: data refer to the price discrepancy around the regions' average price for day-to-day banking services (account management, cash utilisation, exceptions handling, payments) in the period 2005-2008. Price discrepancy is calculated as the standard deviation of a region's bank prices divided by the region's average price. A minor discrepancy means that a region's prices are close to the average and relatively homogeneous, while a larger discrepancy indicates that price levels vary greatly among banks in a region.

Is Europe an attractive place to invest? Cumulated value of Initial Public Offerings (IPOs) in the EU and US



The increased attraction of international IPOs (from companies registered in third countries) is due both to the increase competitiveness of the EU capital markets, but also to the restrictive provisions of the Sarbanes-Oxley Act in the US.

What did we learn from FSAP 99-05?

- Plan vs. « scattered directives »
- Consulting pays off in terms of “directives transposed”, but most especially in terms of market ability to exploit new opportunities.
- But…obviously it costs!
- Institutional courage and innovation also pays off if used with good judgement: Lamfalussy method of extended consultation

3.
The Financial Crisis

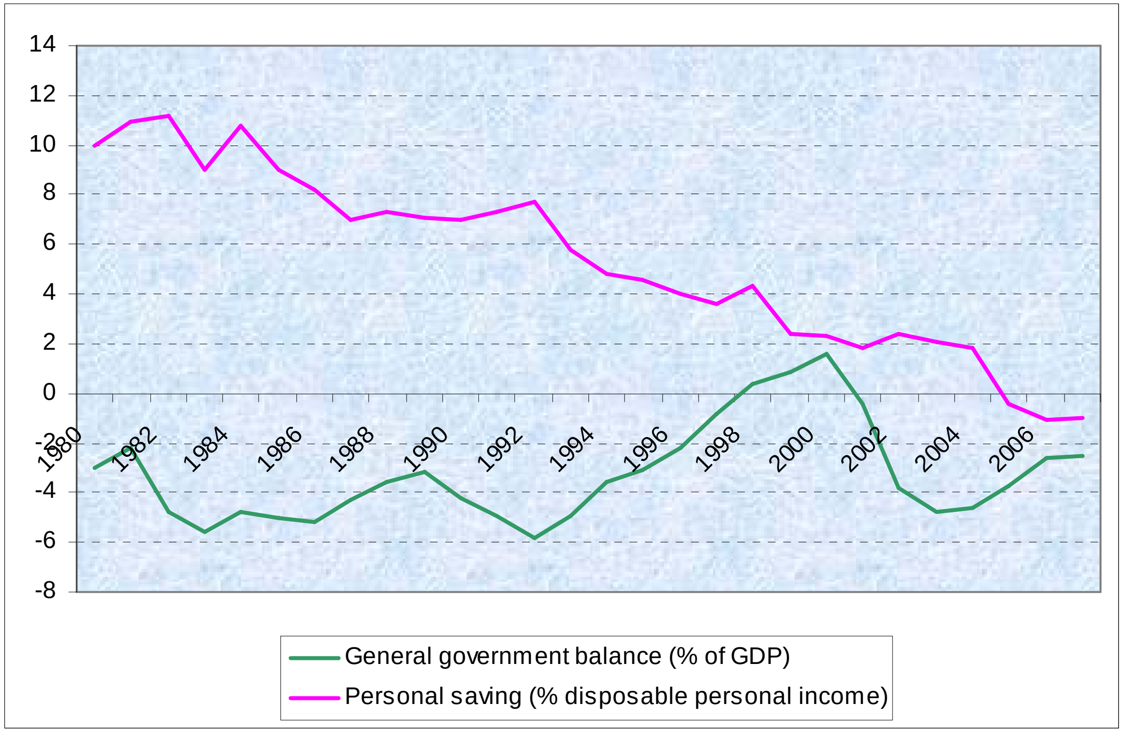
Origin and Facts

Macro

- Weak market conditions in 2001
- Subsequent cuts of interest rates to 1% in mid 2003
- Excess money supply and low returns (US lax monetary policy)
- Massive imbalances, (namely US – and Asia +), US excess consumption (little US saving)
- EU growth supported

US imbalances: how did they get there?

- **Low (or no) saving in the US: both family and Government**

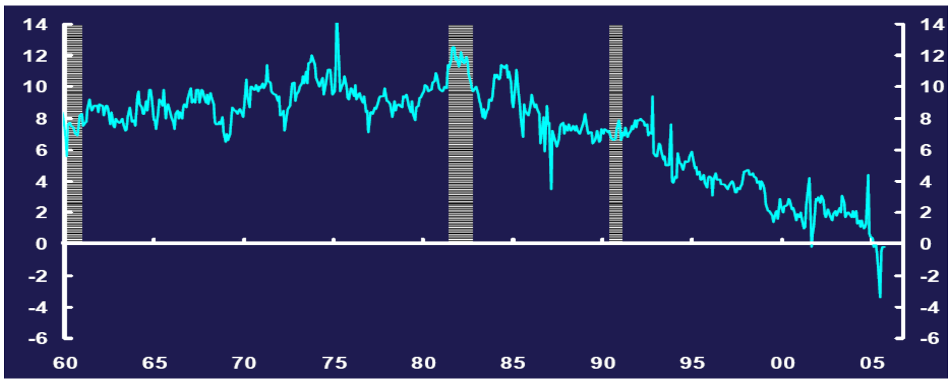


- **Fixed (artificially low?) exchange rate in Asia leading to very high Asia to US export**

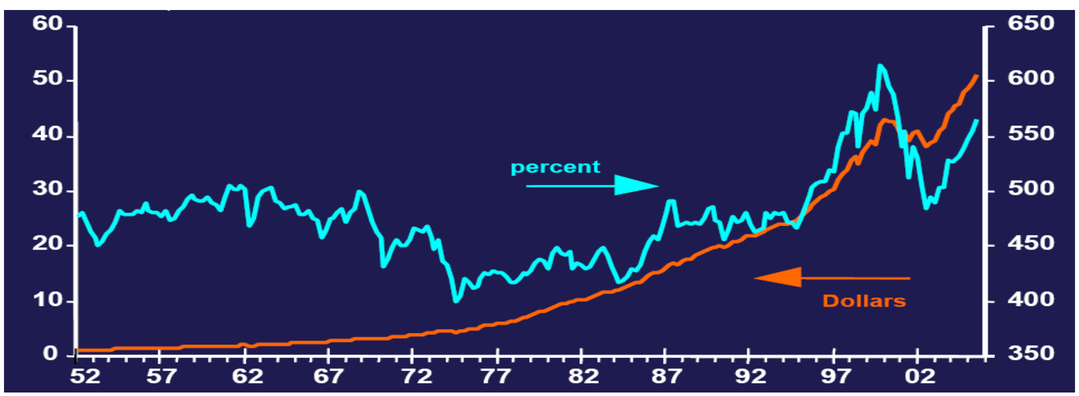
US Savings

- Low saving in US households as a result of an income effect

HHs Saving Rate as % of disposable income



HHs Net Worth as % of disposable income and in $ trillions



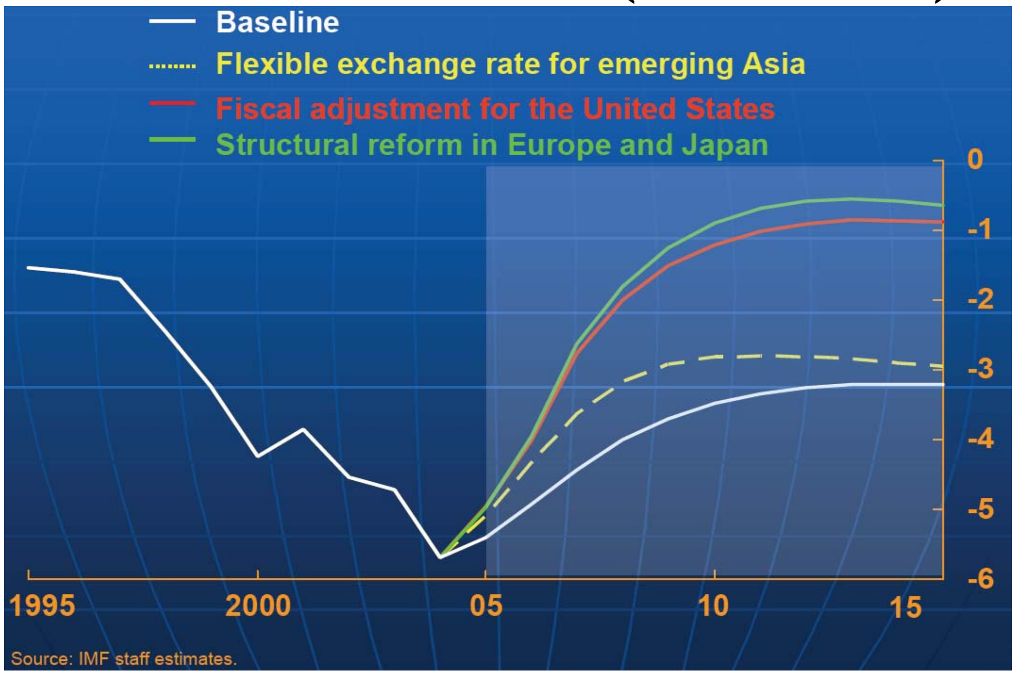
How could adjustment play out? what did they say?

- "The issue is not whether, but how and when" (IMF, WEO 2006)
- It could start from external factors ($ depreciation) or from internal one:
  - $ depreciation, ↑ USX, ↓ US M, ↓World assets in $, and change in investors' sentiments would reinforce $ drop
  - US demand drop would ↑US S ↓ US C (both DC and M)

• It could be sudden and sharp, it could be smooth and overtime depending on key policy strategy:

- Increase in US savings
- Exchange rate flexibility in emerging Asia
- Structural reforms to boost demand and growth, particularly in euro area and Japan
- Efficient absorption of higher oil revenues in oil exporters

Current Account Balance (as % of GDP)



Origin and Facts

Micro

Absence of due diligence, linked to short-term incentive structure for asset managers and complexity and opacity of products, generated a massive mis-price of risk and therefore an excessive appetite for it.

Banks developed creative financial tools that allowed for:

1. Enlarging the pool of borrowers by relaxing standards;
2. Transferring the risk to someone else

The general move away from quality towards quantity, both in the "origination" and in the "distribution" phase, resulted in:

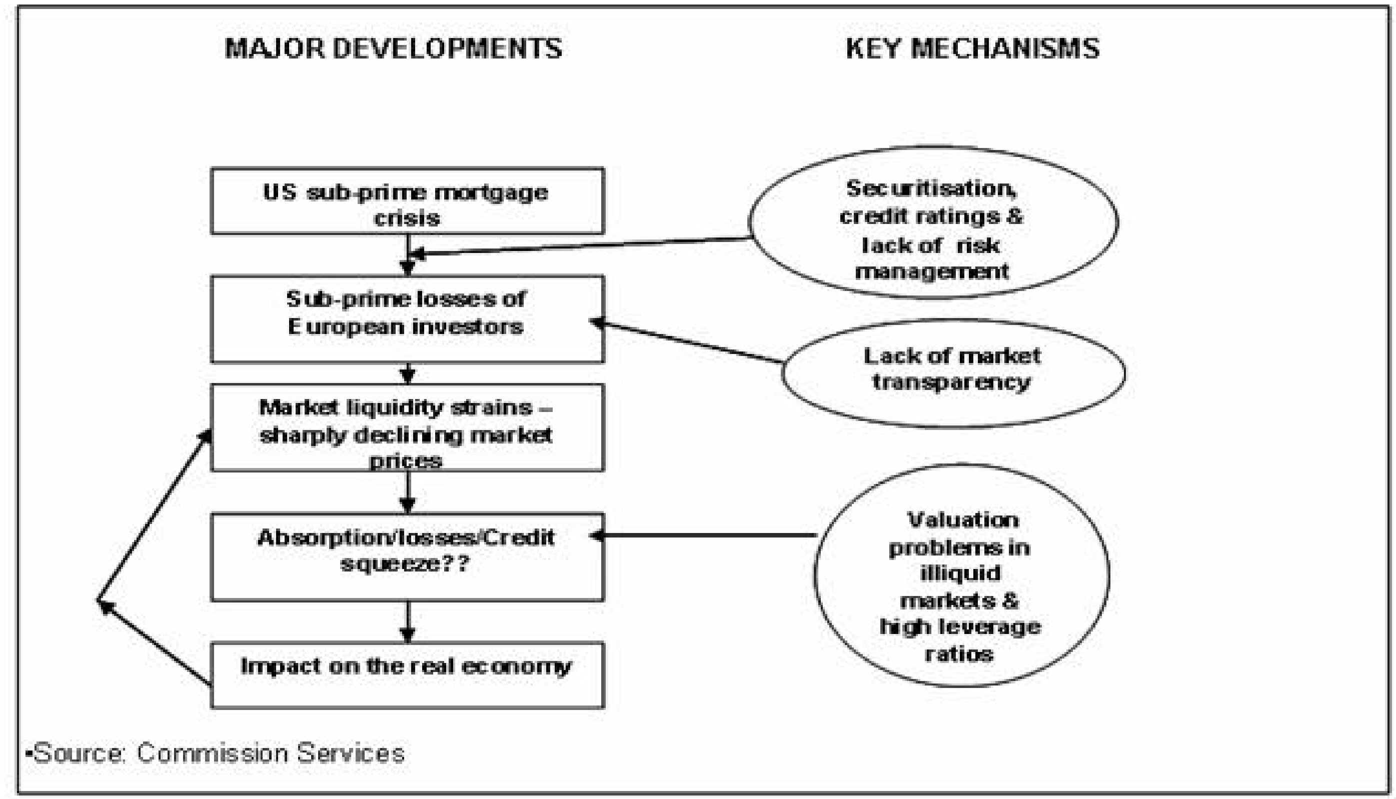
1. when interest rates started rising, borrowers defaulted
2. size and location of the problem unknown to regulators (lack of transparency and issue of microprudential vs. macroprudential)

In turn that led to a general loss of CONFIDENCE and Liquidity Shrunk

Confidence Vs. Liquidity Crisis

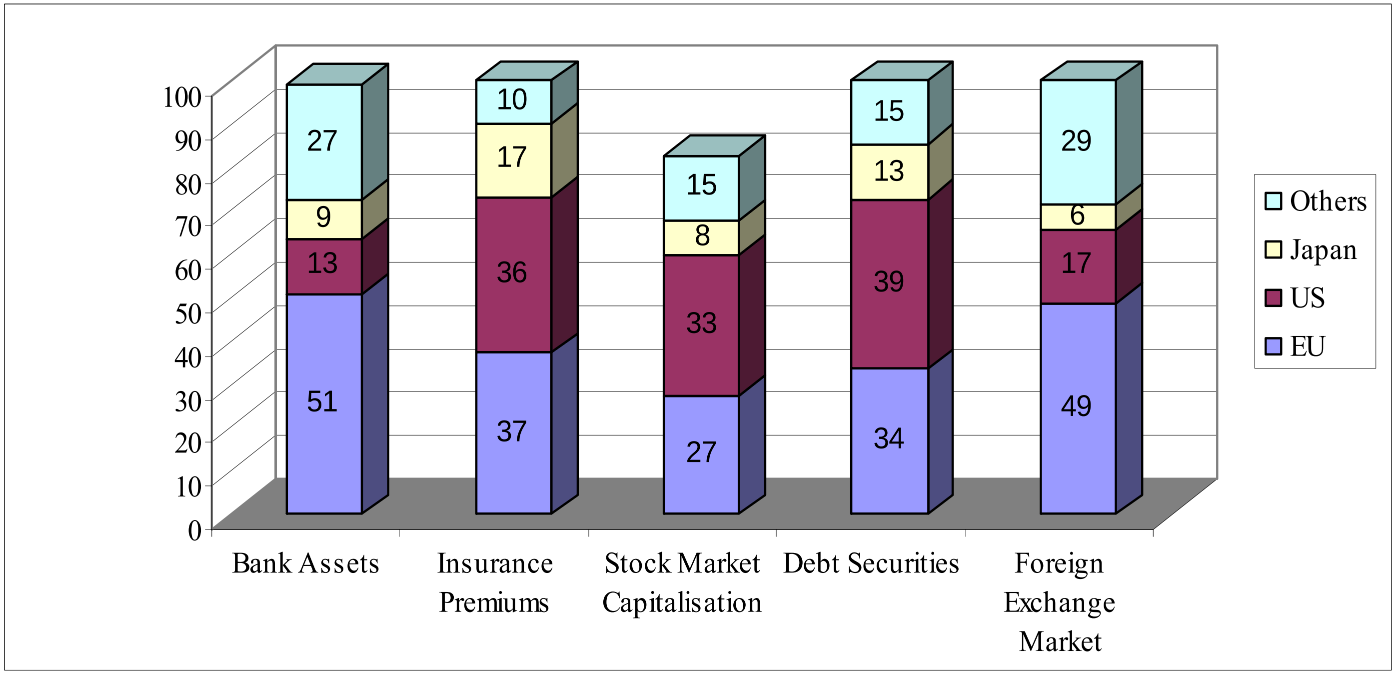
- Lack of confidence at the origin of the crisis
- Liquidity crisis is the consequence
- Central banks have provided liquidity, how can they provide confidence?
- Commercial banks seemed to be hoarding, however, part of that liquidity
- Uncertainty on exposures and counterparties' solvency persists
- Spreading: cross-places, cross-assets and to the real economy
- Are (coordinated) <u>fiscal</u> intervention helping restoring confidence?

Origin and Facts



Contagion Effects

- Across sectors (from subprime to others)
- Across markets

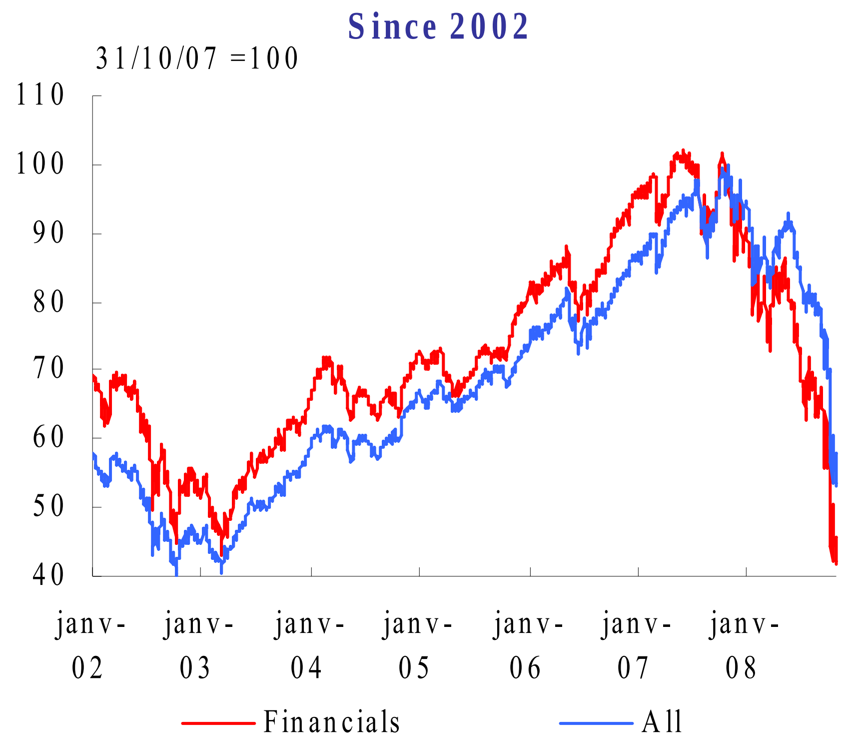


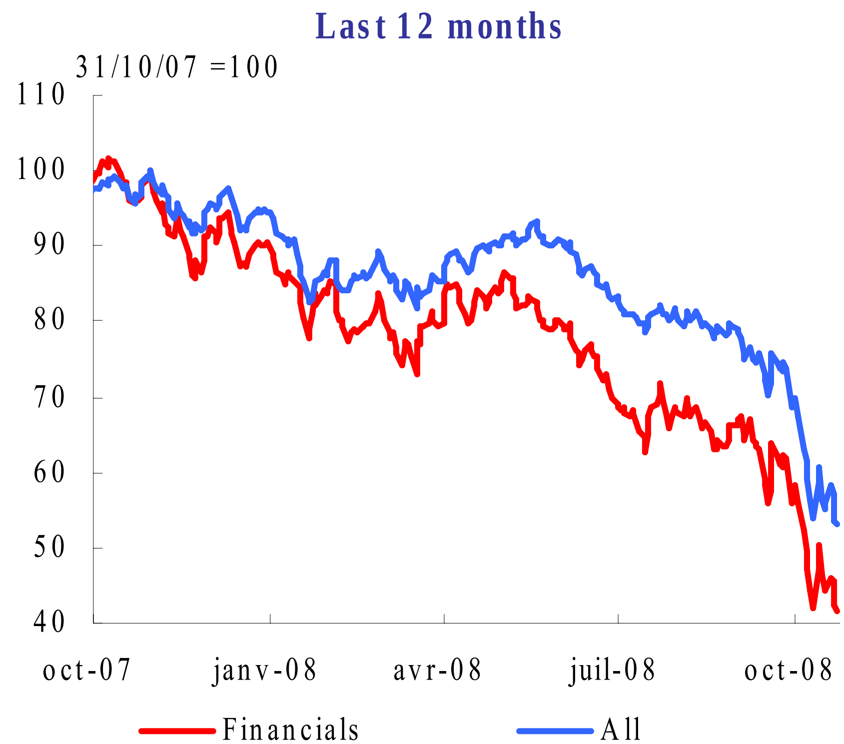
Sources: BIS (2008), IMF (2008) and SwissRe (2007))

- To the real economy

Stock markets plunge

(World-wide share prices, FTSE)





Equity Markets capitalisation in main stock exchanges (change Aug. 2007 – Nov. 2008)

Exchange	Currency	Value at Aug 2007 (EUROm)	Estimated Value 17/11/08	Estimated %Change	Estimated Losses 31/08/07-17/11/08
Borsa Italiana	EUR	777,834	382,210	-50.9%	395,624
Deutsche Börse	EUR	1,389,308	790,417	-43.1%	598,891
Euronext	EUR	2,941,083	1,499,399	-49.0%	1,441,684
London Stock Exchange	EUR	2,826,851	1,516,221	-46.4%	1,310,630
OMX Nordic Exchange	EUR	934,781	443,209	-52.6%	491,572
Spanish Exchanges (BME)	EUR	1,098,147	668,167	-39.2%	429,980
SWX Swiss Exchange	EUR	913,784	668,547	-26.8%	245,237
Total Losses European Exchanges					**4,913,618**
Non-EU Exchanges	Currency	Value Aug 2007	Estimated Value 17/11/08	Estimated %Change	Estimated Losses in EUR
Nasdaq	USD	4,069,585	2,322,994	-42.9%	1,381,359
NYSE Group	USD	15,589,873	8,998,083	-42.3%	5,213,374
Hong Kong Exchanges	HKD	17,746,710	10,010,976	-43.6%	788,644
Shanghai SE	CNY	17,974,520	6,993,311	-61.1%	1,270,179
Tokyo SE Group	JPY	523,675,170	269,360,812	-48.6%	2,068,245
Total Losses Rest of the World					**10,721,802**
TOTAL LOSSES	**EUR**				**15,635,420**

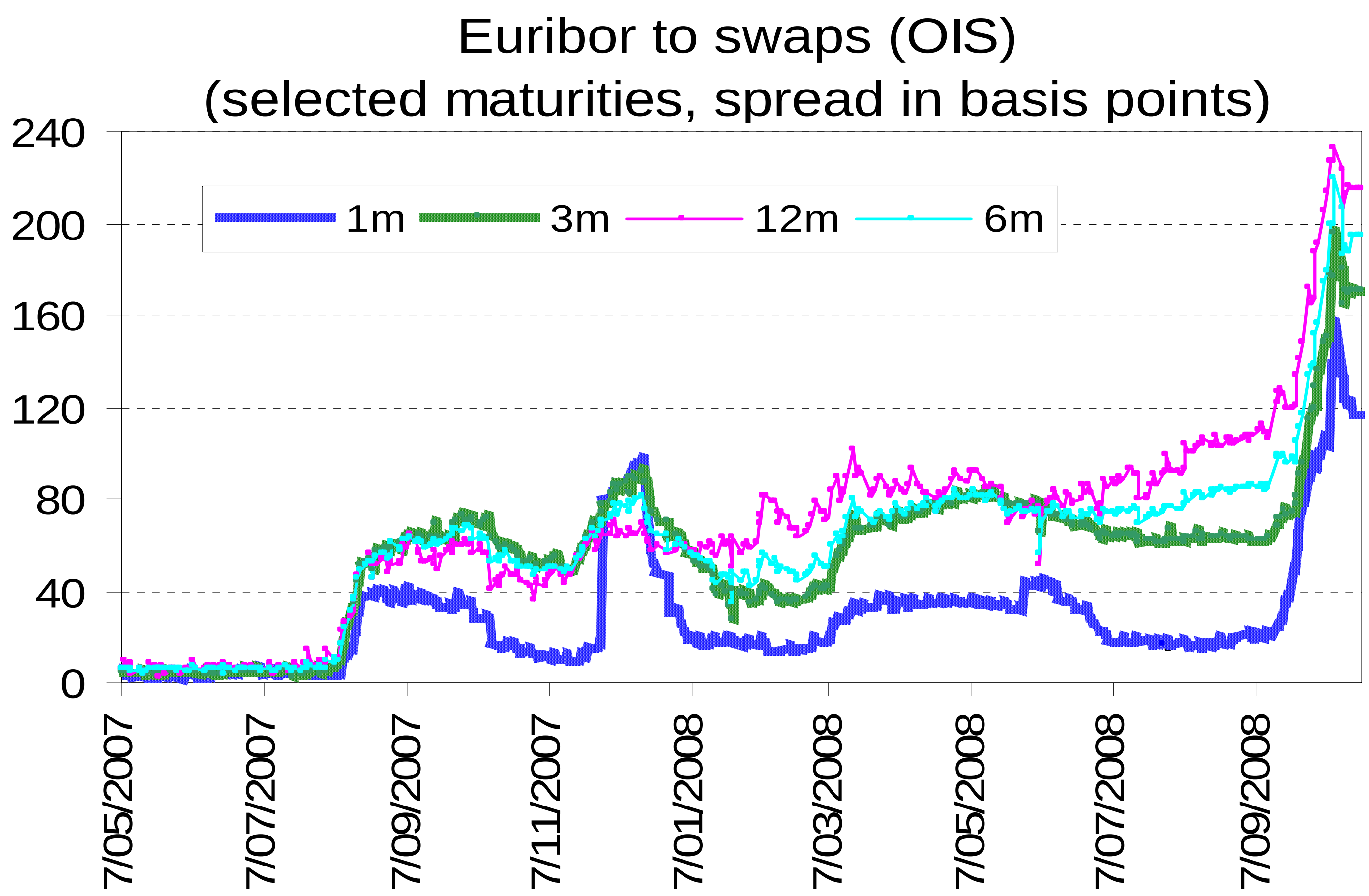
Source: FESE, World Federation of Exchanges and Commission Services calculations

Equity Markets capitalisation in main stock exchanges (change Aug. 2007 – Apr. 2009)

Exchanges	Currency	Value at Aug 2007 (EUROm)	Estimated Value 08/05/09	Estimated % Change	Estimated Losses 31/08/07-08/05/09
Borsa Italiana	EUR	777,834	402,106	-48.3%	-375,728
Deutsche Börse	EUR	1,389,308	823,834	-40.7%	-565,474
Euronext	EUR	2,941,083	1,552,776	-47.2%	-1,388,307
London Stock Exchange	EUR	2,826,851	1,354,168	-52.1%	-1,472,683
OMX Nordic Exchange	EUR	934,781	501,841	-46.3%	-432,939
SWX Swiss Exchange	EUR	913,784	600,887	-34.2%	-312,896
Spanish Exchanges (BME)	EUR	1,098,147	688,050	-37.3%	-410,097
TOTAL Losses European Exchanges					**-4,958,124**
Non-EU Exchanges	Currency	Value Aug 2007	Estimated Value 09/03/09	Estimated %Change	Estimated Losses (EUROm)
Nasdaq	USD	4,069,585	2,725,742	-33.0%	-985,150
NYSE Group	USD	15,589,873	9,828,138	-37.0%	-4,223,836
Hong Kong Exchanges	HKD	17,746,710	12,867,377	-27.5%	-461,534
Shanghai SE	CNY	17,974,520	9,043,159	-49.7%	-960,857
Tokyo SE Group	JPY	523,675,170	298,129,762	-43.1%	-1,682,045
TOTAL Losses Rest of the World					**-8,313,421**
TOTAL Losses	**EUR**				**-13,885,772**

Source: FESE, World Federation of Exchanges and Commission Services calculations

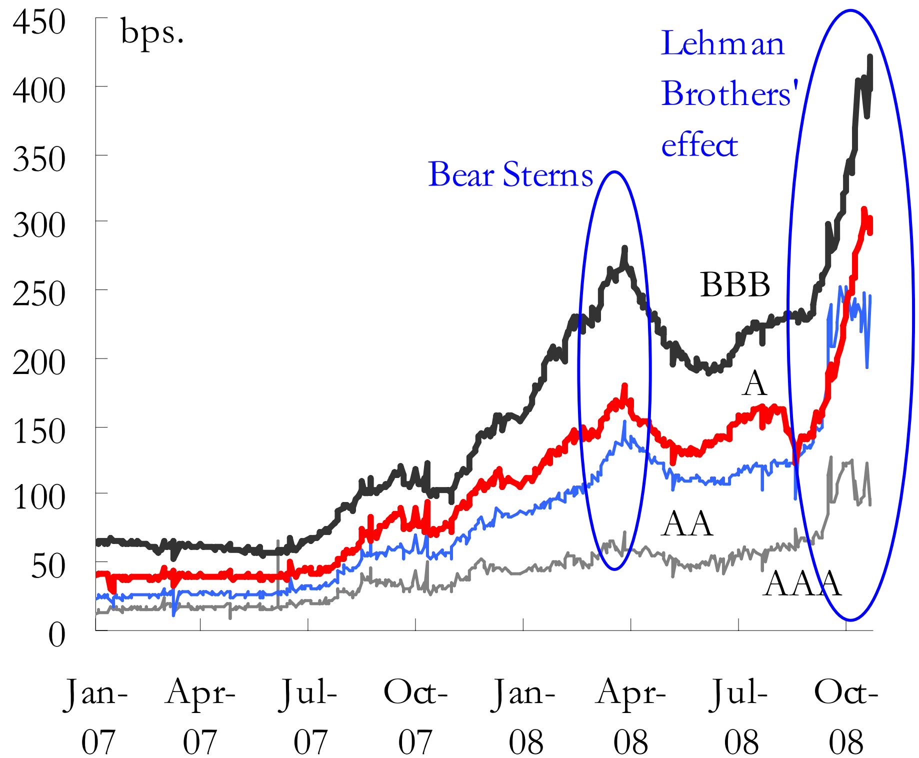
Higher risks



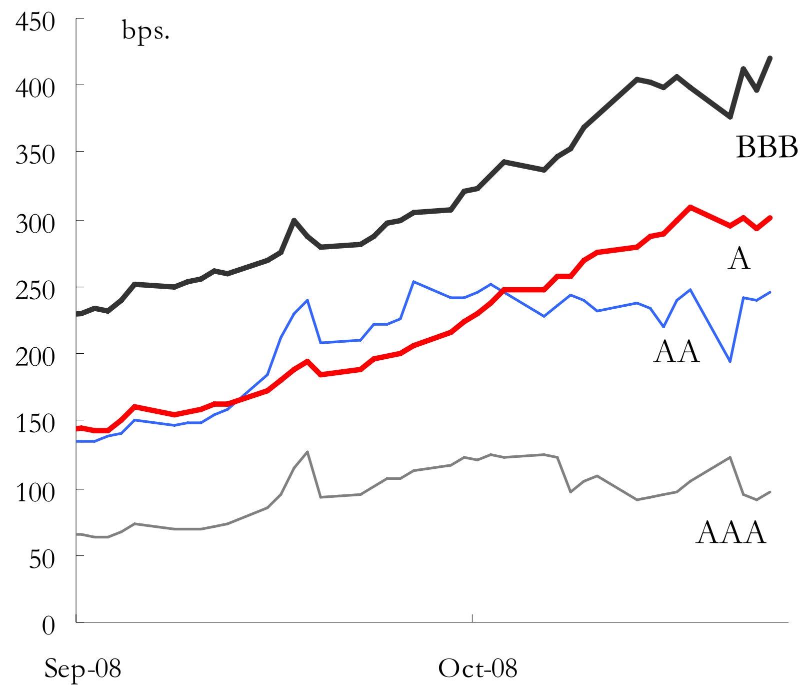
Financial crisis deepened and broadened rapidly

(Corporate spreads over euro-area government bonds)

2007 and 2008

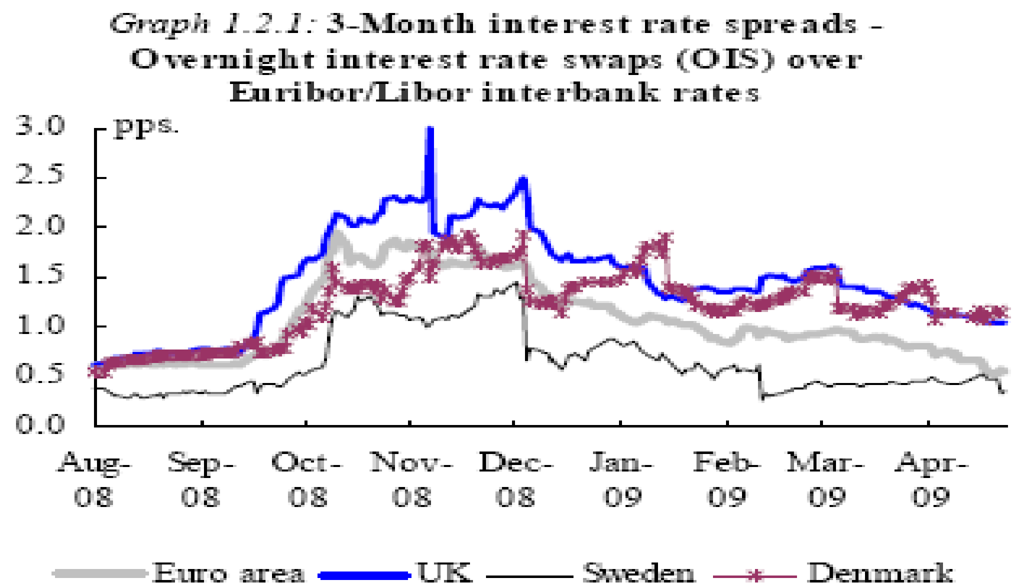


End of 2008



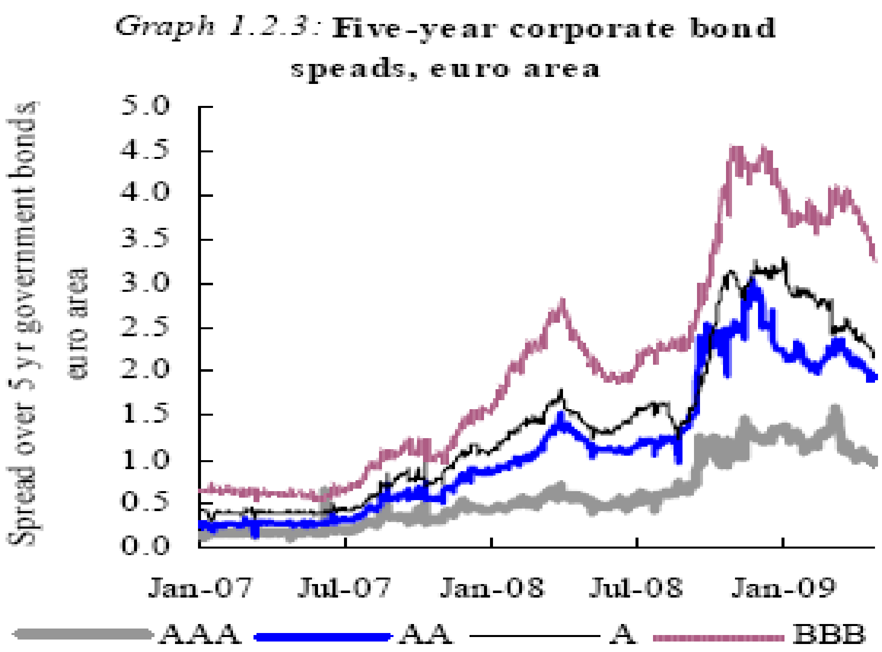
Financial crisis deepened and broadened rapidly, but seems stabilising now

(3M Interest rate spread: OIS over Euribor/Libor)



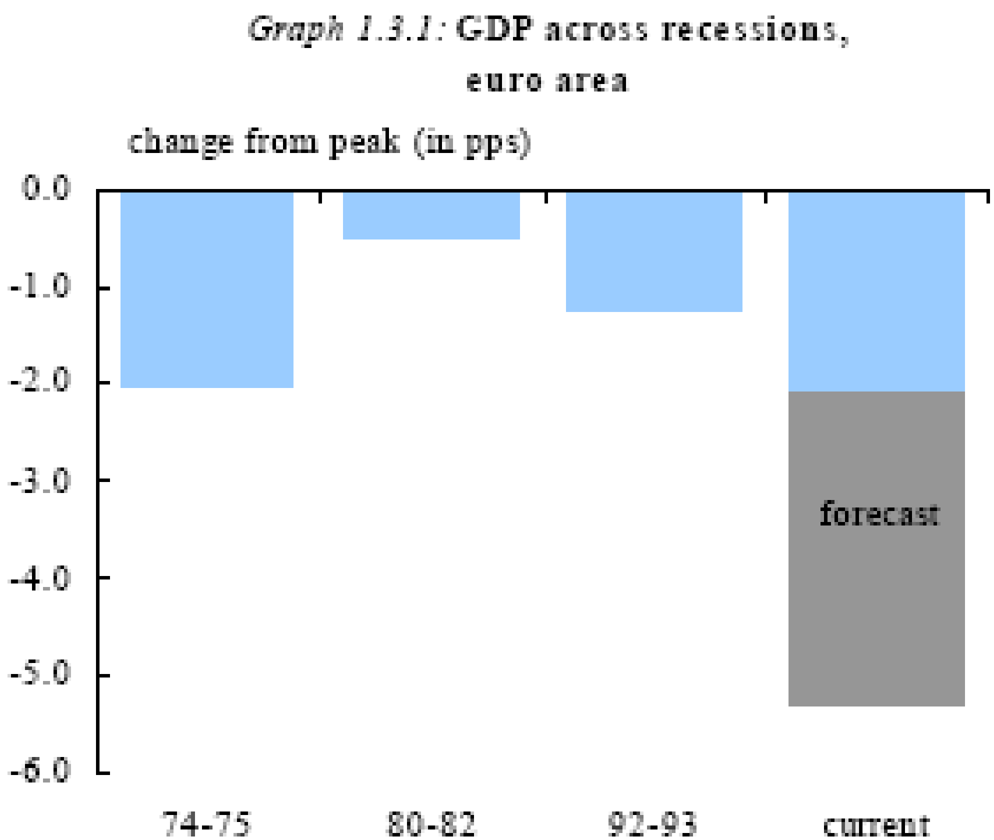
Financial crisis deepened and broadened rapidly, but seems stabilising

(Corporate spreads over euro-area government bonds)



4.
The Impact on the Real Economy of the Financial Crisis

Spring 2009 EU Forecast: very low



Spring 2009 EU Forecast: very low

Table 1:

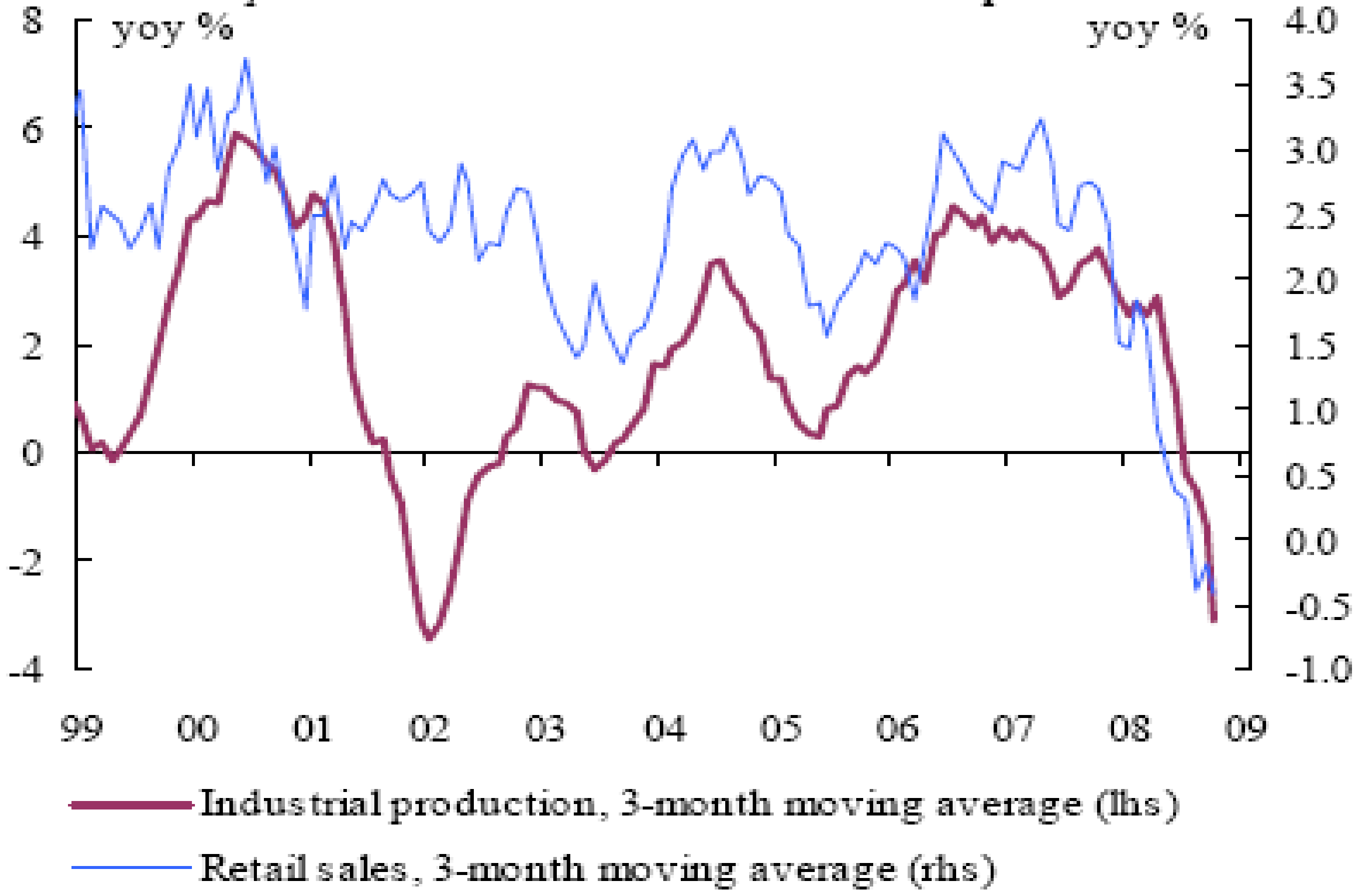
Main features of the spring 2009 forecast - EU

(Real annual percentage change unless otherwise stated)	2005	2006	2007	Spring 2009 forecast [1] 2008	2009	2010	Difference vs January 2009 (a) 2009	2010
GDP	2.0	3.1	2.9	0.9	-4.0	-0.1	-2.2	-0.6
Private consumption	2.0	2.3	2.2	0.9	-1.5	-0.4	-1.1	-0.8
Public consumption	1.6	1.9	1.9	2.2	1.9	1.7	0.4	0.6
Total investment	3.6	6.2	5.4	0.1	-10.5	-2.9	-4.6	-2.3
Employment	0.8	1.5	1.7	0.7	-2.6	-1.4	-1.0	-0.9
Unemployment rate (b)	8.9	8.2	7.1	7.0	9.4	10.9	0.7	1.4
Inflation (c)	2.3	2.3	2.4	3.7	0.9	1.3	-0.3	-0.6
Government balance (% GDP)	-2.4	-1.4	-0.8	-2.3	-6.0	-7.3	-1.6	-2.5
Government debt (% GDP)	62.7	61.3	58.7	61.5	72.6	79.4	5.2	8.5
Adjusted current account balance (% GDP)	-0.7	-1.1	-1.0	-1.5	-1.9	-2.0	-0.4	-0.6

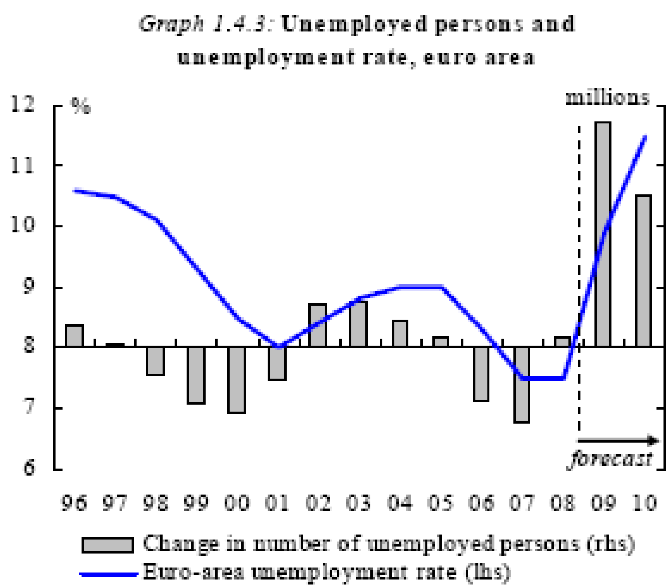
[1] The Commission services' spring 2009 forecast is based on available data up to April 22 2009.
(a) A "+" ("-") sign means a higher (lower) positive figure or a lower (higher) negative one compared to January 2009.
(b) Percentage of the labour force. (c) Harmonised index of consumer prices, nominal change.

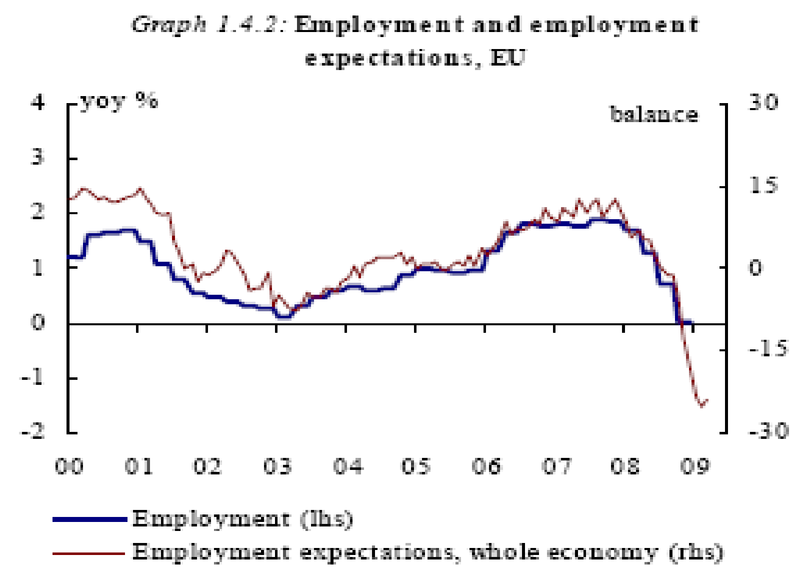
Impact on Consumption and Production

Graph 1.4: **EU - retail sales and industrial production**

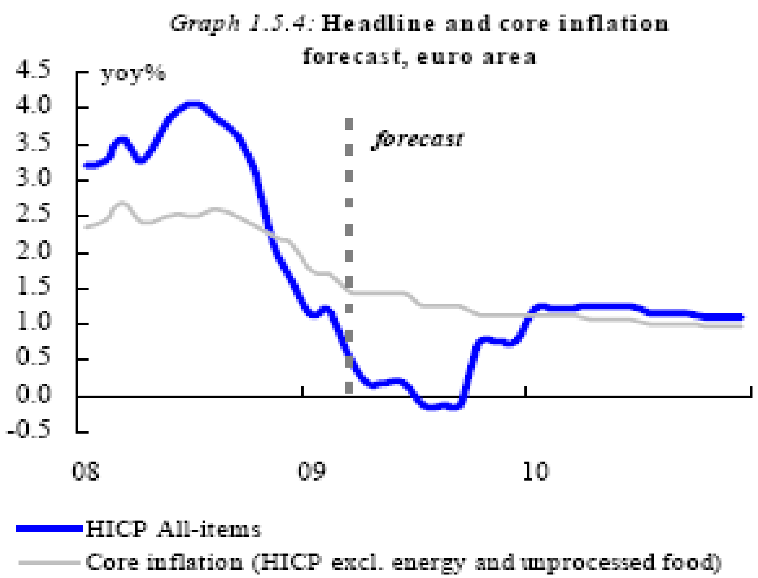


Effects on Employment



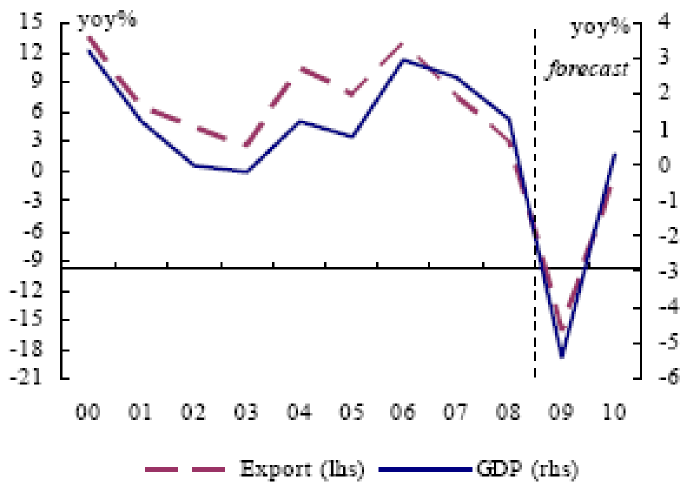


Effects on Prices

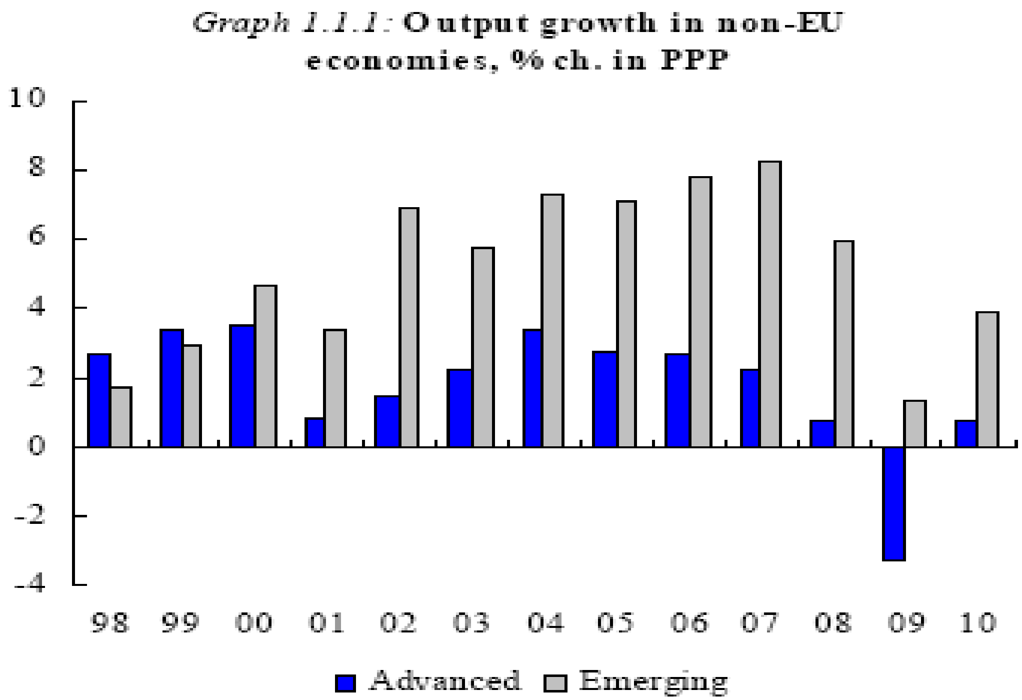


Effects on Growth

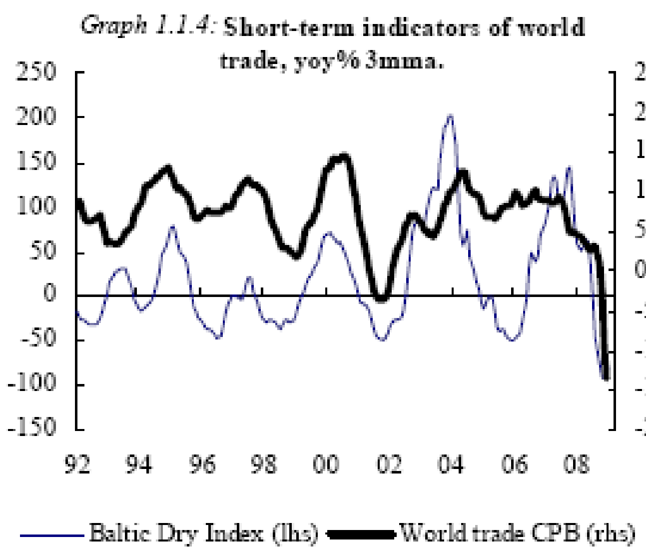
Graph 2.5.1: **Germany - Exports and real GDP growth**



World forecasts



World forecasts



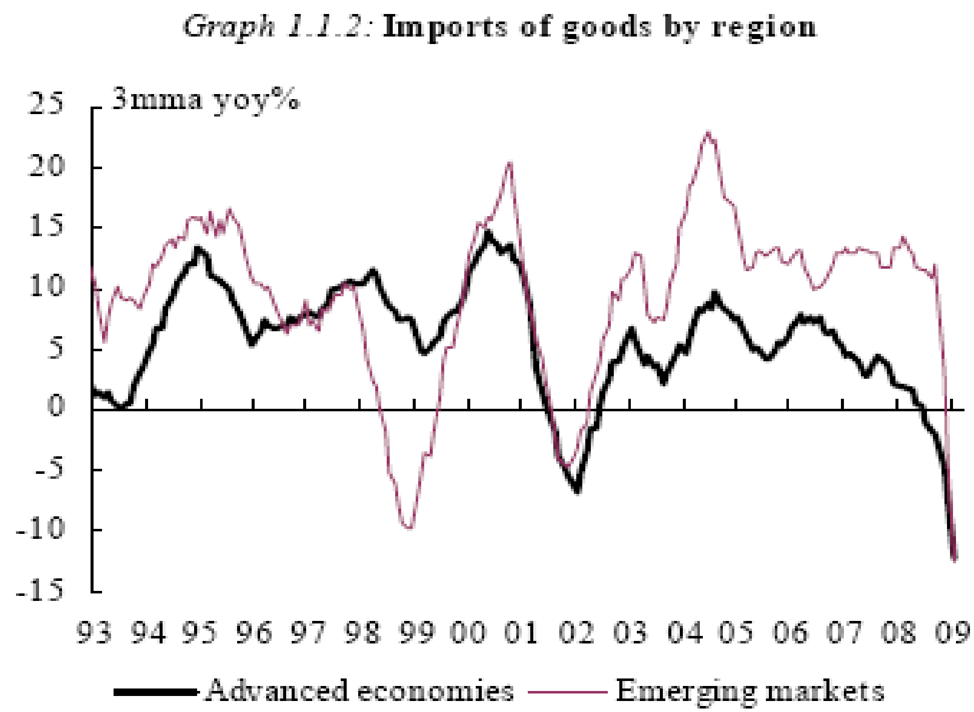


Table 1.1.1:

International environment

(Real annual percentage change)		2005	2006	2007	Spring 2009 forecast 2008	2009	2010	Difference vs autumn 2008 2009	2010
					Real GDP growth				
USA		2.9	2.8	2.0	1.1	-2.9	0.9	-2.4	-0.1
Japan		1.9	2.0	2.4	-0.7	-5.3	0.1	-4.9	-0.5
Asia (excl. Japan)		8.3	9.1	9.7	6.9	3.3	5.6	-2.9	-1.3
of which	China	10.4	11.7	13.0	9.0	6.1	7.8	-1.8	-1.0
	ASEAN4 (a) + Korea	5.0	5.4	5.7	4.2	-0.3	3.3	-4.3	-1.0
Candidate Countries		8.0	6.7	4.8	1.3	-3.6	2.1	-6.3	-1.8
CIS		6.7	8.4	8.5	5.6	-3.8	1.4	-9.8	-4.9
of which	Russia	6.4	7.7	8.1	5.6	-3.8	1.5	-9.8	-5.0
MENA		6.8	6.4	7.0	5.9	1.5	1.6	-3.5	-4.0
Latin America		4.6	5.4	5.6	4.2	-1.6	1.6	-3.9	-1.5
Sub-Saharan Africa		5.6	6.5	6.6	5.2	2.5	3.5	-3.0	-2.5
World		4.5	5.1	5.1	3.1	-1.4	1.9	-3.7	-1.3
					World merchandise trade				
World import growth		8.5	9.5	6.7	2.6	-11.4	0.9	-13.6	-3.2
Extra EU export market growth		:	9.3	8.9	3.6	-10.7	2.1	-14.8	-3.3

(a) ASEAN4 : Indonesia, Malaysia, Philippines, Thailand.

But everything has a cost in terms of public finances

Table 1.6.1:

General government budgetary position - euro area and EU

(% of GDP)	Euro area				Difference vs January 2009		EU				Difference vs January 2009	
	2007	2008	2009	2010	2009	2010	2007	2008	2009	2010	2009	2010
Total receipts (1)	45.4	44.7	44.8	44.4	0.1	0.0	44.9	44.5	44.1	43.8	-0.2	-0.3
Total expenditure (2)	46.1	46.6	50.1	51.0	1.4	2.2	45.7	46.8	50.1	51.1	1.4	2.1
Actual balance (3) = (1)-(2)	-0.6	-1.9	-5.3	-6.5	-1.3	-2.1	-0.8	-2.3	-6.0	-7.3	-1.6	-2.5
Interest expenditure (4)	2.9	3.0	3.0	3.2	0.0	0.2	2.7	2.7	2.8	3.1	0.0	0.2
Primary balance (5) = (3)+(4)	2.3	1.1	-2.3	-3.3	-1.3	-2.0	1.9	0.4	-3.2	-4.3	-1.6	-2.3
Cyclically adjusted budget balance	-1.9	-2.9	-3.9	-4.7	-0.7	-1.4	-2.1	-3.3	-4.6	-5.6	-0.9	-1.8
Cyclically adjusted primary balance	1.1	0.1	-0.9	-1.5	-0.7	-1.2	0.6	-0.5	-1.8	-2.5	-0.9	-1.6
Structural budget balance	-1.8	-2.8	-3.9	-4.7	-0.7	-1.4	-2.0	-3.1	-4.6	-5.5	-0.9	-1.7
Change in structural budget balance	0.2	-1.0	-1.1	-0.8	-0.2	-0.7	0.1	-1.1	-1.5	-0.9	-0.4	-0.8
Gross debt	66.0	69.3	77.7	83.8	5.0	8.0	58.7	61.5	72.6	79.4	5.2	8.5

The structural budget balance is the cyclically-adjusted budget balance net of one-off and other temporary measures estimated by the Commission services.

But everything has a cost in terms of public finances

Graph 1.6.1: Total revenue and expenditure (Four-quarter moving average), EU

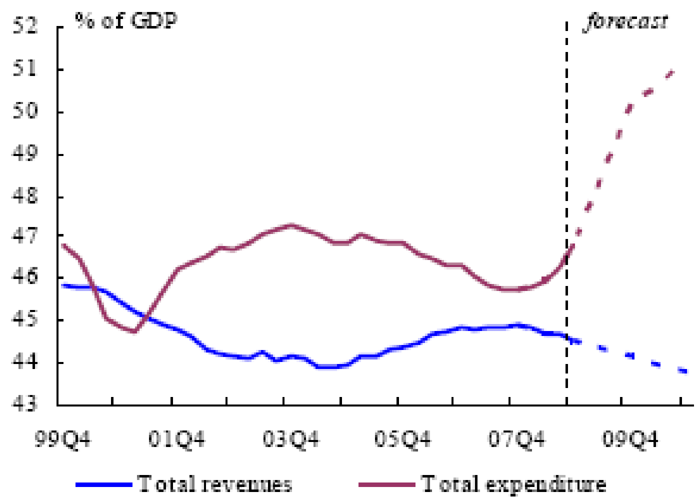


Table 1.6.2:
Euro area - Debt dynamics

(% of GDP)	average 2002-06	2007	2008	2009	2010
Gross debt ratio[1]	69.1	66.0	69.3	77.7	83.8
Change in the ratio	0.5	-2.2	3.3	8.3	6.1
Contributions [2] *:*					
1. Primary balance	-0.4	-2.3	-1.1	2.3	3.3
2. "Snow-ball" effect	0.8	-0.3	1.0	4.8	2.3
Of which:					
Interest expenditure	3.2	2.9	3.0	3.0	3.2
Growth effect	-0.9	-1.7	-0.5	2.9	0.1
Inflation effect	-1.4	-1.5	-1.5	-1.1	-1.0
3. Stock-flow adjustment	0.1	0.5	3.4	1.2	0.5

Notes:
[1]End of period.
[2]The snow-ball effect captures the impact of interest expenditure on accumulated debt, as well as the impact of real GDP growth and inflation on the debt ratio (through the denominator). The stock-flow adjustment includes differences in cash and accrual accounting, accumulation of financial assets and valuation and other residual effects.

5.
Policy Responses

What do we learn from the current crisis?

- Financial innovation is not a bad thing
  - Can improve stability smoothing the risk among investors;
  - Can allow for a more efficient allocation of capital, making it available to new segments of the economy;

  But
  - It should not alter incentives of market participants (originate and distribute Vs. buy and hold)
  - “Greater efficiency does not necessarily go hand-in-hand with enhanced stability” (Lamfalussy 2001)
- Moral hazard of little relevance (the facto tendency towards public intervention, excessive risk taking was due to mispricing of liquidity risk, market conditions, funding mismatch)
- Asymmetric information leads to market disruption
- Global in life, local in death?

The G20 (November 08, April 08)

- Global repair is needed: need for both regulation and enforcement
- No regulatory power at global level;
- Push for fiscal action in EU and US.
- International Cooperation
- Reforming International Institutions (FSF, IMF)

The Ecofin Roadmap (12/07)

- Credit Market Crisis
  - Transparency
  - Valuation standards
  - Prudential framework, risk management and supervision
  - Market functioning
- Crisis Management
- Lamfalussy Review

EU Tensions in Financial Regulation and Supervision

- EU vs. national supervision;
- Home vs. host;
- Euro vs. non-Euro;
- Domestic vs. pan-EU banks;
- Harmonised vs. competitive rulebook;

EU Tensions in Financial Regulation and Supervision

- European vs. national crisis mechanisms;
- Pragmatism vs. Big-bang;
- More vs. less Europe;
- Global vs. EU-centred.

La Commission face à la crise financière

- Un rôle de « faiseur de règles »
- Le 1er plat de résistance – les exigences de fonds propres
  - Acquis: grands risques, collèges, hybrides et gestion des risques dans la titrisation (EEV: Dec 2010)
  - En négociation: re-titrisation, portefeuille de négociation/ trading book, remunération (EEV: Dec 2010)

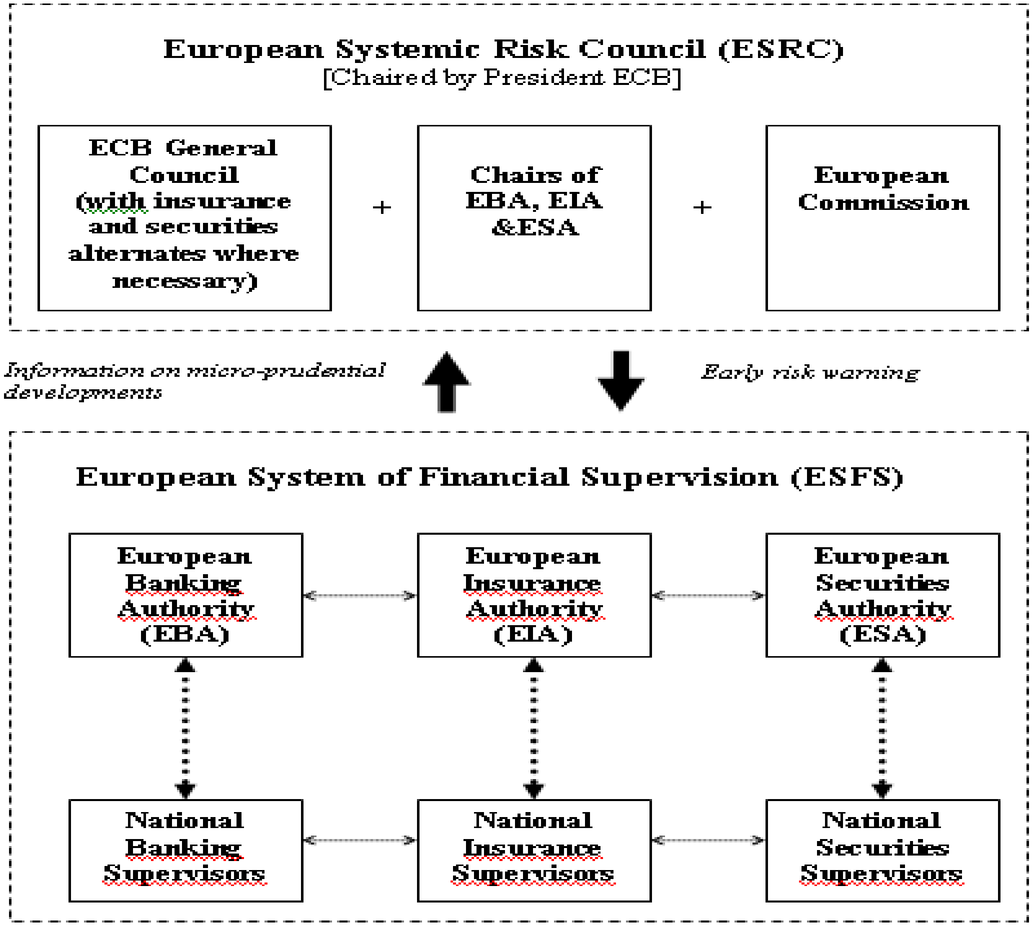
La Commission face à la crise financière

- Un rôle de « faiseur de règles »
- Le 1er « Plat de résistance » – les exigences de fonds propres
    - En discussion (Bâle, FSB): ratio d'endettement, des amortisseurs en capital et du traitement des institutions financières d'importance systémique
    - Les conditions d'une concurrence équitable avec les US
    - Question de l'effet cumulé
        - Etude d'impact
        - « lorsque les conditions financières se seront améliorées et la reprise économique sera effective »
        - Au plus tard en 2012

La Commission face à la crise financière

- Un rôle d'architecte
- Le 2eme « Plat de résistance » – la réforme de la surveillance
  - Traditionnellement, le point faible de l'Europe financière
    - Mécanismes de coopération fondés sur le consensus
    - Absence de code européen des services financiers
  - De nouvelles failles apparues avec la crise
    - L'absence de coopération dans la surveillance des groupes transfrontaliers
    - L'absence de surveillance « macro-prudentielle » pour la détection des risques

La Commission face à la crise financière



La Commission face à la crise financière

- Un rôle d'architecte
  - Le 2eme « Plat de résistance » – la réforme de la surveillance
    - La surveillance journalière relève des gendarmes nationaux
    - Pour les groupes transfrontaliers, les collèges sont essentiels
    - Les autorités européennes arbitrent, coordonnent et harmonisent les règles techniques
    - La Commission transforment les règles en normes européennes

Conclusions

- Worst crisis since ’30
- Timely and effective Governments’ reaction (even coordinated at world level) to avoid meltdown, but…
  - larger state presence in the economy
  - greater role for CBs
  - large fiscal costs of the intervention and difficulty to raise taxes/cut expenditure

Conclusions

- Tomorrows' features of the economy
  - markets more volative
  - lower growth in the short run
  - less employment creation
  - need to cater for very large public deficits deficits
  - pressure on interest rates
  - possible inflation risks?