

***“The International
Financial Crisis
&
Prospects for the Global
Economy in 2009”***

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I. THE FINANCIAL CRISIS IN PERSPECTIVE

THE TWO FUNDAMENTAL PROBLEMS BEHIND THE CRISIS:

- 1) Insolvency
- 2) Lack of liquidity

CAUSE DE-LEVERAGING

1.1 Insolvency: Getting better

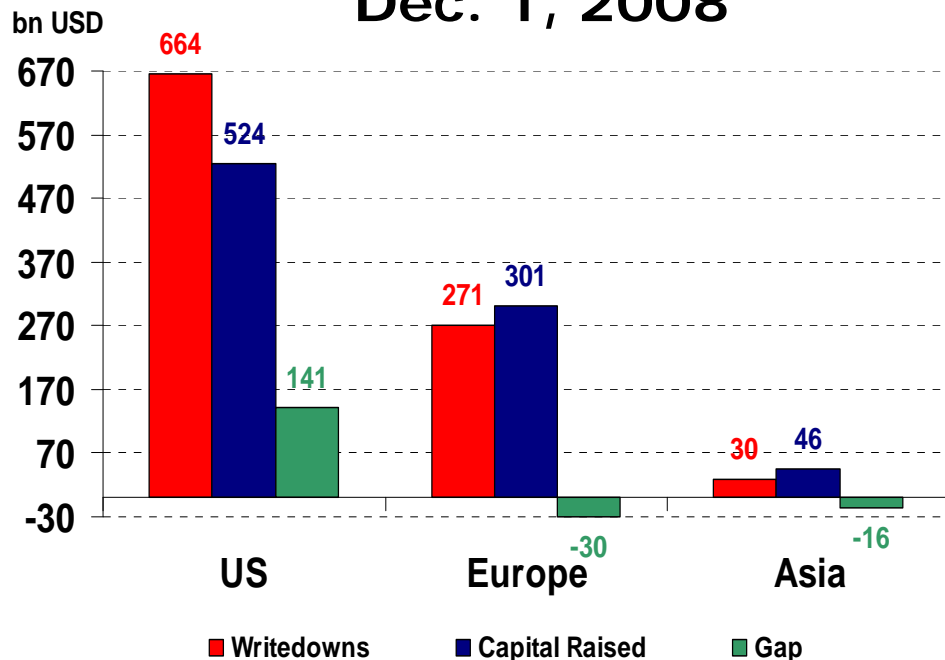
- ✓ The gap between total write-downs and capital increases has declined sharply in recent weeks due to governments' recapitalizations
- ✓ **IMF: Estimates write-downs for all FIs to reach \$1.4 trillion**

All Financials*

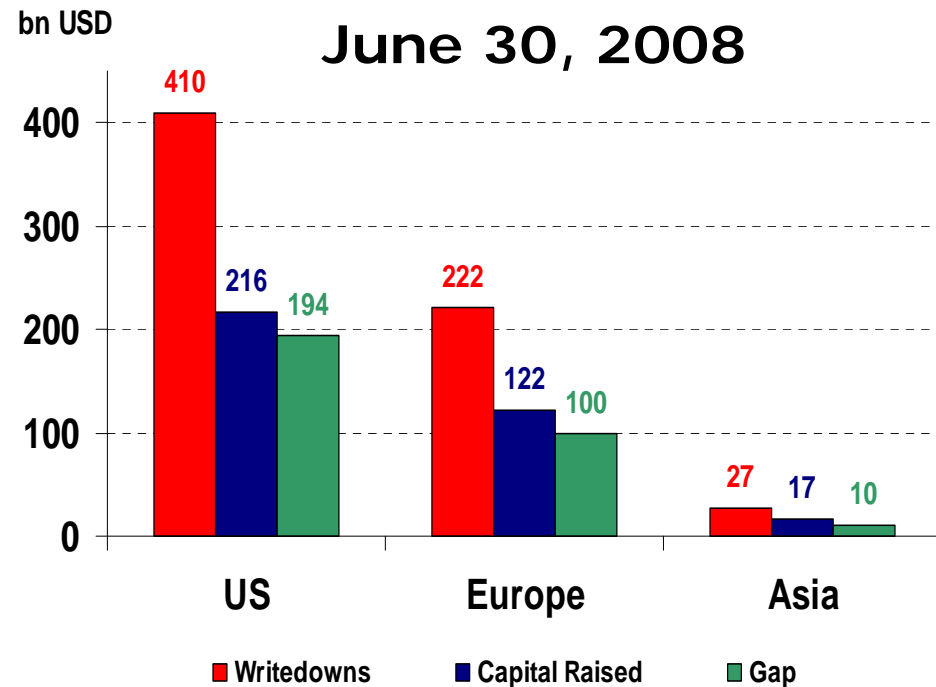
Total Write-downs: \$ 965.1
Total Capital Raised: \$ 869.9
Total Gap: \$ 95.2

Total Writedowns: \$ 658.5
Total Capital Raised: \$ 355.3
Total Gap: \$ 303.2

Dec. 1, 2008



June 30, 2008

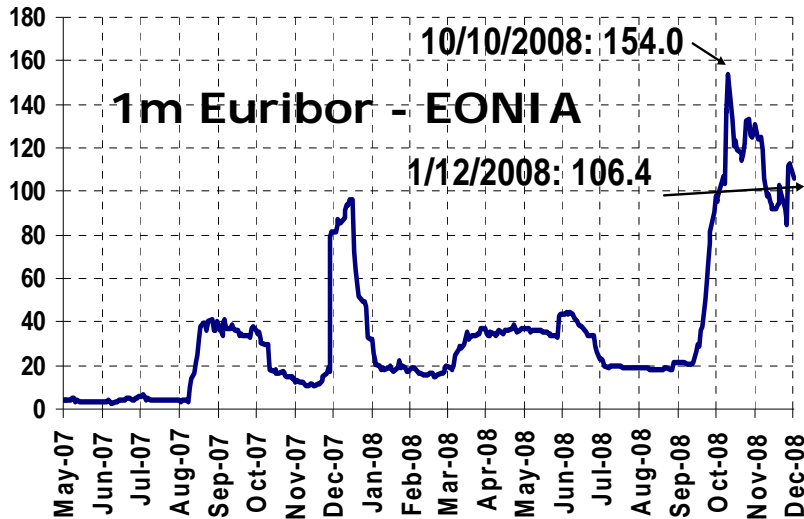


* Banks/Brokers, Insurers, GSEs Source: Bloomberg

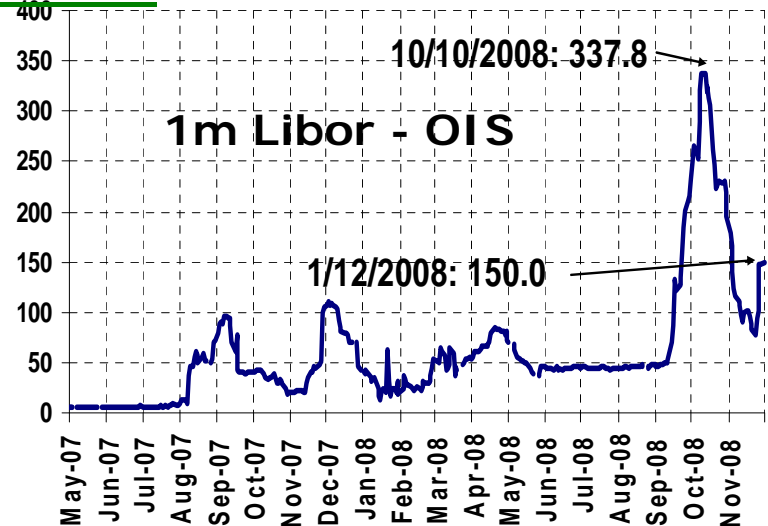
1.2 Liquidity: Not yet solved

Euro Area

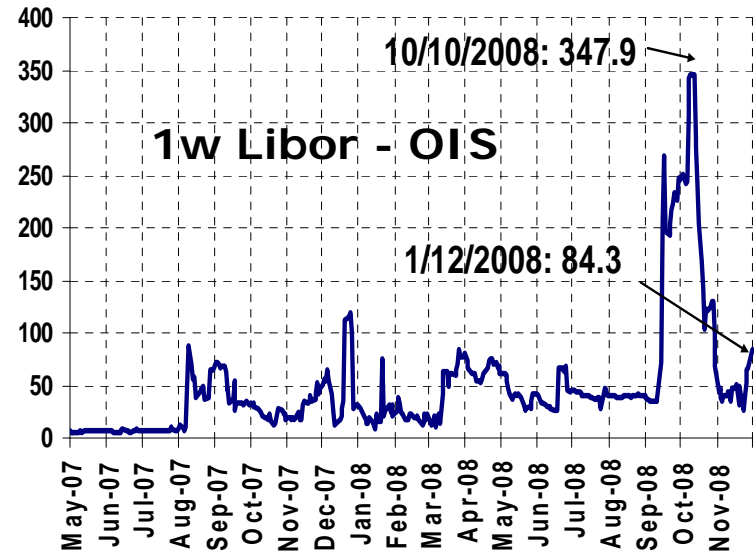
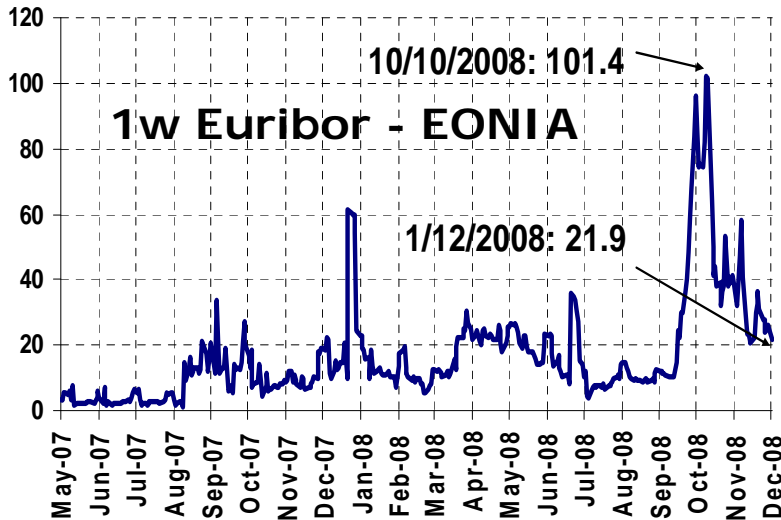
Uncovered minus covered 1-month inter-bank rates



U.S.A.

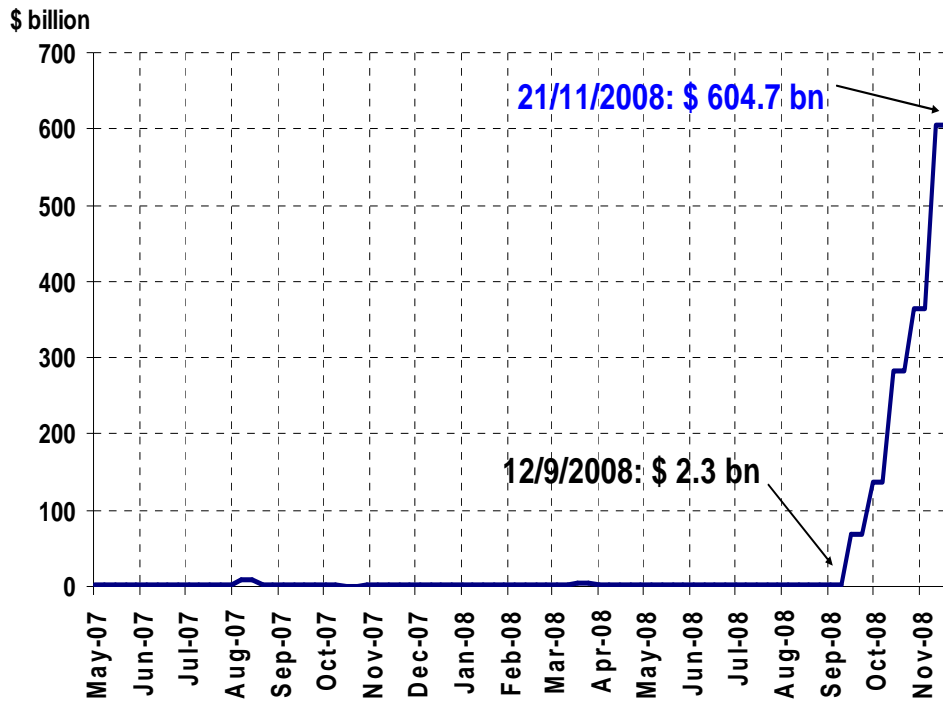


Uncovered minus covered 1-week inter-bank rates

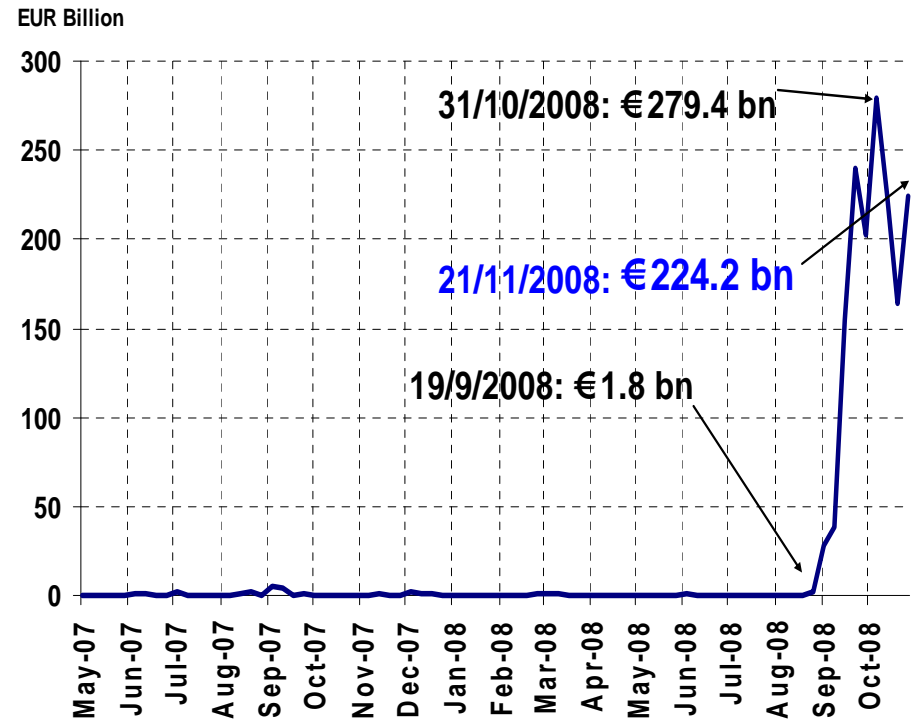


I.2 Liquidity: US & European banks are hoarding cash

US: Excess Reserves



Europe: Deposit Facility



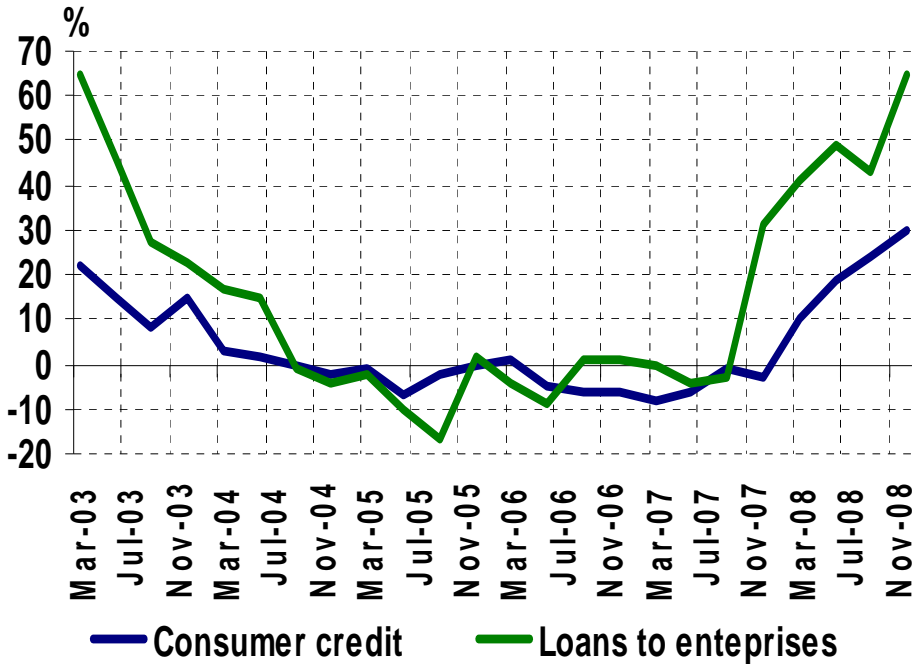
Source: Federal Reserve, ECB

I.3 Illiquidity & Insolvency -> deleveraging

Significant tightening of credit standards

Euro area

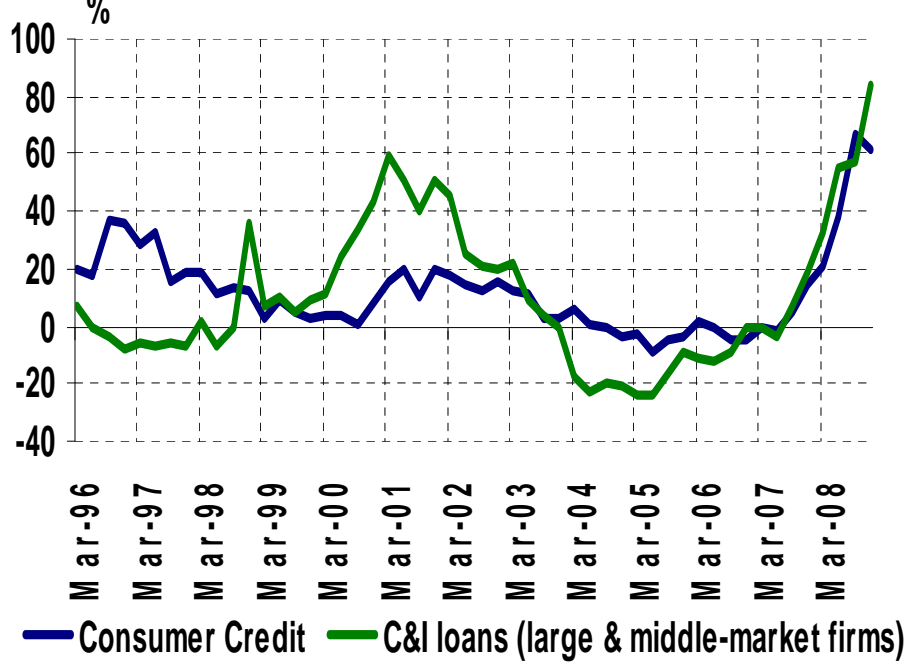
Net percentage of banks reporting a tightening of credit standards



Source: ECB, The Euro Area Bank Lending Survey, October 2008

USA

Net percentage of banks reporting a tightening of credit standards



Source: Federal Reserve, The Senior Loan Officer Opinion Survey on Bank Lending Practices, October 2008

✓ *The results of the October 2008 bank lending surveys in the US and the EA indicate a significant increase in the net tightening of credit standards for loans to enterprises in Q3 08.*

II.

The Economy in 2009

- 1) A deeper recession than usual
- 2) Decline in growth is world-wide
- 3) Deflation is unlikely
- 4) International trade decelerates
- 5) Volatile financial markets

II.1 Recessions with credit crunches and house price busts are deeper and last longer

Recessions in OECD countries (1960-2007)

Recessions	Duration (mean)	Amplitude (median)	Cumulative loss (median)
Without credit crunches	3.64	-1.82	-2.87
With credit crunches	3.78	-2.19	-4.44
With severe credit crunches	4.33	-2.70	-6.15
Without house price busts	3.20	-1.52	-2.25
With house price busts	4.47	-2.18	-3.74
With severe house price busts	4.60	-2.64	- 5.23
ALL RECESSIONS	3.64	-1.87	-3.04

Notes: **Duration** is the number of quarters between a peak and the next trough. **Amplitude** is the percent change in output from a peak to the next trough. The **cumulative loss** combines information about the duration and amplitude to measure the overall cost of a recession expressed in %. Severe crunch/bust episodes consist of the top 12.5% of all crunch/bust episodes.

II.1 CENTRAL BANK BALANCE SHEETS

innovations in US monetary policy

	End of August 08	End of October 08	End of November 08
USA	\$ 909 bn	\$ 1,971 bn	\$ 2,109 bn
Euro Area	€1,449 bn	€2,031 bn	€1,974 bn

- ✓ *Fed's balance sheet has more than doubled since August 08, and is due to increase further on the back of increasing financial support to the banking system*
- ✓ *ECB balance sheet has also gone up*

Fed innovations:

- 1) Rescue non-banks
- 2) Lend to non-banks
- 3) Intervene directly in the bond market

GDP, Inflation and Key Policy Rates

	Real GDP			Inflation			Intervention Rates	
	2007	2008	2009	2007	2008	2009	Dec-08	Dec-09
US	2.0	1.4	-1.4	2.9	4.3	1.8	1.00	0.50
EA	2.6	1.0	-1.0	2.1	3.4	1.6	3.25	1.25
Japan	2.1	0.5	-1.2	0.1	1.5	-0.2	0.30	0.30

Bond yields

	Now	Dec-09
US		
10-yr	2.73	3.80
2-yr	0.90	1.30
EA		
10-yr	3.16	3.60
2-yr	2.12	1.45

- ✓ Forecasts deteriorated post-Lehman
- ✓ A protracted recession until 2009:Q3, with a weak rebound throughout 2010.
- ✓ Countries where house price declines (such as US, UK, Ireland and Spain) will be hit harder, as wealth effects will intensify the downturn.
- ✓ Open economies which rely more on exports (such as Germany and Japan) will suffer more from the global slowdown

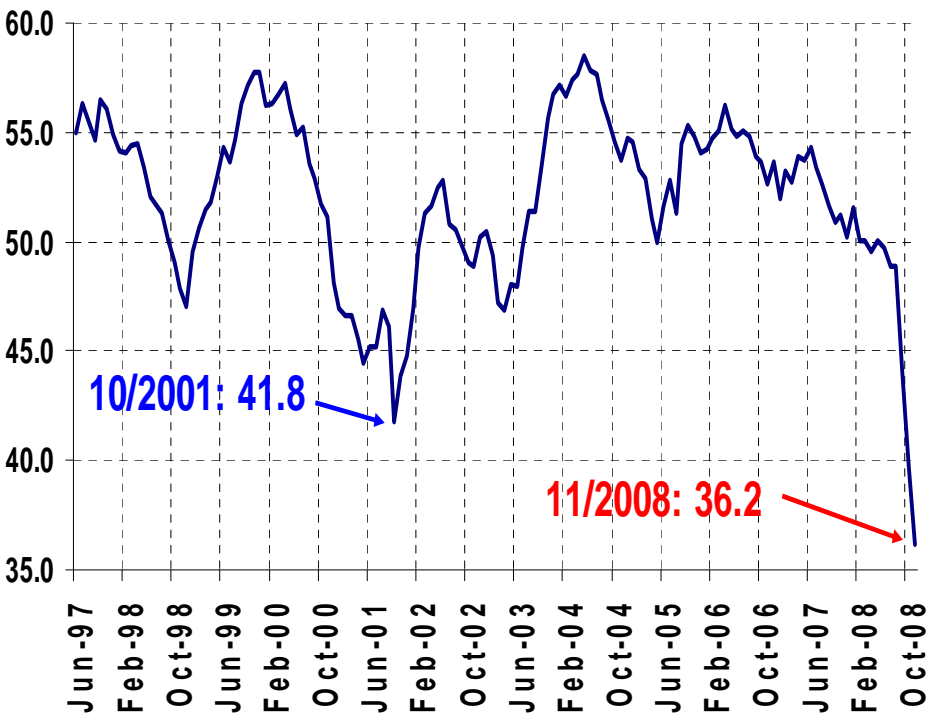
II.2 US: A consumer-led recession

NBER US Recessions	Average real GDP growth (% qoq saar)	Average consumption growth (% qoq saar)	Personal Consumption (contribution to GDP growth-%)
Q4 48 - Q4 49	-1.2	3.3	2.1
Q2 53 - Q2 54	-1.5	1.1	0.7
Q3 57 - Q2 58	-2.2	0.3	0.2
Q2 60 - Q1 61	-1.0	0.9	0.6
Q4 69 - Q4 70	-0.5	1.9	1.3
Q4 73 - Q1 75	-1.5	-0.6	-0.4
Q1 80 - Q3 80	-2.5	-1.8	-1.1
Q3 81 - Q4 82	-1.0	2.1	1.4
Q3 90 - Q1 91	-1.7	-1.0	-0.7
Q1 01 - Q4 01	0.2	2.8	1.9
Average	-1.3	0.9	0.6
Q4 07-Q3 08	0.8	-0.2	-0.1
Q3 08	-0.5	-3.7	-2.7

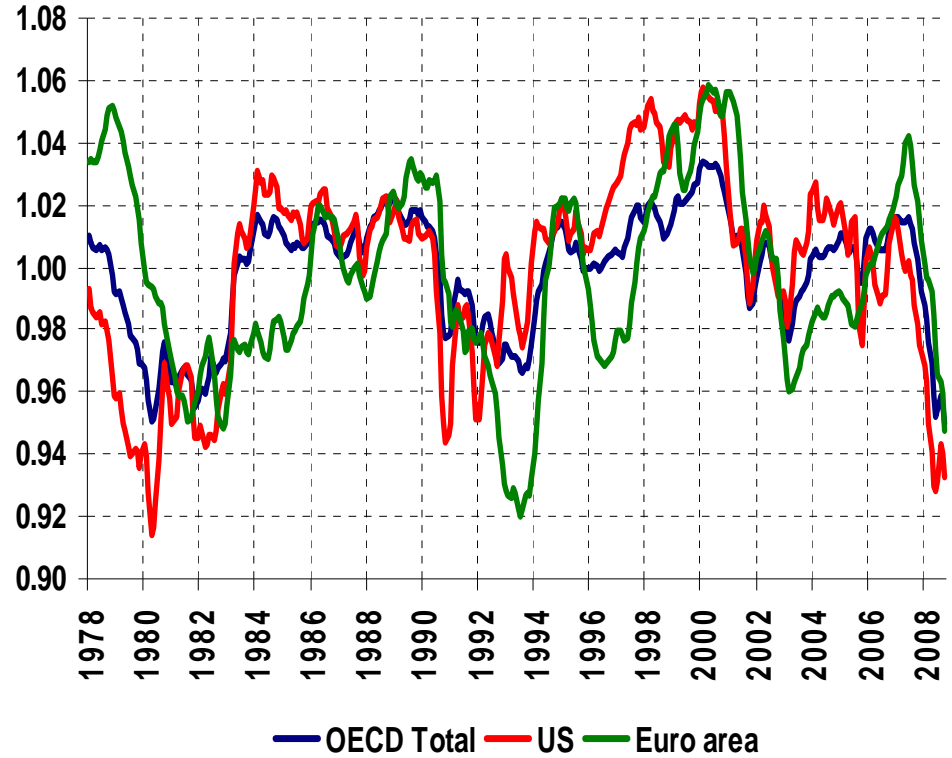
- ✓ Personal consumption contracts in severe recessions
- ✓ Q3 Consumer spending: **-3.7%**
 - First quarterly reduction since 1991
 - Largest decline since 1980
 - Fourth largest decline in post-war history
- ✓ Looking forward: Worst is still to come in Q4 and H1 09. We expect a weak rebound in H2 09 and 2010
- ✓ Fears of a 1930-style depression overdone, given size of fiscal and monetary stimulus
- ✓ **Fed funds:** easing cycle will likely end at 0.50%
- ✓ However, our estimate of policy neutral rate is zero

11.2 Pessimistic enterprises and consumers: Global Leading Indicators at multi-year lows

Composite Manufacturing PMI US & EA



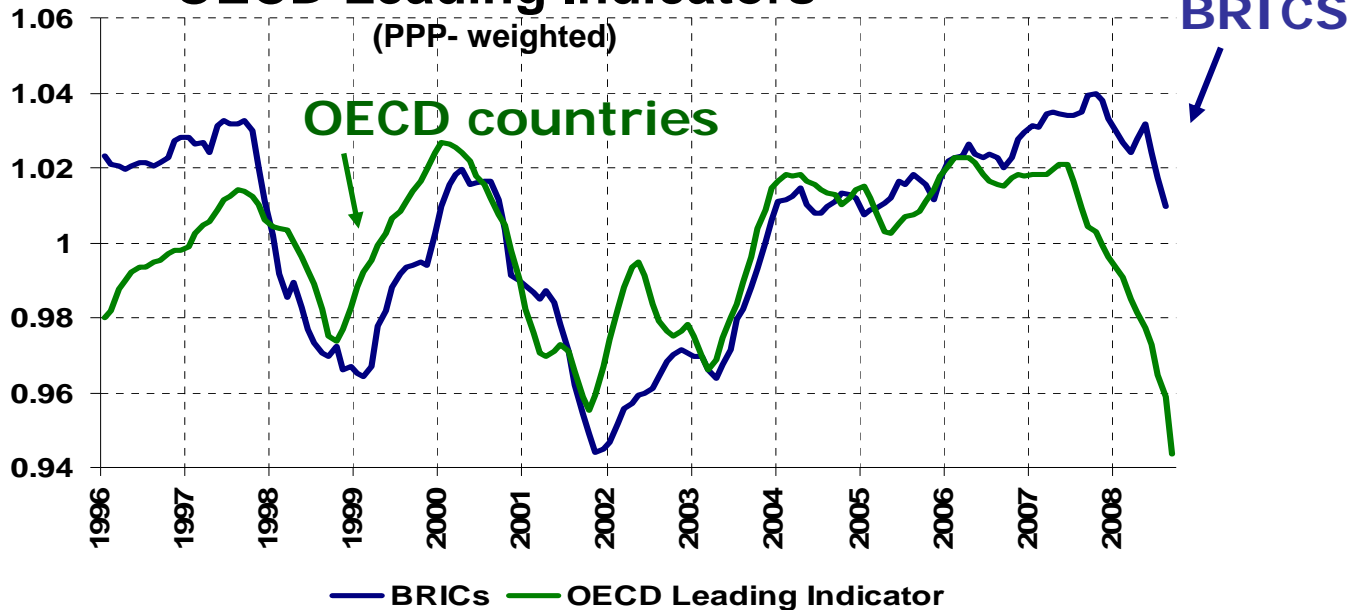
OECD Consumer Confidence Indicators



Source: Ecwin, OECD database, Eurobank EFG estimates

11.2 No decoupling for BRICS

OECD Leading Indicators



- ✓ The slow-down is global
- ✓ Hence, Greece would be affected as well

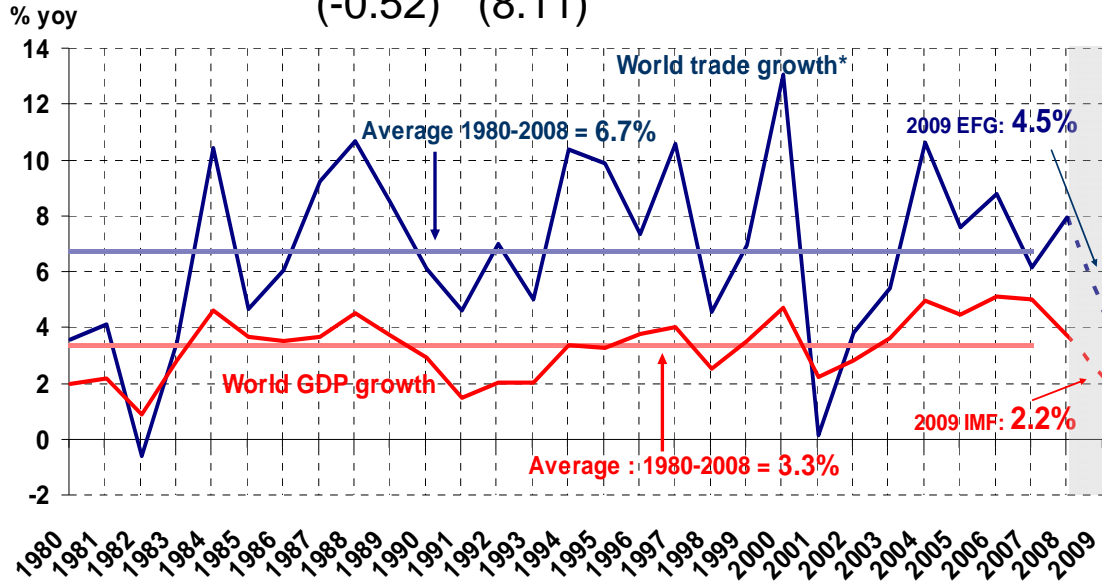
	Real GDP			Inflation			Key policy rates	
	2007	2008	2009	2007	2008	2009	Dec-08	Dec-09
China	11.9	9.5	8.0	4.8	6.2	3.5	5.60	3.50
Brazil	5.4	5.0	3.0	3.6	5.7	5.0	13.75	12.00
Russia	8.1	6.5	3.5	9.0	14.0	11.0	13.00	9.50
India	9.3	7.0	6.5	4.7	9.0	7.0	7.50	6.00

11.3 Is global deflation likely?

- ✓ Many insiders have recently warned that the current mix of credit deceleration and economic contraction may lead to deflation
- ✓ Yet, **deflation risk is small**; it appears **unlikely** that the world will experience a deflation similar to Japan in the 1990s:
 - **Inflation targeting** is the prevailing monetary regime now (unlike 1920s gold standard and Japan in 1990s)
 - Provides anchor for inflation expectations.
 - Targeting is symmetric.
 - Flexibility in providing but also withdrawing liquidity.
 - **Governments and central banks acted early** enough to provide support to the banking system
 - Central banks implemented from the first moment huge liquidity injections.
 - Governments implemented large scale bail out plans for the banking systems. In particular, the US government responded with a large fiscal stimulus package early this year.

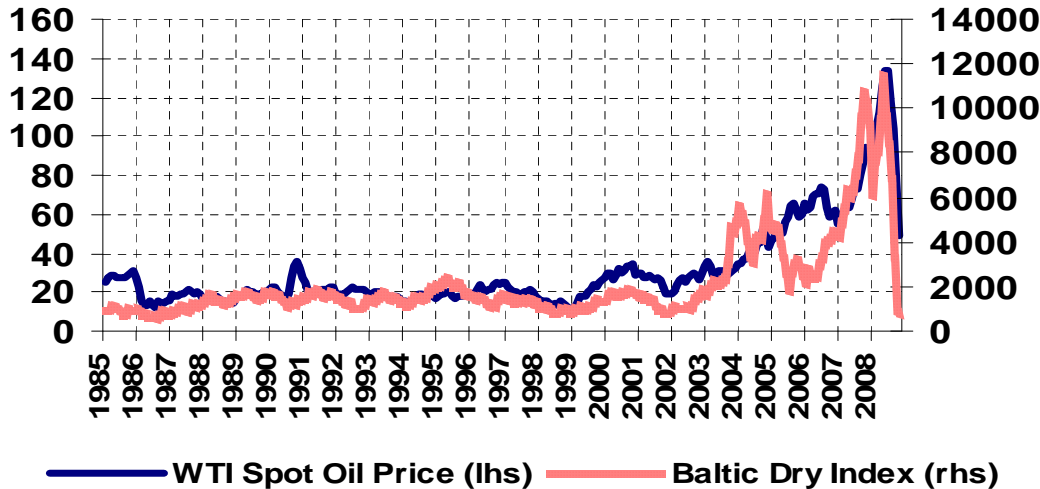
11.4 International trade decelerates

Trade growth = $-0.50 + 2.28 \cdot \text{GDP growth}$, $R^2 = 67\%$
 (-0.52) (8.11)

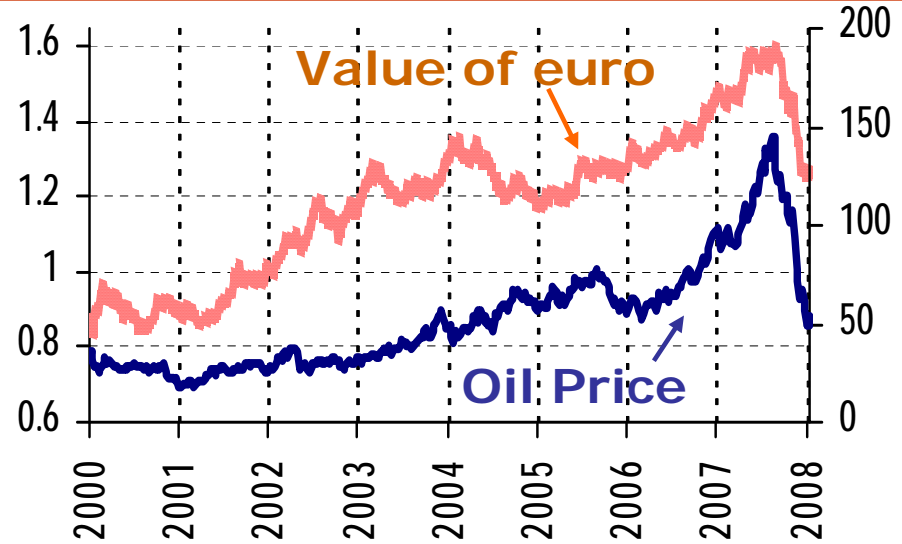
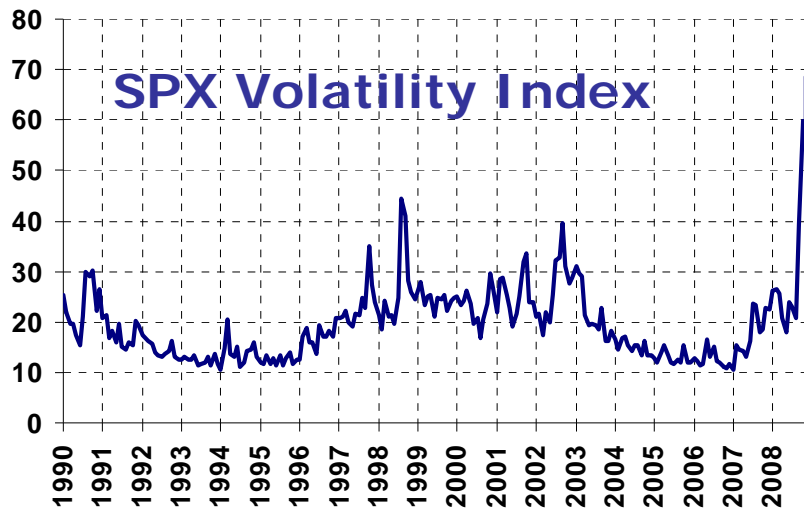


Source: OECD, IMF database, Eurobank EFG estimates

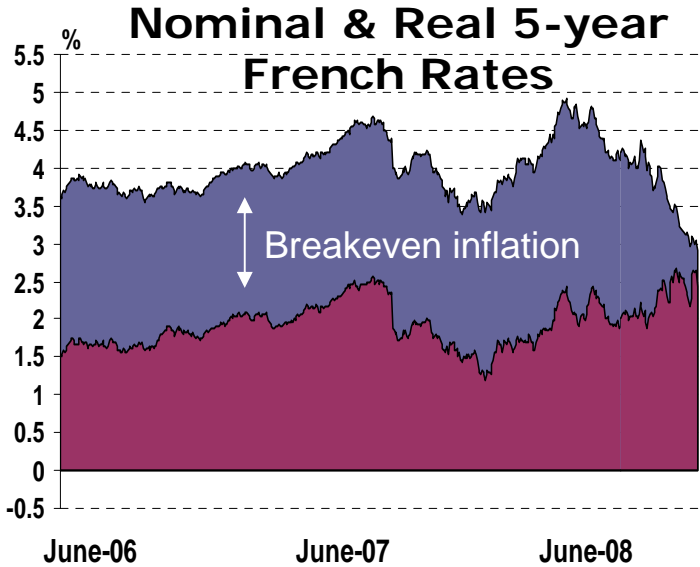
- ✓ The deceleration in global demand affects
 - International trade
 - Oil prices
 - The Baltic dry index
 - The dollar



11.5 Volatile financial markets

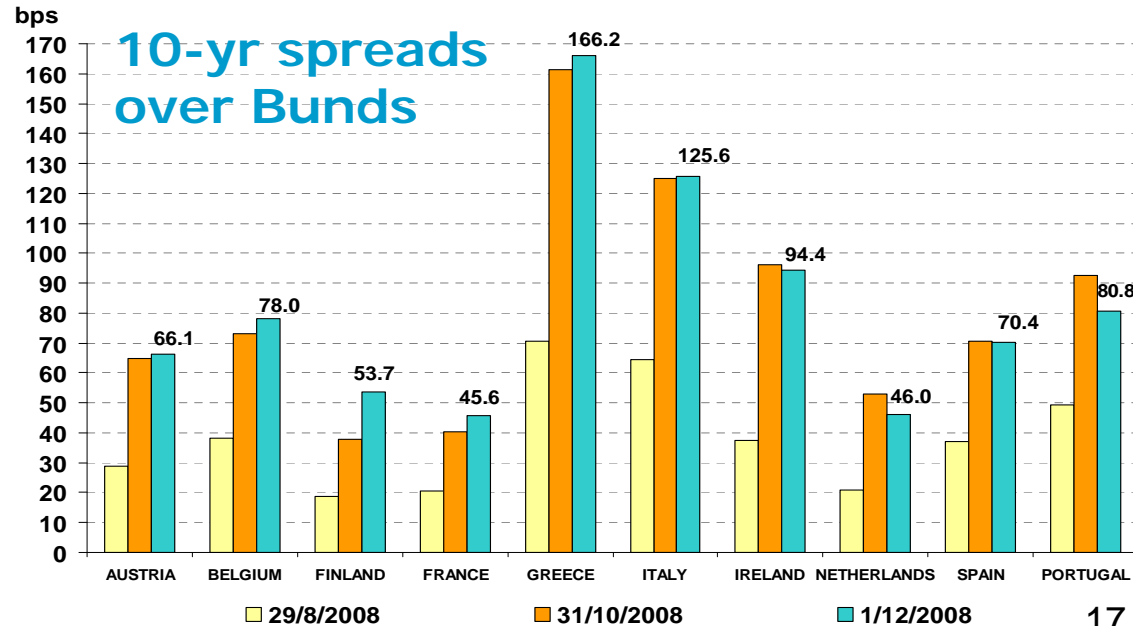


— USD/EUR (lhs) — WTI spot price (rhs)



Nominal = 2.91%
Real = 2.44%

Breakeven = 0.47%



III.

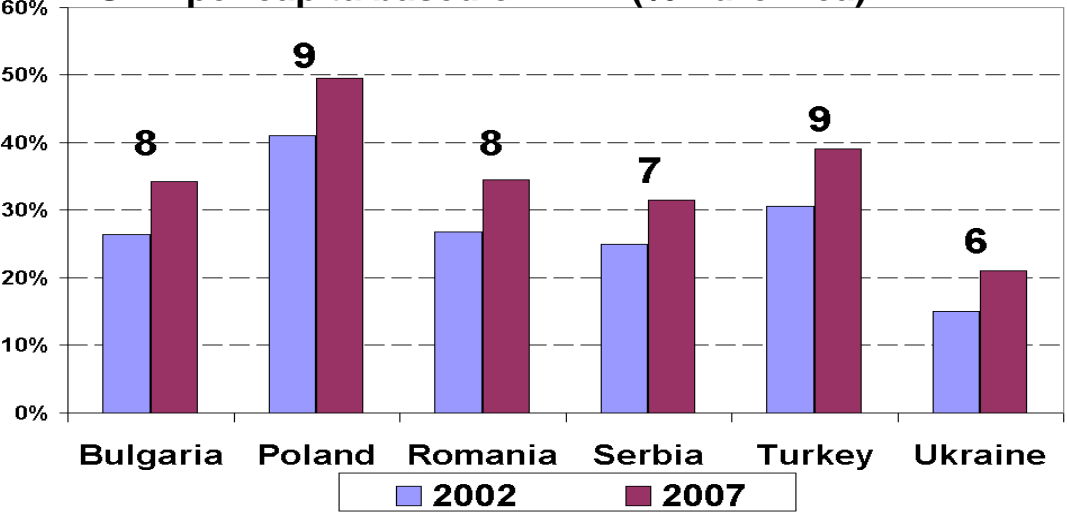
New Europe

The region is bound to continue growing fast, yet short-run risk factors:

- 1) Sharp reduction in credit growth**
- 2) FX risk & asset quality deterioration**
- 3) Sudden stop in capital inflows**

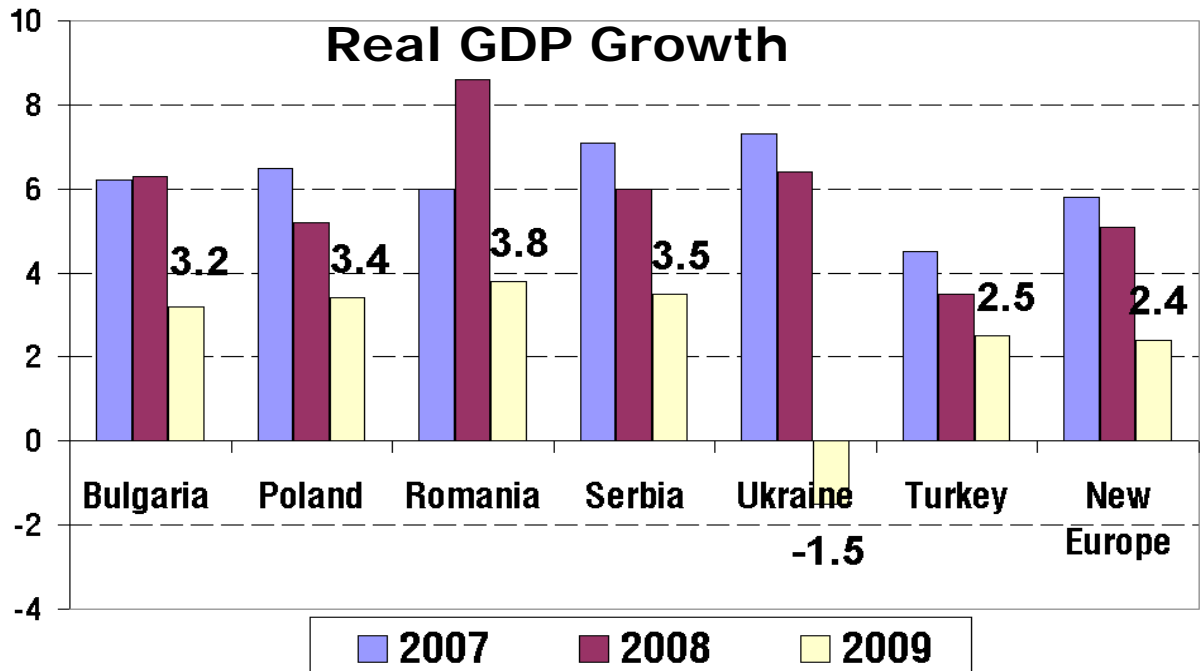
III. NE: Prospects of Real Convergence, but sharp drop in 2009 output growth

GDP per capita based on PPP (% EuroArea)



✓ NE improved its relative standard of living over the last 5 years

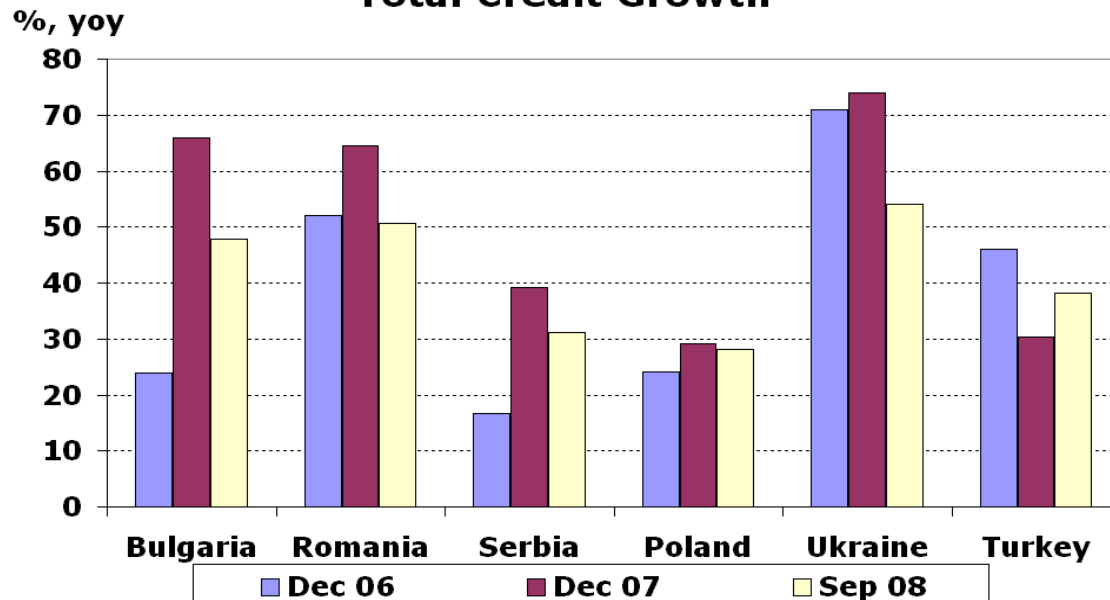
Real GDP Growth



✓ The current slow down reduces overheating and is not yet threatening

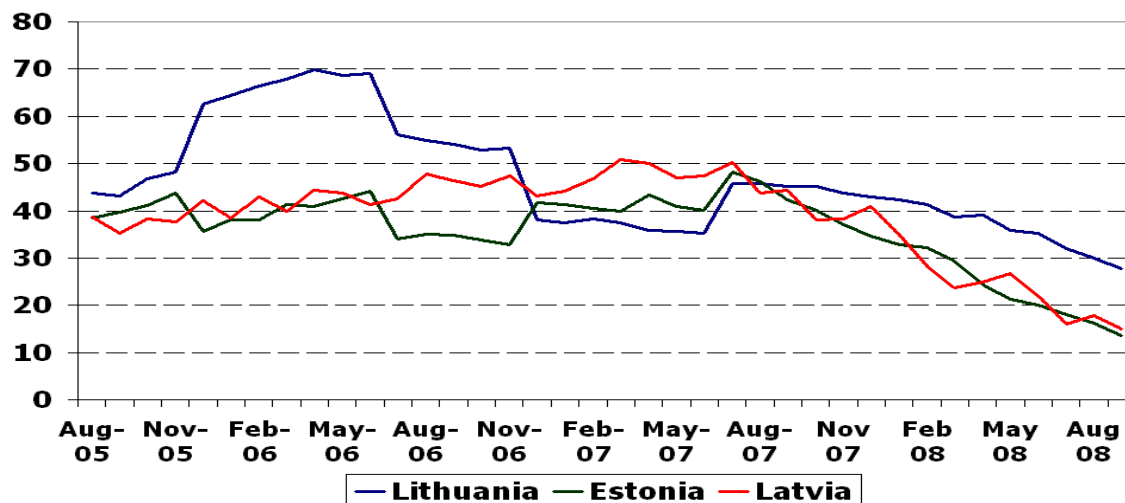
III.1 NE credit growth is slowing down

Total Credit Growth



✓ The drop in NE credit growth will be more pronounced in the future

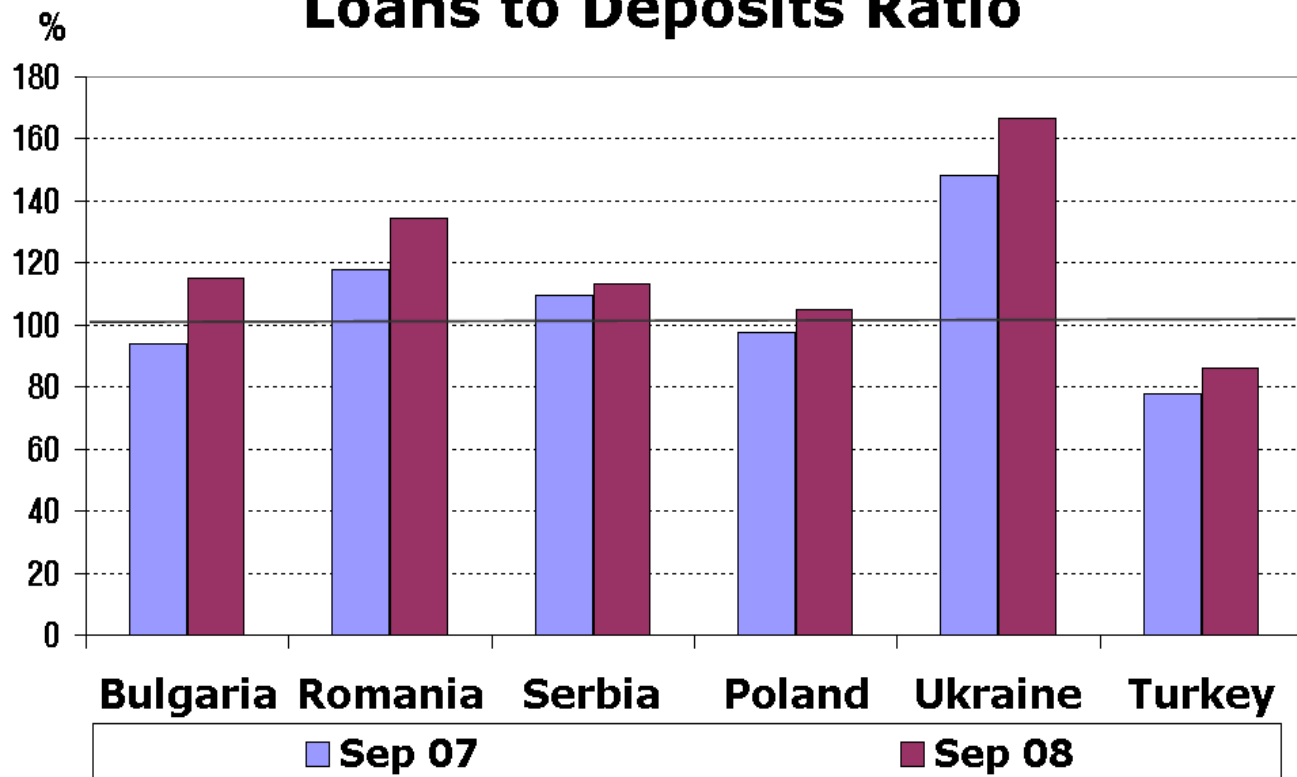
Baltics Credit Growth



✓ An earlier credit crunch in the Baltic States caused a drastic reduction in output growth

III.1 Liquidity is a concern

Loans to Deposits Ratio

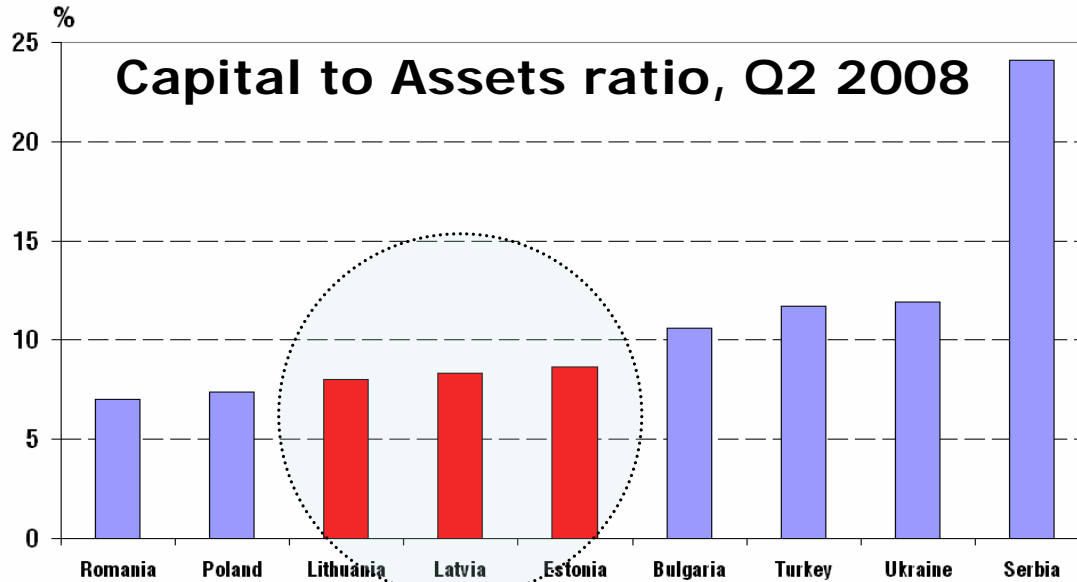


Baltic States at End-2007

Latvia	114.6
Lithuania	151.6
Estonia	168.6
Hungary	128.2

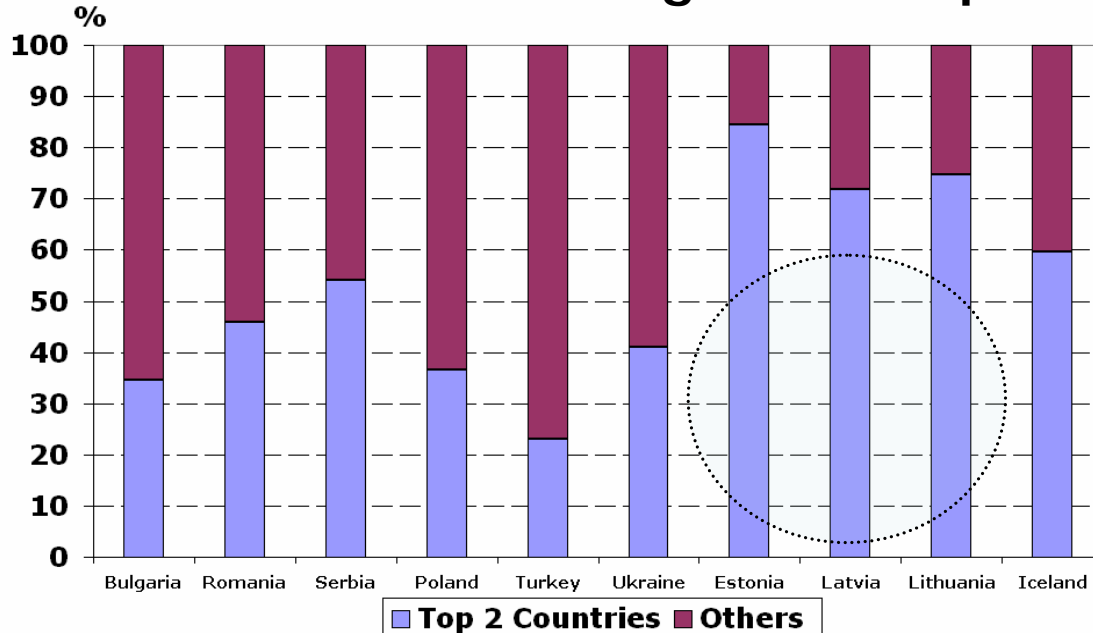
- ✓ Domestic deposits are unable to support a large expansion in credit growth
- ✓ Foreign banks expected to finance loan expansion through local deposits
- ✓ Baltic States were in a worse shape a year earlier

III.1 NE banking system in better shape



✓ Capital to assets ratio relatively stronger in New Europe

The distribution of foreign bank exposure



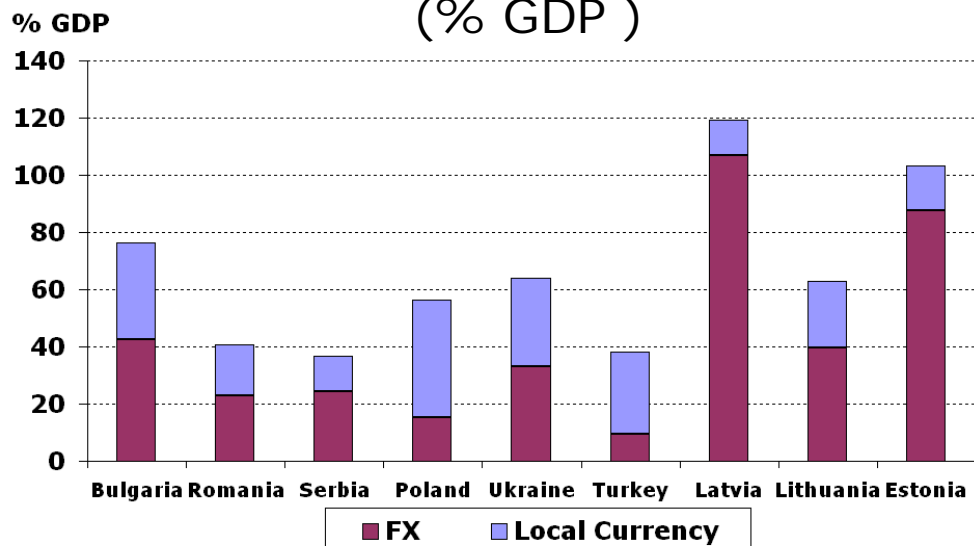
✓ Banking system's foreign ownership more diversified in New Europe than in Baltics

III.1 Credit deceleration will not be as damaging as in the Baltic States

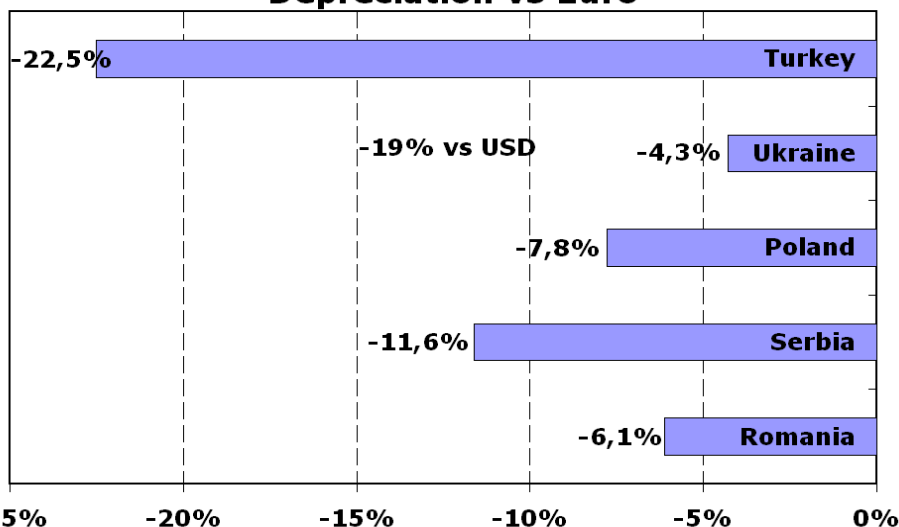
- ✓ The expected credit growth deceleration will slow NE growth, but will not bring a catastrophic recession
- ✓ The sensitivity of GDP growth to credit is much higher in the Baltic States: A 10% reduction of credit causes a loss of **2.3** pps in GDP growth in the Baltics vs **0.8** pps in New Europe
- ✓ The drop in output growth in the Baltics was consistent with the deceleration in credit growth. The same sensitivity of 2.3 applied. Hence,
 - In the most probable scenario, assuming that NE lending is financed exclusively by local deposits, most countries would lose around 1pp from their pre-crisis (Sept 2008) GDP growth
 - In the bad scenario, assuming that banks are forced to lower the loans to deposits to unity, the GDP growth loss is significant for Ukraine, Romania (4.5 pps) but for Poland (1.4 pps) and Bulgaria (2.2 pps) as well

III.2 FX exposure will increase NPLs

Total Credit Decomposition (% GDP)



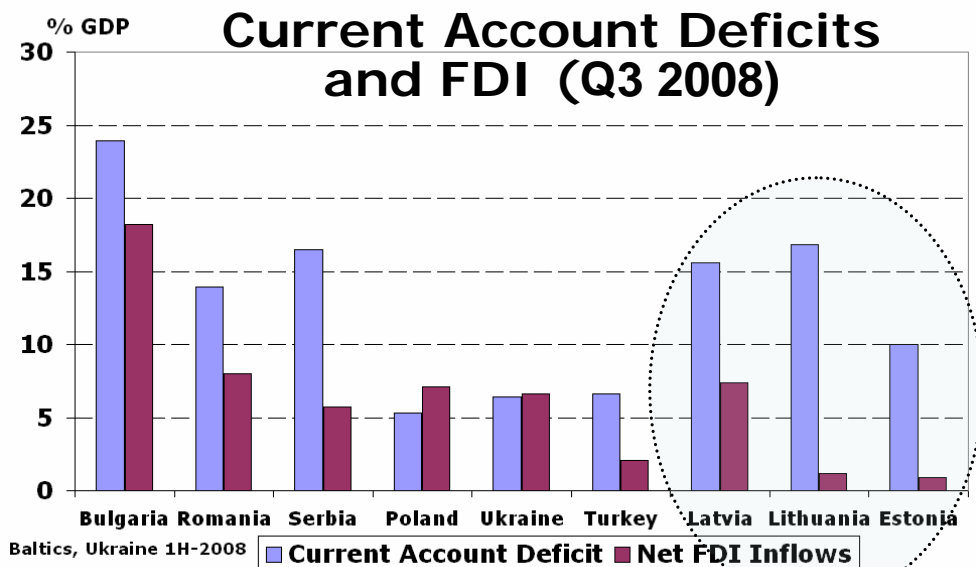
Depreciation vs Euro



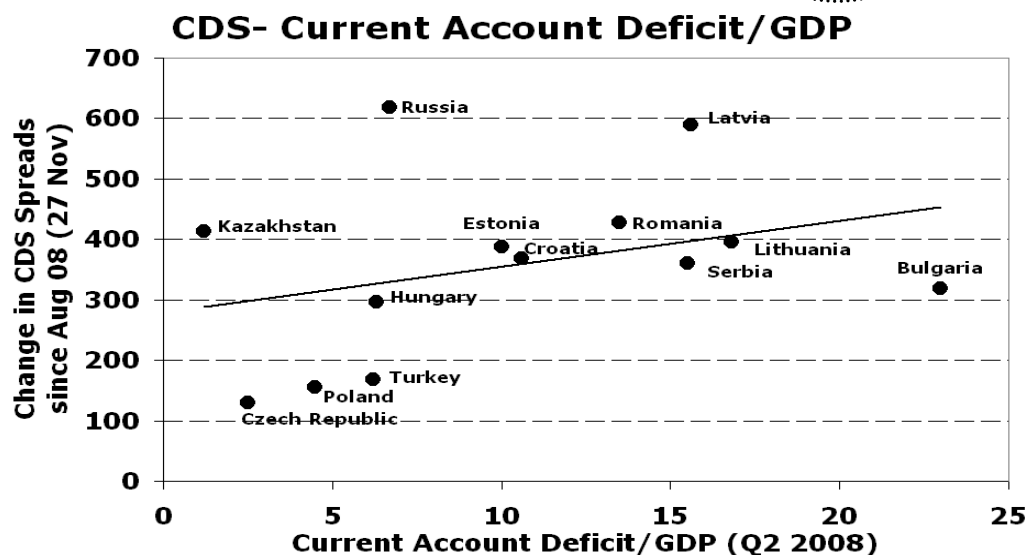
Total Credit (%GDP)		
	<i>FX</i>	<i>Local Currency</i>
Bulgaria	42,7	33,8
Romania	23,0	17,9
Serbia	24,5	12,1
Poland	15,2	41,1
Ukraine	33,0	31,2
Turkey	9,5	28,7
Latvia	107,0	12,2
Lithuania	39,5	23,4
Estonia	87,5	15,6

- ✓ Latvia & Estonia with large exposure problems
- ✓ Currency board would be attacked in Baltic States first, before migrating to Bulgaria

III.3 Large external imbalances and sudden stop of capital inflows

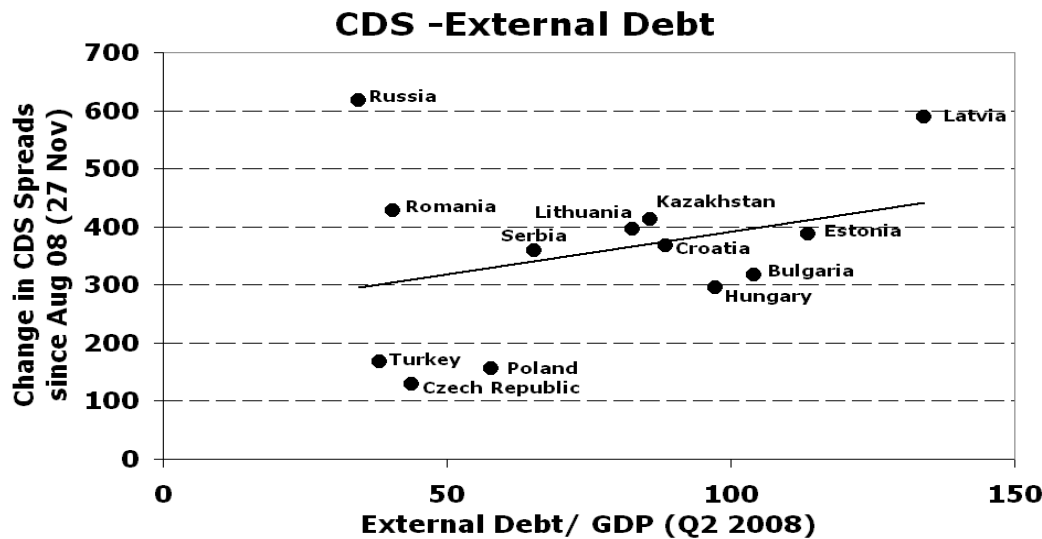
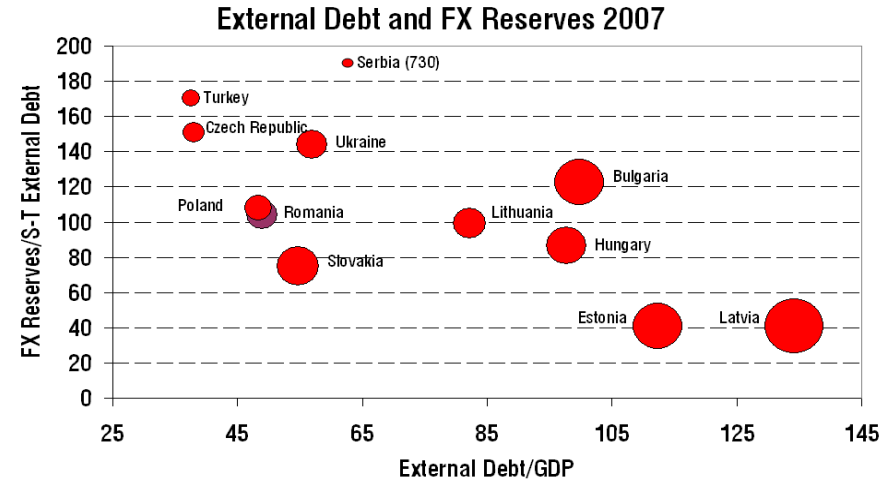
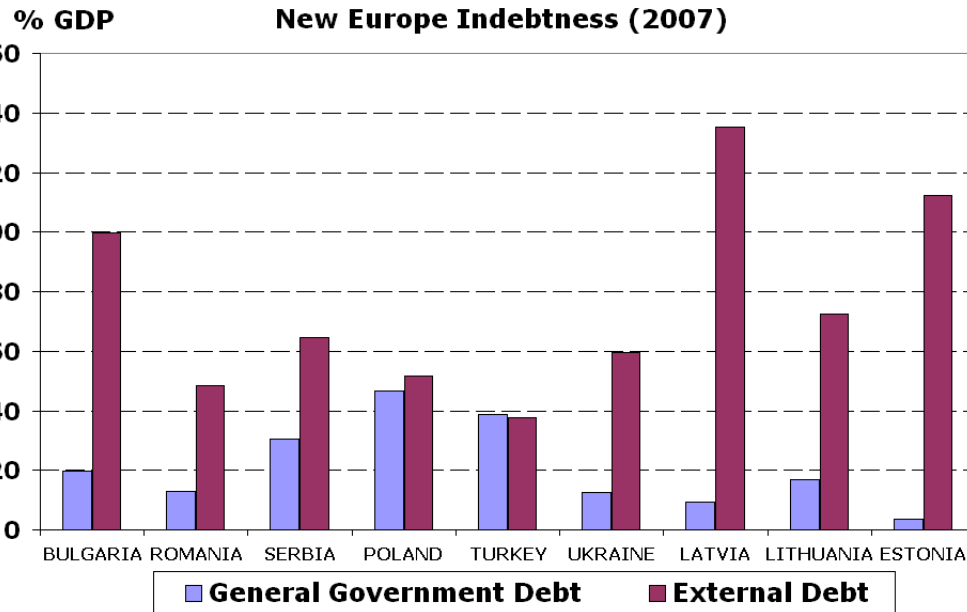


✓ Severe imbalances-significant financing needs



✓ CDSs have risen most for those countries that have the highest financing needs

III.3 Large external imbalances and sudden stop of capital inflows



- ✓ Government debt is low but external debt high
- ✓ Baltic States have lower reserve coverage
- ✓ CDSs have risen most for those countries which have high roll-over external financing needs

IV. Conclusion

- ✓ Liquidity not back to normal levels yet, hence all predictions are tenuous
- ✓ The recession is likely to stay through H1-2009 into Q3-2009, with a slow recovery mainly in 2010
- ✓ The slow down affects every country
- ✓ Market volatility ahead as in 2008
- ✓ Our region is risky, but not to the same degree as the Baltic States
- ✓ Have to see the cup half-full, not half-empty

THANK YOU FOR YOUR ATTENTION!!

My thanks to the Research Department of Eurobank EFG for able research assistance and support

For more info, please consult the Eurobank website:

<http://www.eurobank.gr/research>



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