Small Open European Economy and Dynamics of Banking Sector Regulation

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Charles University
Faculty of Social Sciences

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- Background of the crisis
- Response and Consequences
- CEE status
- Conclusion

Introduction

Be ready before the storm!

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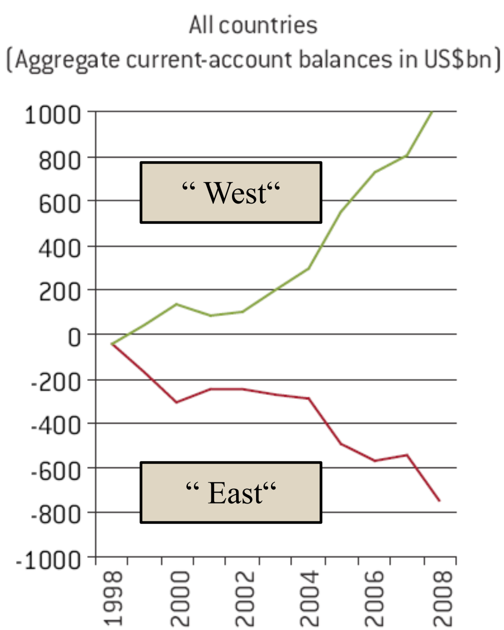
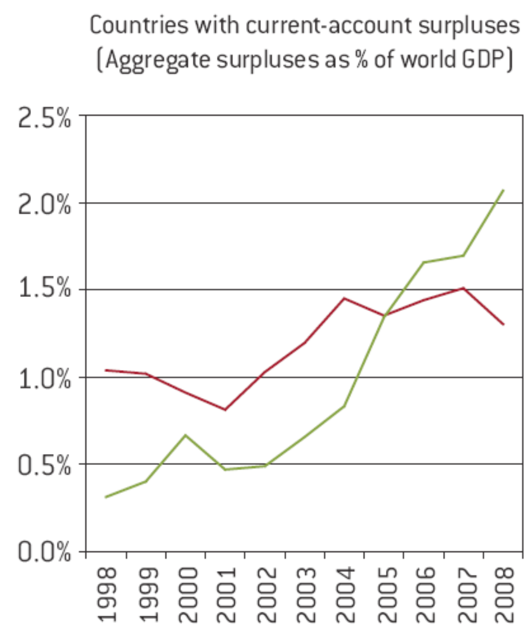
Background

Current account balances and political regimes





1: Transfer of wealth

2: Emerging economies favor free trade over protectionism for the first time…

3: Developed economies private & public deficits financed by borrowings from underdeveloped countries

4: G20 new strategic set up

…and different levels of productivity!

Source: Roeller, Veron (2008), www.bruegel.org

Background

More and more pesimistic growth forecasts

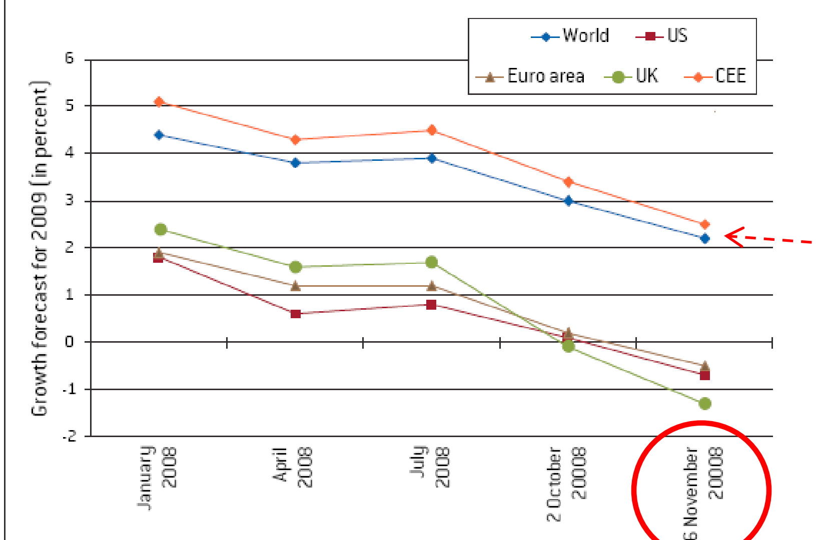


Figure 2: Major world economies heading for recession
(Evolution of IMF World Outlook forecast of GDP growth for 2009)

Source: IMF. CEE: central and eastern European countries.

No.7 update of IMF forecast

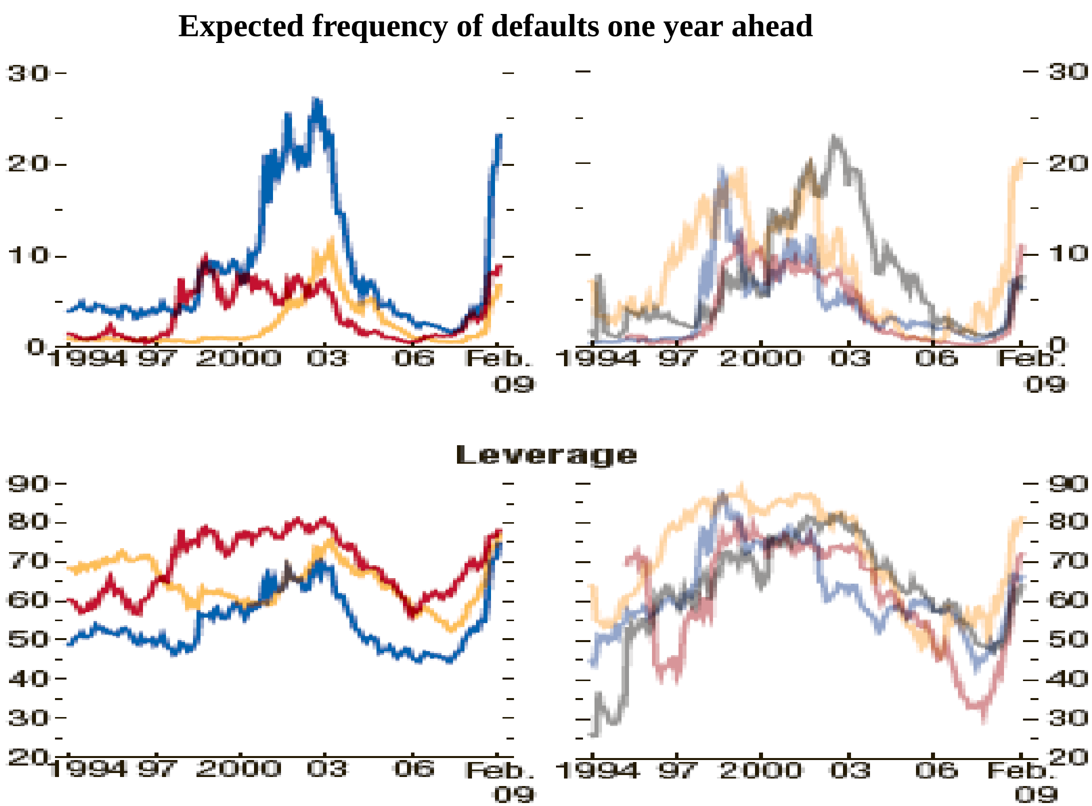
of world GDP from April 22, 2009

			Projections		Difference from January 2009 WEO projections	
	2007	2008	2009	2010	2009	2010
World output[1]	**5.2**	**3.2**	**-1.3**	**1.9**	**-1.8**	**-1.1**
Advanced economies	2.7	0.9	-3.8	0.0	-1.8	-1.1
United States	2.0	1.1	-2.8	0.0	-1.2	-1.6
Euro area	2.7	0.9	-4.2	-0.4	-2.2	-0.6
Germany	2.5	1.3	-5.6	-1.0	-3.1	-1.1
France	2.1	0.7	-3.0	0.4	-1.1	-0.3
Italy	1.6	-1.0	-4.4	-0.4	-2.3	-0.3
Spain	3.7	1.2	-3.0	-0.7	-1.3	-0.6
Japan	2.4	-0.6	-6.2	0.5	-3.6	-0.1
United Kingdom	3.0	0.7	-4.1	-0.4	-1.3	-0.6
Canada	2.7	0.5	-2.5	1.2	-1.3	-0.4
Other advanced economies	4.7	1.6	-4.1	0.6	-1.7	-1.6

Currently expected decrease in world GDP in 2009, structural changes…but bank portfolios will deteriorate further

Background
The expected impact on enterprises globally

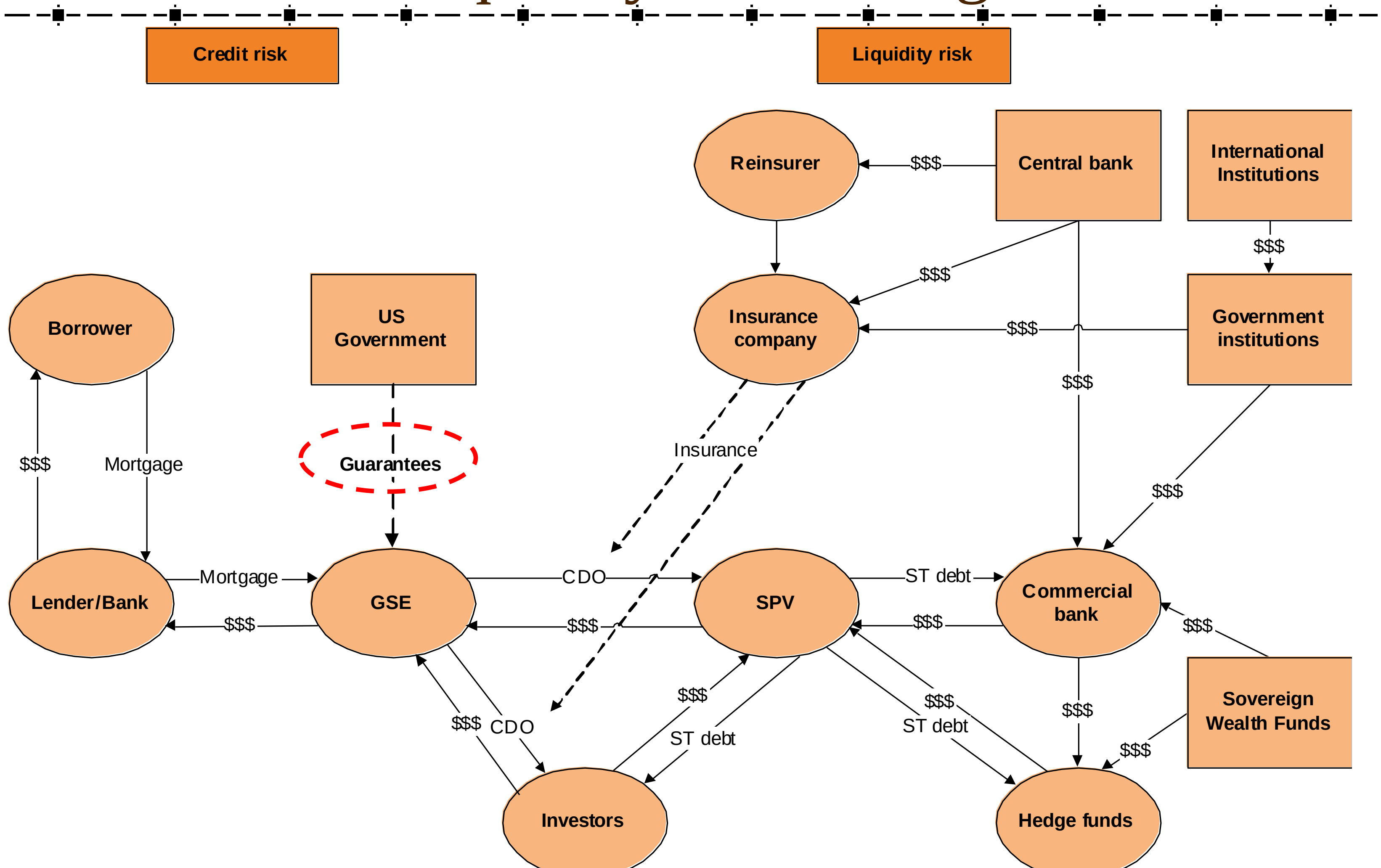
Selected market indicators of non-financial corporations (%)



Zdroj: IMF, World Economic Outlook, April 2009

Background of the crisis

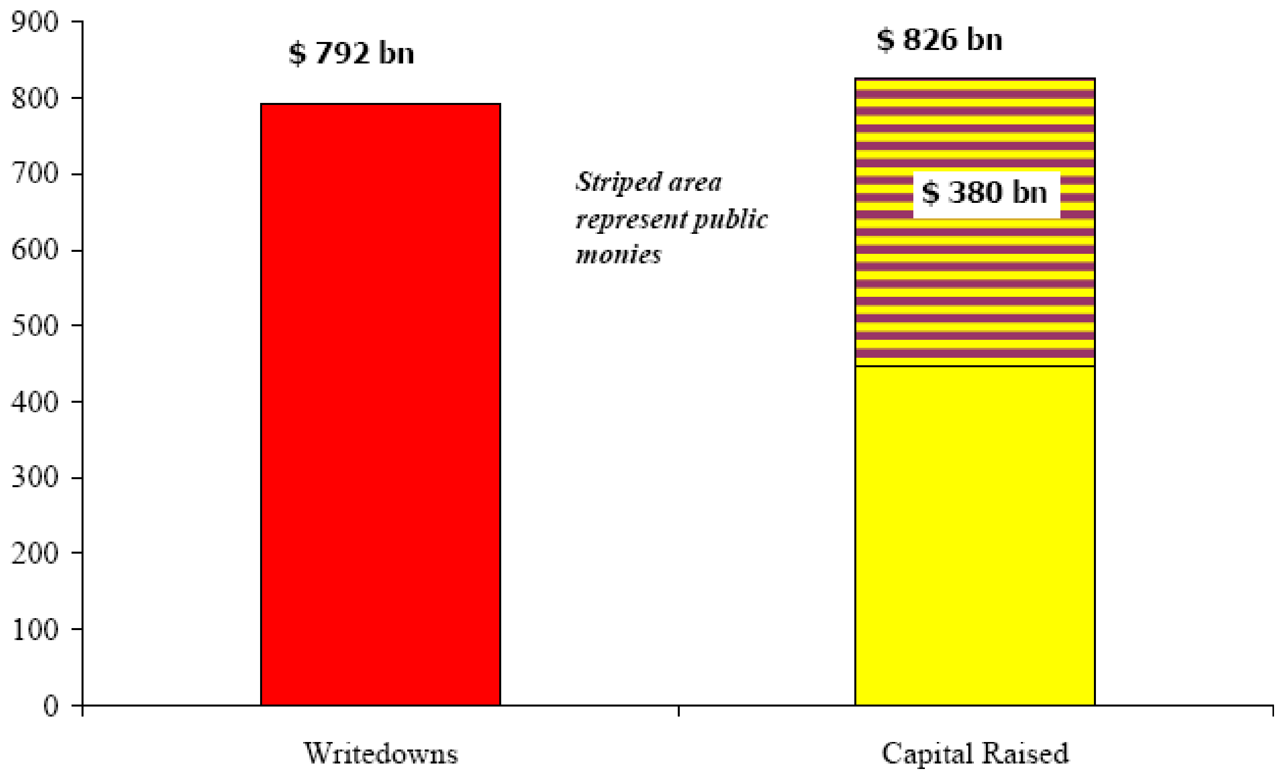
The credit and liquidity risk during the crisis



Source: Teply & Cernohorsky (2008)

Background

Bank losses (April 2009) and capital raised by January

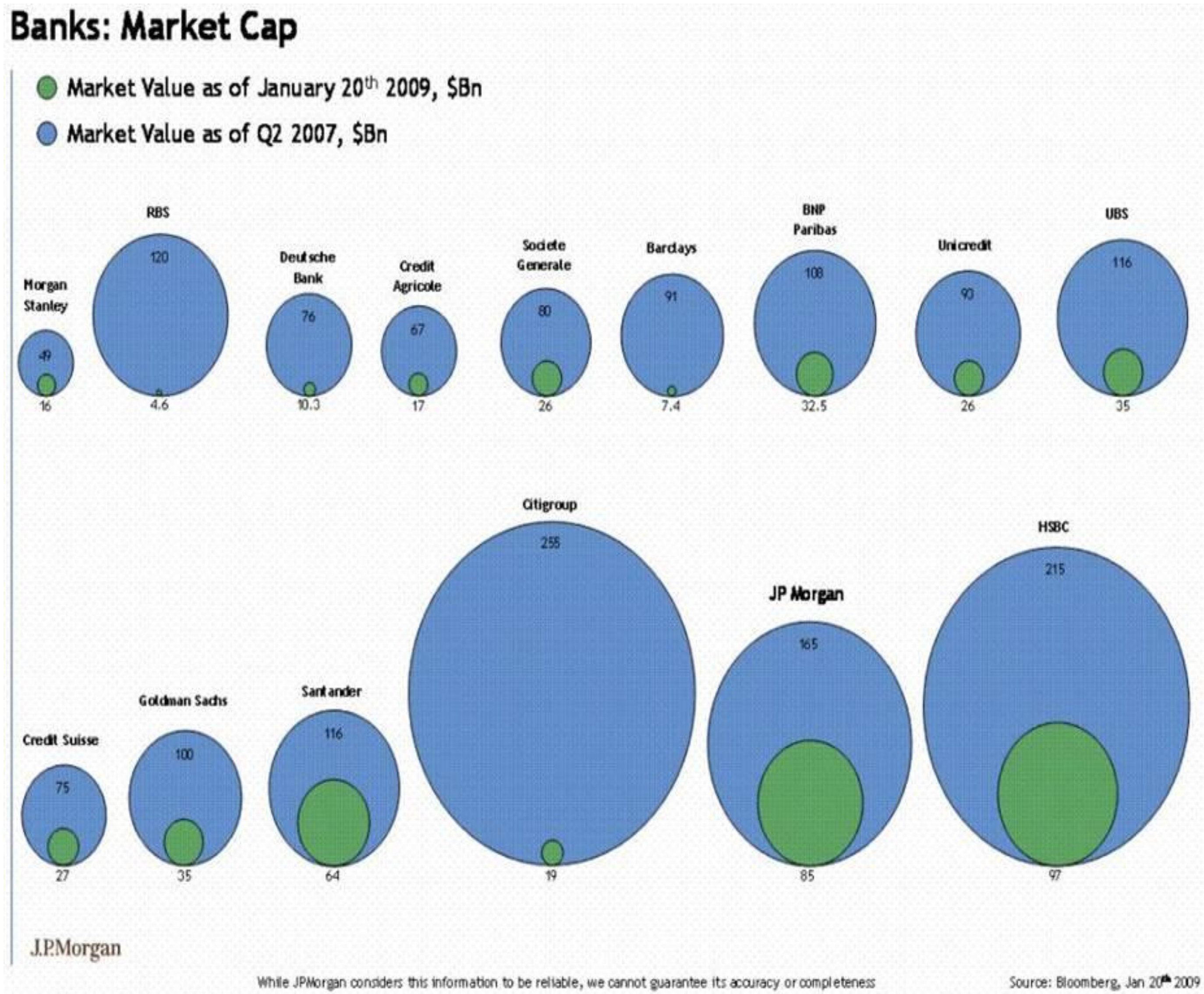


IMF – **expected losses** from the US crisis in April 2009 **USD 4.2 trillion** (in October 2008 “mere“ USD 1.4 trillion)

Source: Bloomberg, IMF

Background

Market value decrease (January 2009 vs. June 2007) and Top 3



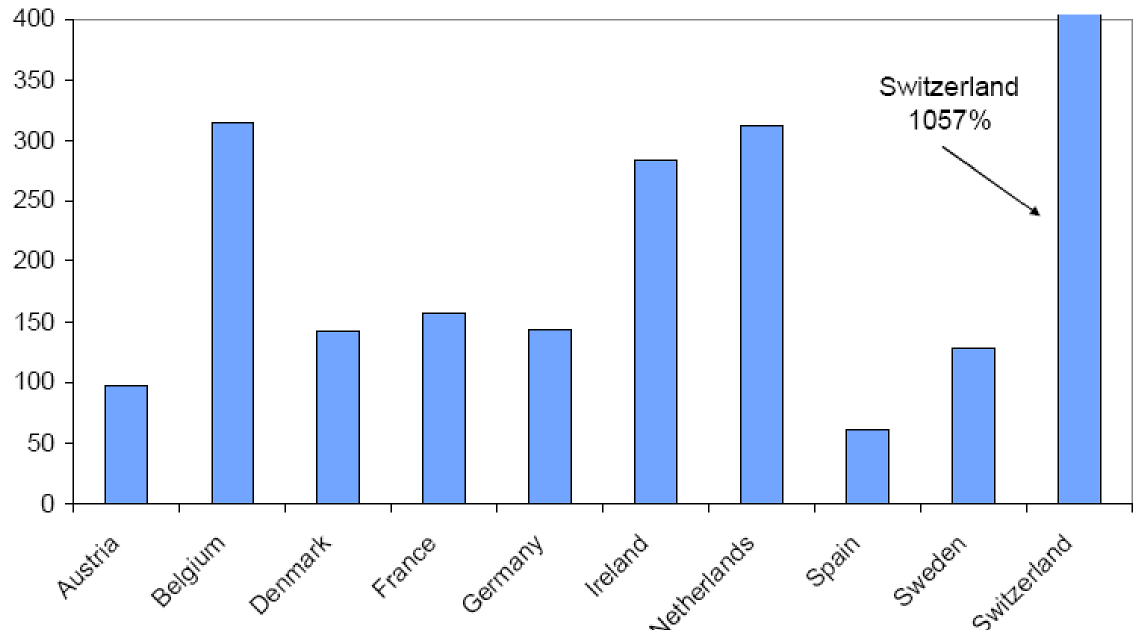
- FT March 23, 2009: Since 1999 until 2007 bank´s market value stable
- Since 2007 MV shrinking
- **Increasing role of Chinese banks – Top 3 MV** in March 2009

Background

High cross-border exposure of EU banks

Figure 1.23. European Banks' Cross-Border Liabilities, end-2007

(As a percntage of GDP)



Sources: Bank for International Settlements; International Monetary Fund, World Economic Outlook database.

Contrary to convention wisdom, many EU banks are highly dependant on cross-border funding

Contents

Response and Consequences

Different government responses to bank rescues as of Feb 2009

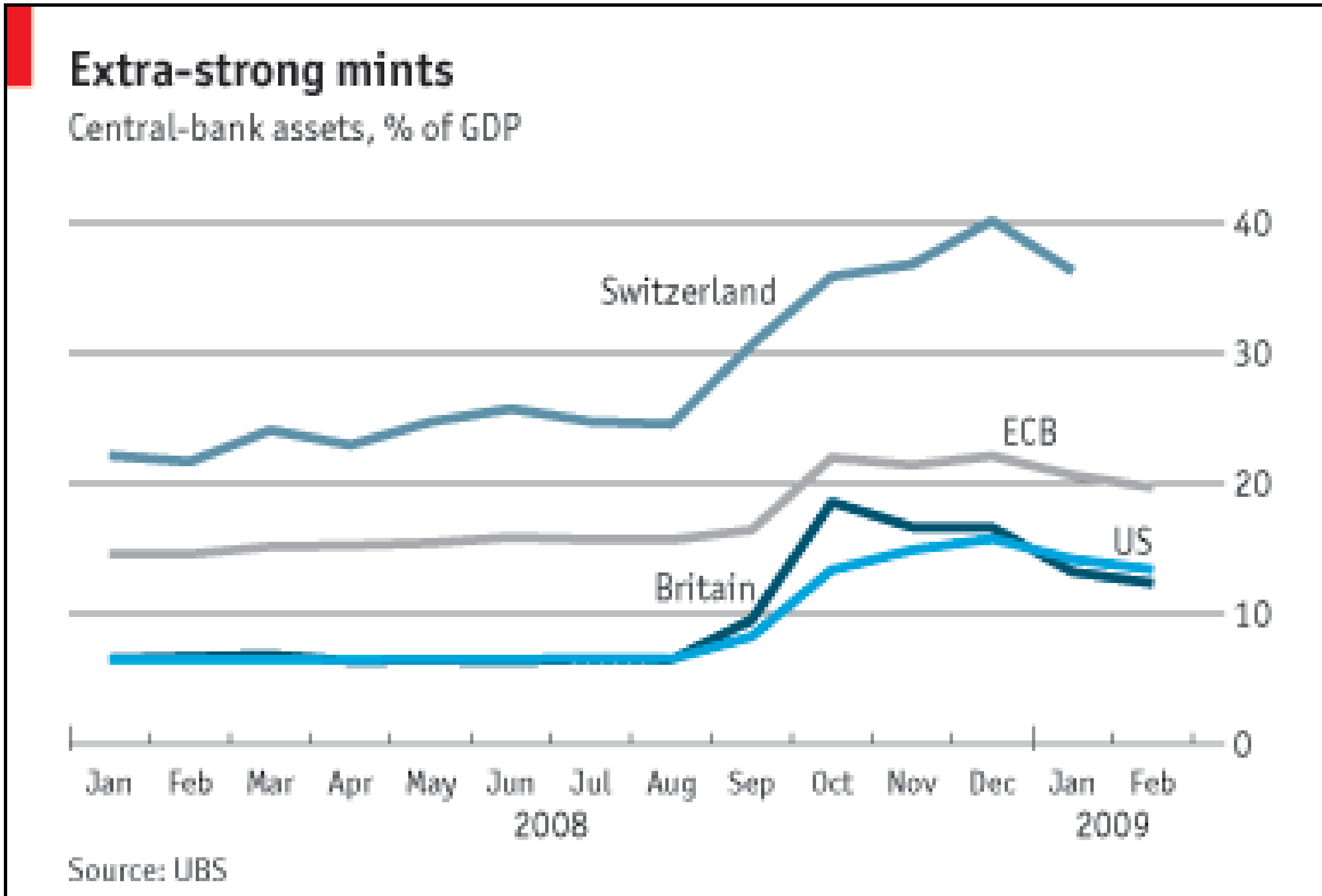
	Containment			Resolution	
	Establish, Increase or Expand Deposit Insurance	Guarantees of Wholesale Borrowing	Sternghtened Liquidity Measures	Re-Capitalization Plans Established 1/	Asset Purchase Plans
Argentina			X		
Australia	X	X	X		X
Brazil			X		X
Canada		X	X		X
China			X		
France		X	X	X	
Germany	X	X	X	X	X
India			X		
Indonesia	X		X		
Italy		X	X	X	
Japan			X	X	X
Mexico		X	X		
Netherlands	X	X	X	X	
Russia	X	X	X	X	X
Saudi Arabia	X	X	X		
South Africa			X		
Spain	X	X	X		X
South Korea		X	X	X	X
Turkey			X		
United Kingdom	X	X	X	X	X
United States	X	X	X	X	X

Source: Various government announcements and information on official websites.

Source: IMF

Response and Consequences

High engagement of several central banks



Source: The Economist 12/2009

Response and Consequences

Headline Support for the Financial Sector and Huge Upfront Financing Needs in Advanced Economies - total net costs may vary due to future assets disinvestment and loss from guarantees (As of April 15, 2009; in percent of 2008 GDP)

COUNTRY	Capital Injection (A)	Purchase of Assets and Lending by Treasury (B)	Central Bank Support Provided with Treasury Backing (C)	Liquidity Provision and Other Support by Central Bank (D)	Guarantees (excludes by deposit insurance agencies) (E)	Total (A+B+C+D+E)	Upfront government financing
USA	3,9	1,3	1,1	42,1	31,3	79,6	6,3
AT	5,3	0	0	0	30	35,3	5,3
BE	4,7	0	0	0	26,2	30,9	4,7
FR	1,2	1,3	0	0	16,4	19	1,5
DE	3,8	0,4	0	0	18	22,2	3,7
GR	2,1	3,3	0	0	6,2	11,6	5,4
IR	5,3	0	0	0	257	263	5,3
IT	1,3	0	0	2,5	0	3,8	1,3
NL	3,4	2,8	0	0	33,7	39,8	6,2
PT	2,4	0	0	0	12	14,4	2,4
ES	0	4,6	0	0	18,3	22,8	4,6
SWE	2,1	5,3	0	15,3	47,3	70	5,8
UK	3,9	13,8	12,9	0	51,2	81,8	20,2
HU	1,1	0	0	4,7	1,1	6,9	1,1
PL	0,4	0	0	0	3,2	3,6	0,4
Rus	0.3	0,5	3.2	3.2	0.5	7,7	0,8
JAP	2,4	11,3	0	1,2	7,3	22,1	0,8
G20EU	2.7	3.8	3.2	0.5	22.1	32.3	6.7
G20	1,9	2,5	1	12,4	14,3	32,1	3,4
Emerging Economies	0,2	0,1	0,4	1,6	0,1	2,4	0,1

Source: IMF, UPDATE ON FISCAL STIMULUS AND FINANCIAL SECTOR MEASURES, April 26, 2009

Response and Consequences

EU economic policy/rescues in the world context (discretionary measures only, non-discretionary automatic stabilizers excluded)

	2008	2009	2010
Argentina	0.0	1.5	...
Australia	0.7	2.1	1.7
Brazil	0.0	0.6	0.8
Canada	0.0	1.9	1.7
China	0.4	3.1	2.7
France	0.0	0.7	0.8
Germany	0.0	1.6	2.0
India 3/	0.6	0.6	0.6
Indonesia	0.0	1.3	0.6
Italy	0.0	0.2	0.1
Japan 4/	0.3	2.4	1.8
Korea	1.1	3.9	1.2
Mexico	0.0	1.5	...
Russia	0.0	4.1	1.3
Saudi Arabia	2.4	3.3	3.5
South Africa 3/ 5/	1.7	1.8	-0.6
Turkey 6/	0.0	0.8	0.3
United Kingdom	0.2	1.4	-0.1
United States 7/	1.1	2.0	1.8
G-20 PPP-GDP weighted average	0.5	2.0	1.5
G-20 discretionary impulse 8/	0.5	1.5	-0.5

- Different stimulus for different countries to improve real economy and bank portfolios…

- Dependant on public debt/GDP ratio…

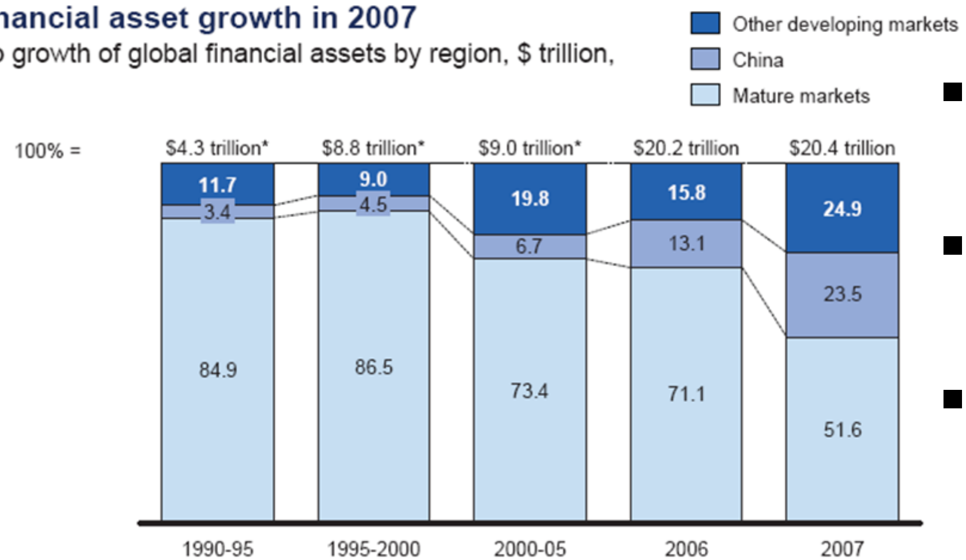
Source: IMF UPDATE ON FISCAL STIMULUS AND FINANCIAL SECTOR MEASURES, April 26, 2009

Consequences – where to borrow ?

Change in global financial assets' structure

Developing markets contributed almost half of global financial asset growth in 2007

Contribution to growth of global financial assets by region, $ trillion, Percent



	1990-95	1995-2000	2000-05	2006	2007
Developing market share (incl. China) of global financial assets Percent	5.6	8.6	12.6	16.2	19.5
Developing markets' financial assets $ trillion	3.2*	8.0*	16.2*	28.4	38.3

Note: Some numbers do not sum due to rounding. All figures expressed in 2007 exchange rates.
* Average data for each 5-year period.
Source: McKinsey Global Institute Global Financial Assets Database

- Wealth shift due to trade
- Shift of savings and loan providers
- Increasing role of developing countries/China and G20
- ? Attractiveness - competing USD vs. Eurozone features for investment

Source: McKinsey (2008)

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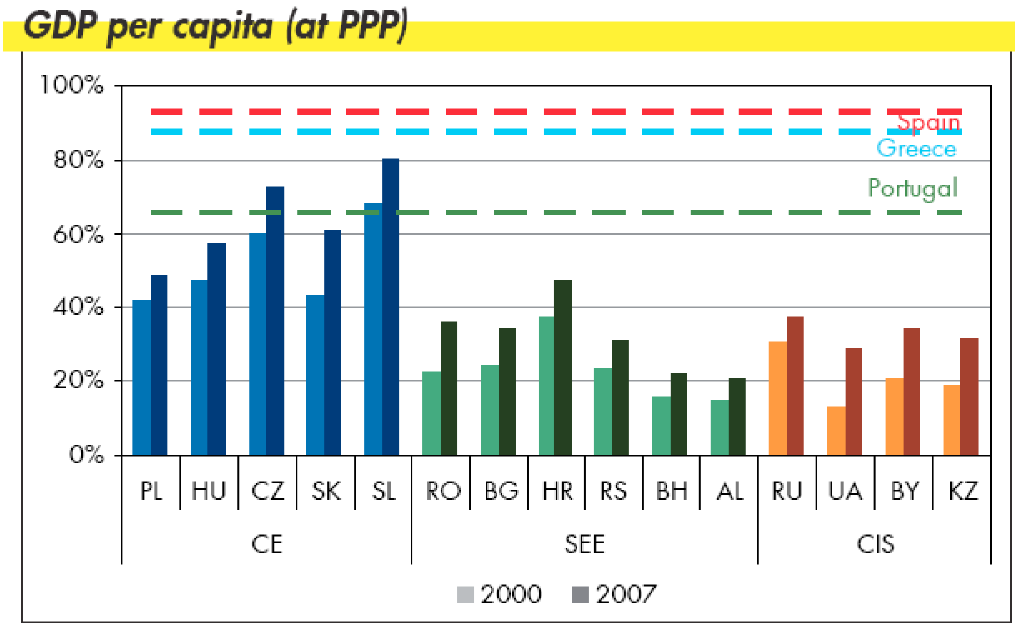
CEE status

Heterogeneous CEE exposure:
Stormy times also for some (!) CEE economies

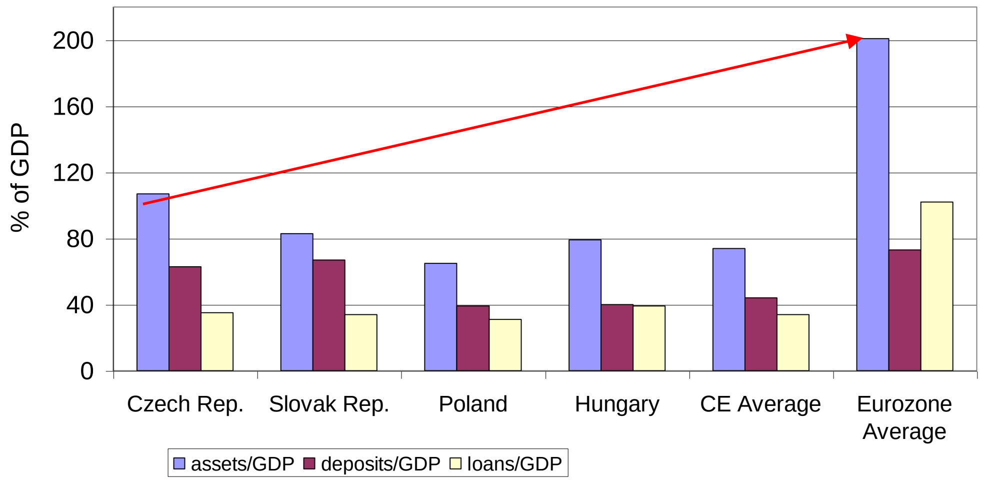


Per cent of the EU-15 average
Source: Thomson Financial Datastream, wiiw, Raiffeisen RESEARCH

After rapid catch-up… current-account balances in deficits…	...and costly foreign debt… exposed small currencies to the depreciation

CEE status - Czech case

Significantly smaller CEE financial intermediation level especially for households (but growing)

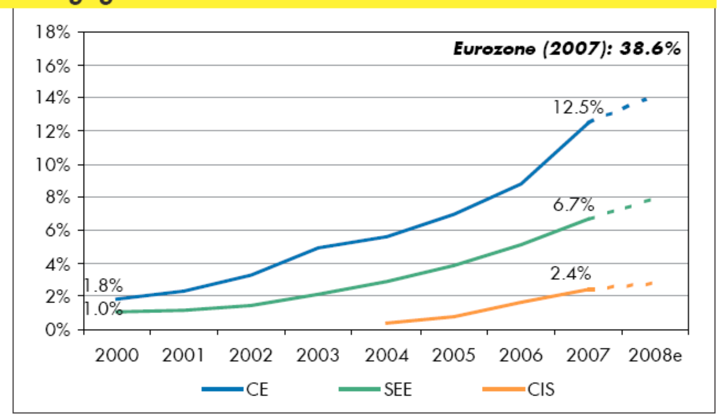


Quite different ratio of deposits to credits in CEE and Euro zone…

And somewhat conservative approach of banks

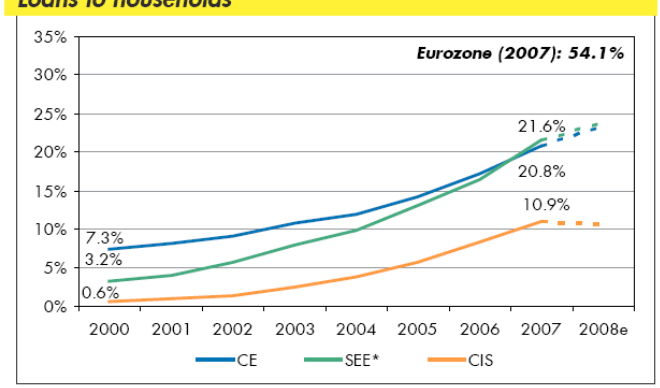
Source: Mejstřík, Pečená, Teplý (2008)

Mortgage loans



Per cent of GDP
Source: ECB, local central banks, Raiffeisen RESEARCH

Loans to households

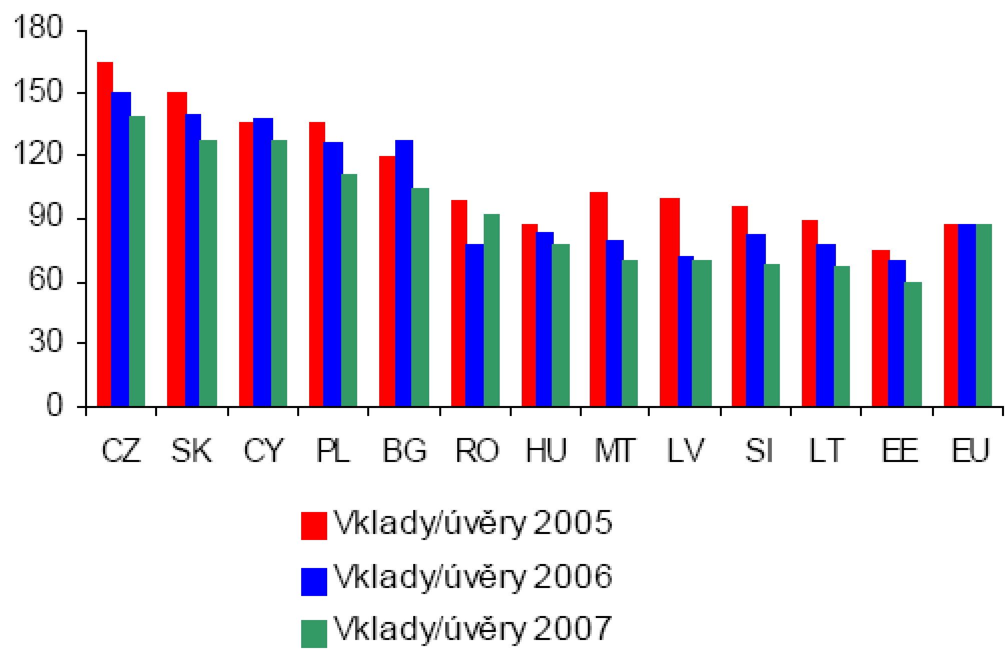


Per cent of GDP
** excluding Kosovo*
Source: ECB, Local central banks, Raiffeisen RESEARCH

Source: RB CEE Banking Report 2008

CEE status

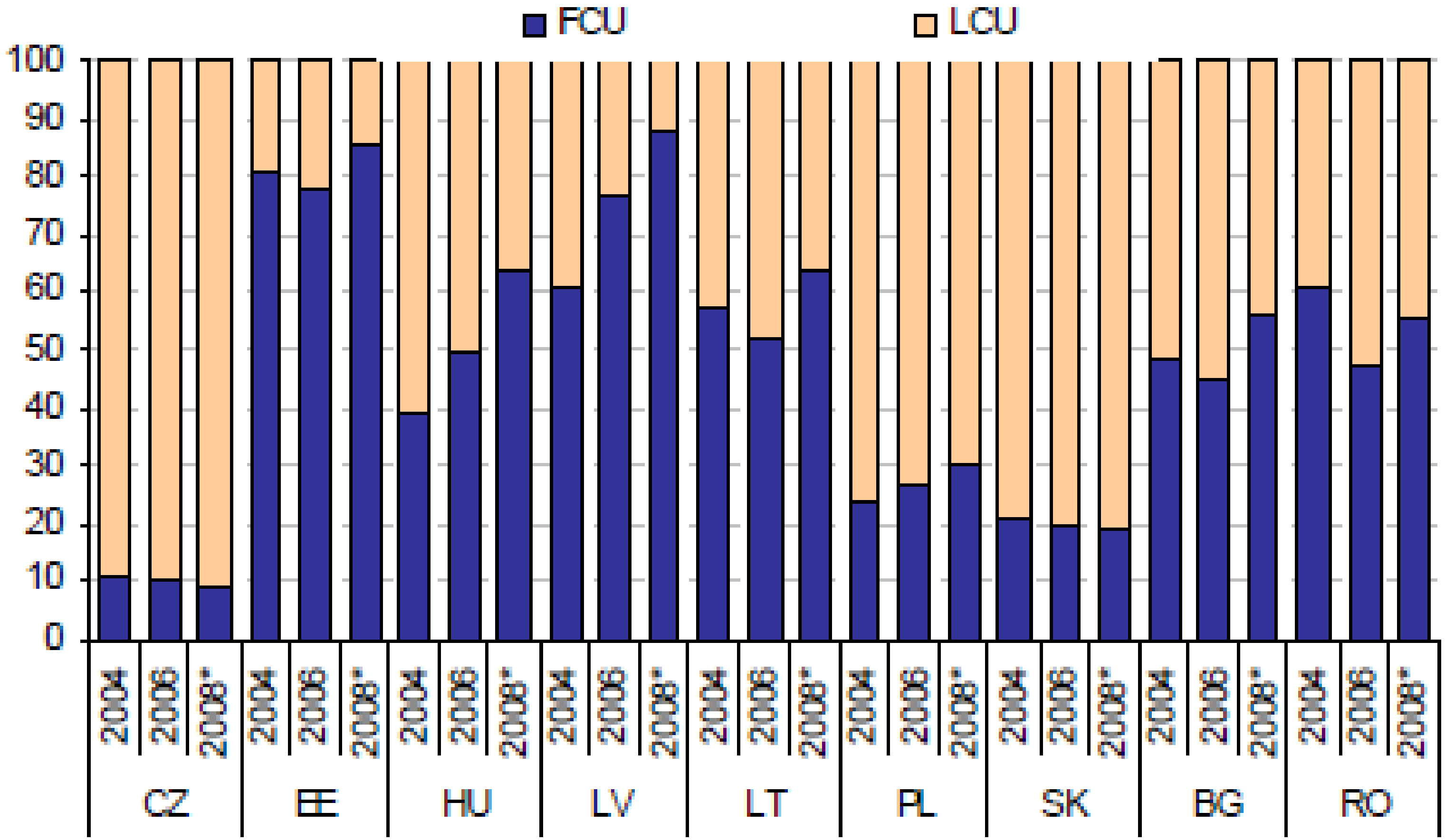
• Ratio of deposits and loans in new member states *(2005-7, v %, Source : ECB)*



Pramen: ECB

Zdroj: ***M. Singer – Pohled ČNB na ekonomickou stagnaci, březen*** 2009

Share of FX Denominated Bank Loans in Loans to the Private Sector (%)



Source: World Bank

CEE heterogeneous status – Case study

- In several countries borrowings in foreign currencies seemed to be „cheaper“ and FX risk was neglected by debtors (state, households, enterprises)

- But **country-specific risk due to** current account deficits, foreign exchange indebtedness, fragile national CEE currencies…CEE bank exposure to foreign currency risk has grown then, risk premium has increased

- **Danger of „quasi-homogeneous CEE “ risk bias** to detriment of less-risky countries such as Czech Republic

…and what about the CDS and opinion of rating agencies on CEE?

CEE status

Key Message from Moody´s

Europe, and in particular Central and Eastern Europe, is not a homogeneous region. The scale of the challenges faced by all countries is currently limited, but liquidity risk could aggravate them.

Countries	Speed of financial deepening: growth in % of domestic credit to GDP ratio 2000-07 period	Reliance on external funding: external debt growth in % 2000-07 period	Macroeconomic imbalances: Current account deficit + fiscal deficit or surplus (%of GDP)	
			FY2000	FY2007
Latvia (Baa1)	307.2	120.0	-7.4	-23.9
Lithuania (A2)	297.2	70.2	-9.1	-15.9
Bulgaria (Baa3)	232.3	12.4	-6.6	-18.0
Estonia (A1)	172.6	112.2	-5.6	-15.3
Romania (Baa3)	155.5	43.2	-7.6	-16.6
Croatia (Baa3)	75.5	35.1	-8.2	-10.3
Hungary (A3)	39.0	65.2	-11.4	-9.8
Poland (A2)	33.9	24.3	-9.0	-6.8
Czech Republic (A1)	6.9	11.7	-8.4	-3.6
Slovakia (A1)	-9.1	11.1	-15.7	-7.2

Source: Moody´s (2009)

CEE status

Different positions of different CEE countries

Fourteen ways to slowdown

In euro area / *Pegged to euro*

Country	GDP per person*	S&P sovereign rating†	Financing requirements % of GDP‡	Exports§	In a nutshell
Belarus	12,344	B+	7.3	62.1	Autocratic, isolated, gained surprise IMF bail-out
Bulgaria	12,372	BBB	29.4	61.0	Strong finances back currency peg, but sleaze rampant
Czech Rep.	25,757	A	9.4	80.1	Thrifty and solid, but hit by export slowdown
Estonia	20,754	A	20.0	72.0	Star reformer squeezes spending to stay afloat
Hungary	19,830	BBB	29.9	80.2	Currency crash could topple debt-heavy economy
Latvia	17,801	BB+	24.3	46.6	Clinging to currency peg amid turmoil and downturn
Lithuania	18,855	BBB+	27.1	59.0	Painful spending squeeze to avoid worse
Poland	17,560	A-	13.2	42.3	Regional heavyweight speeds up euro bid
Romania	12,698	BB+	20.2	34.4	Spendthrift policies meet sober reality
Russia	16,161	BBB	2.2	31.7	Energy-based kleptocracy in denial about crisis
Serbia	10,911	BB-	23.5	22.2	Seeking more IMF help
Slovakia	22,242	A+	12.5	90.5	Smugly in euro area but hit by car-factory slowdown
Slovenia	28,894	AA	–	70.5	Self-satisfied, rich and still growing
Ukraine	7,634	CCC+	16.1	45.0	No end in sight to political and economic chaos

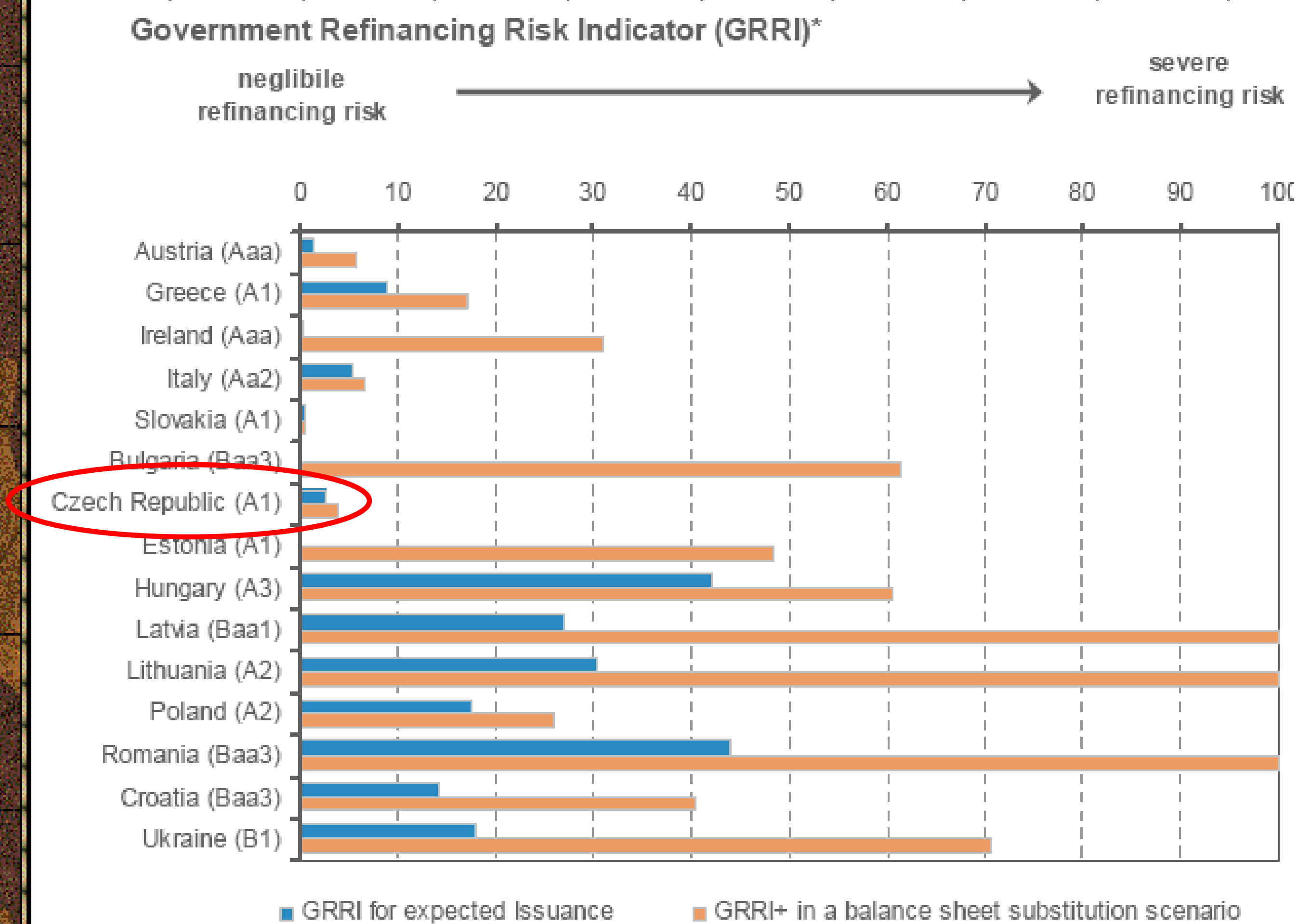
*PPP$, 2008 estimate †Standard & Poor's sovereign foreign currency ratings, long-term ‡Current-account balance, principal due on public and private debts plus IMF debits, 2008 estimate §Goods and services, % of GDP, 2008 estimate

Sources: IMF; Standard & Poor's; Economist Intelligence Unit; *The Economist*

Source: The Economist 9/2009

CEE status

Key Message from Moody´s



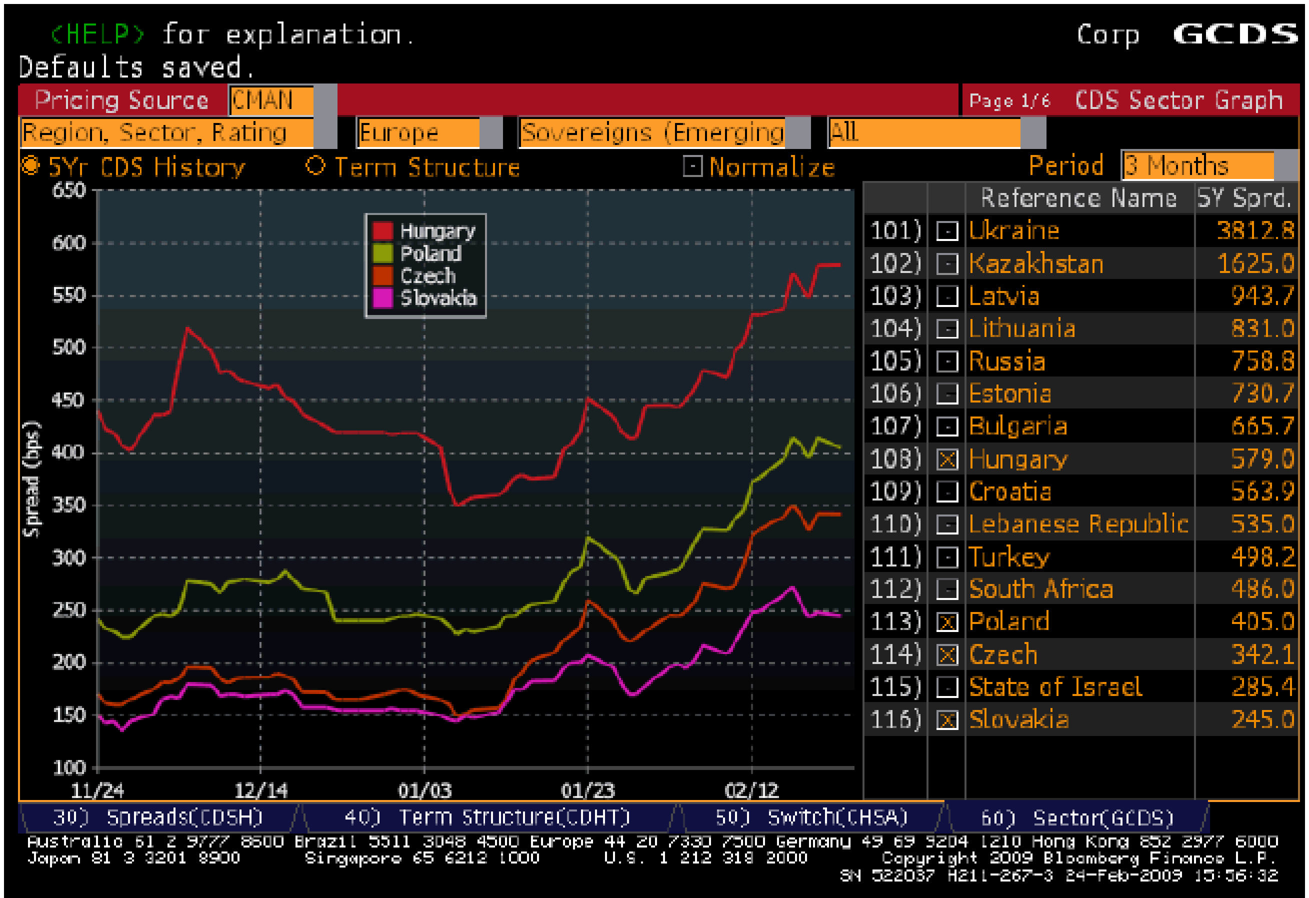
Interpretation:

Moody´s classifies risk levels below 20 as “very low”, higher than 20 as “low”, above 40 as “significant” and above 70 as “considerable”.

Source: Moody´s (2009)

CEE status

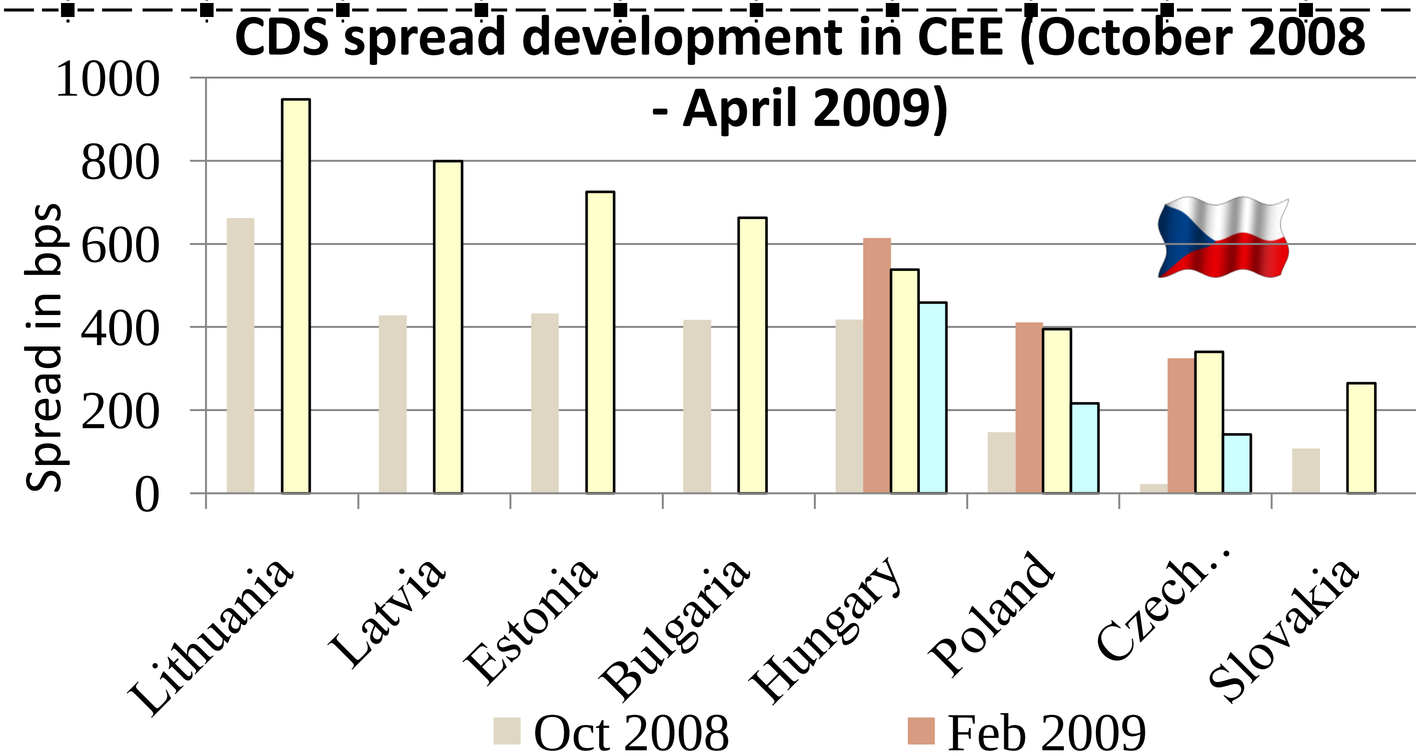
…implying different risk premiums (CDS)



Source: Bloomberg

CEE status

Country sovereign risk expressed imperfectly by CDS



Zdroj: Bloomberg

…lower risk for the CR but fragile

Consequences

Government bailouts of banks

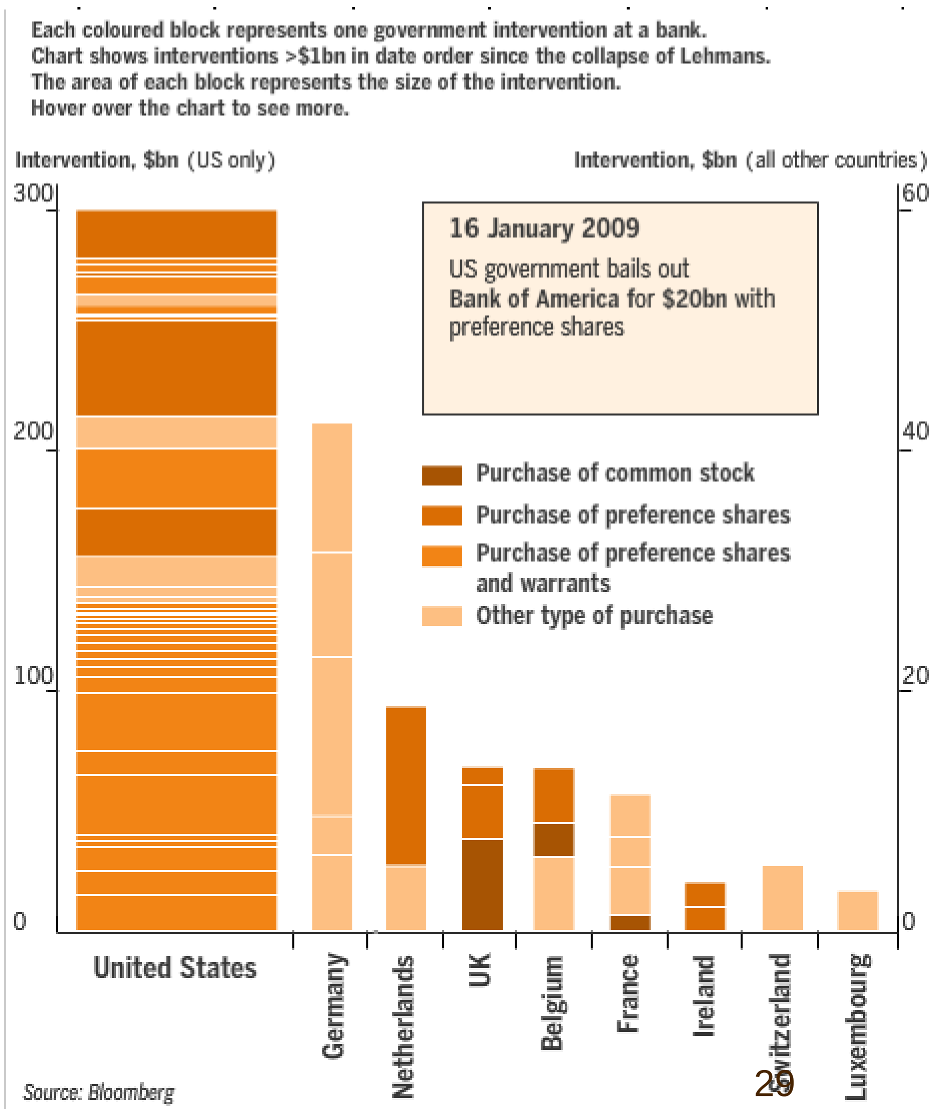
…only few OECD countries have not supported their banks

1. **Czech Republic**
2. Slovakia

Very few toxic assets in the balance sheets

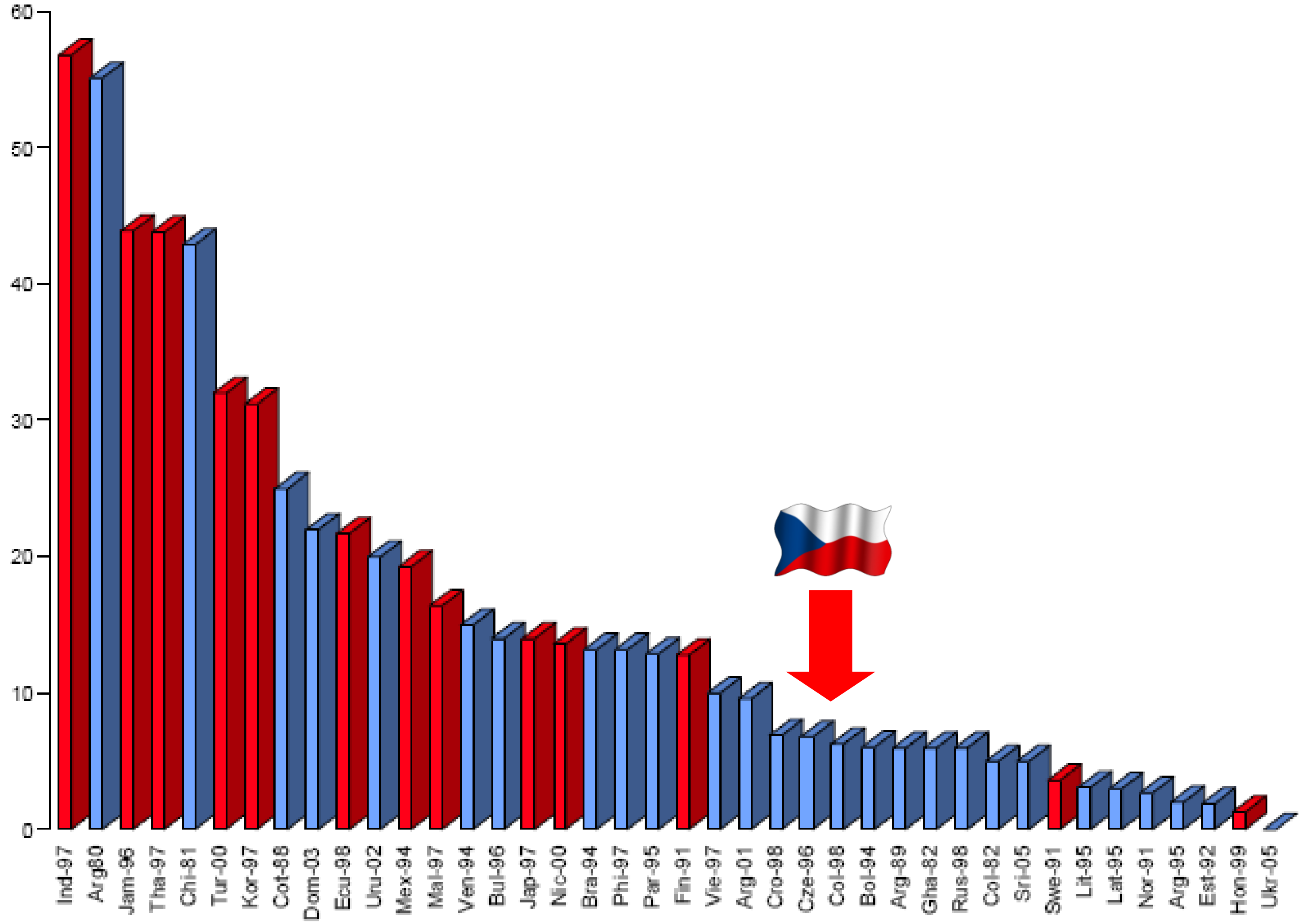
But secondary impact on portfolio ?

Source: Bloomberg



Consequences

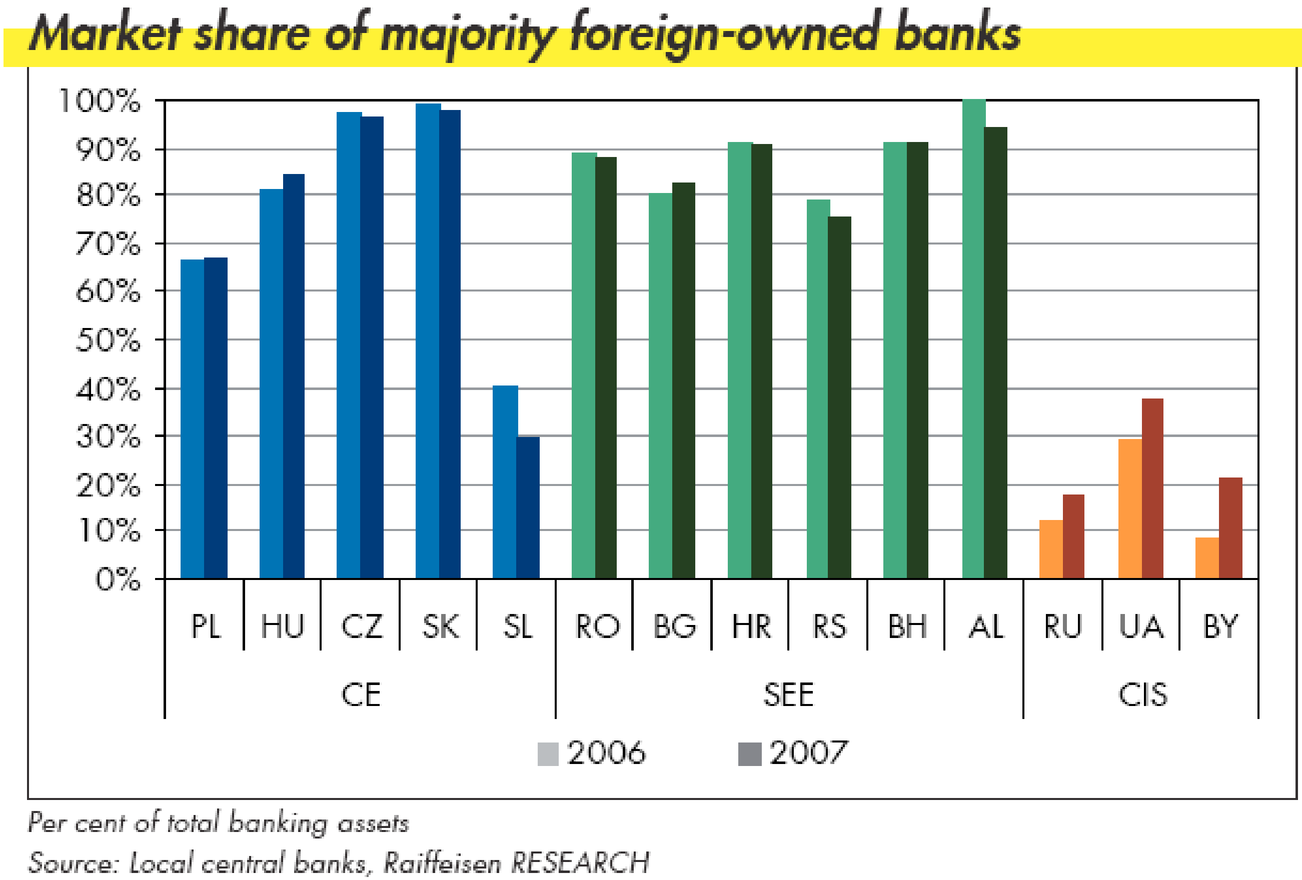
Past crises costs of % GDP



Source: Laeven and Valencia (2008).

CEE status

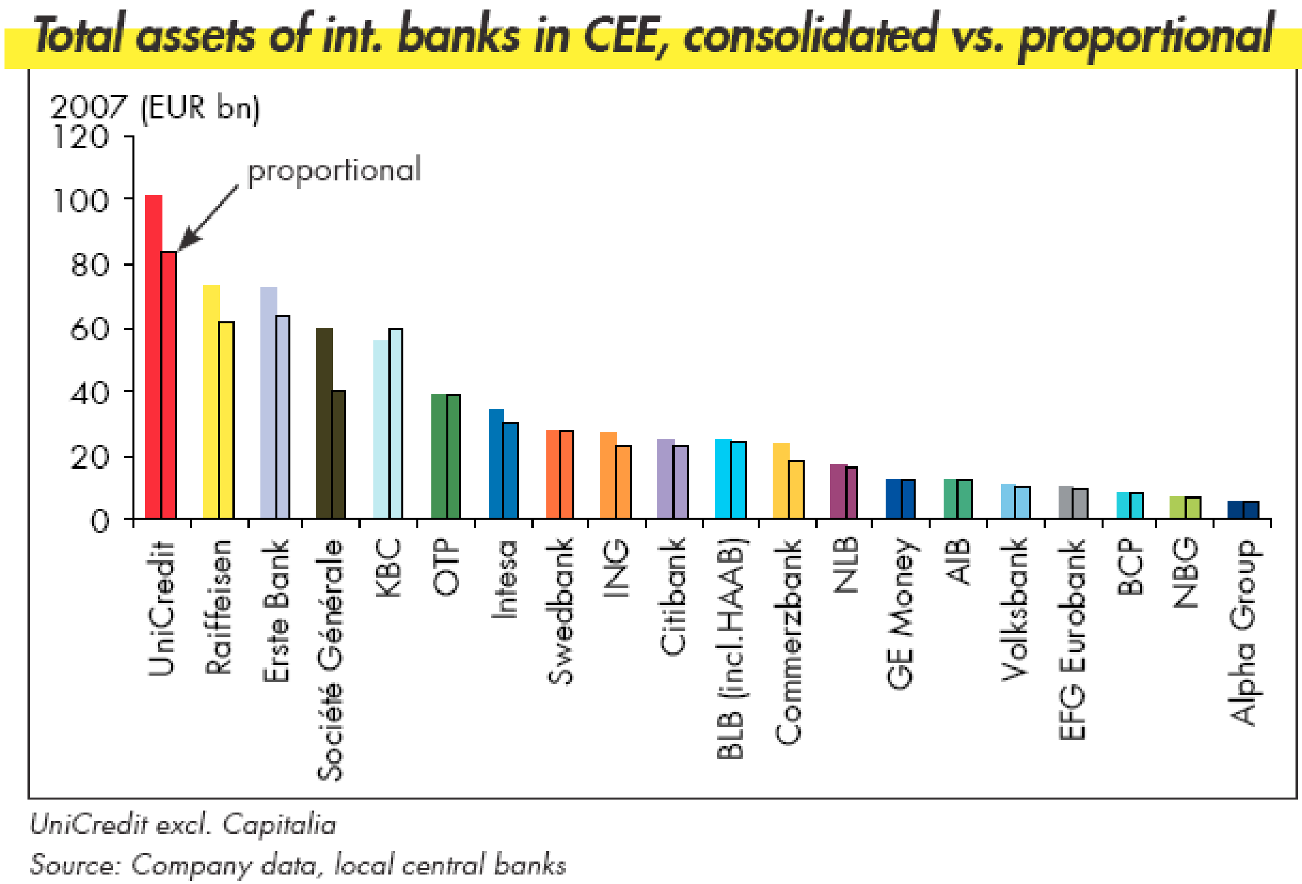
…bank ownership out of control of CEE



Source: CEE Banking Sector Report, Raiffeisenbank, 09/2008

CEE status

Key owners of CEE Banks



Source: CEE Banking Sector Report, Raiffeisenbank, 09/2008

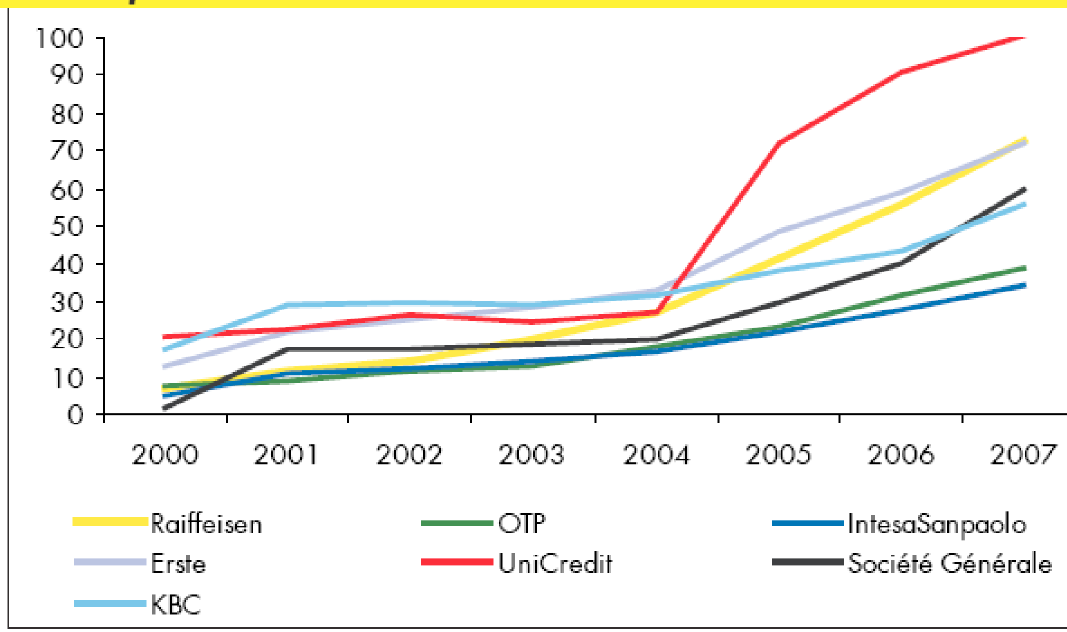
CEE status

Rapid expansion and consolidation of CEE Banks due to CEE rapid growth and attractive return : Upside vs. Downside ?

Total assets CAGR 2002 - 2007

Raiffeisen	***38.3%***
UniCredit	***30.2%***
Société Générale	***27.5%***
OTP	***27.4%***
Erste Bank	***23.2%***
IntesaSanpaolo	***22.4%***
KBC	***13.1%***

Development of consolidated total CEE assets



Data as of December 2007

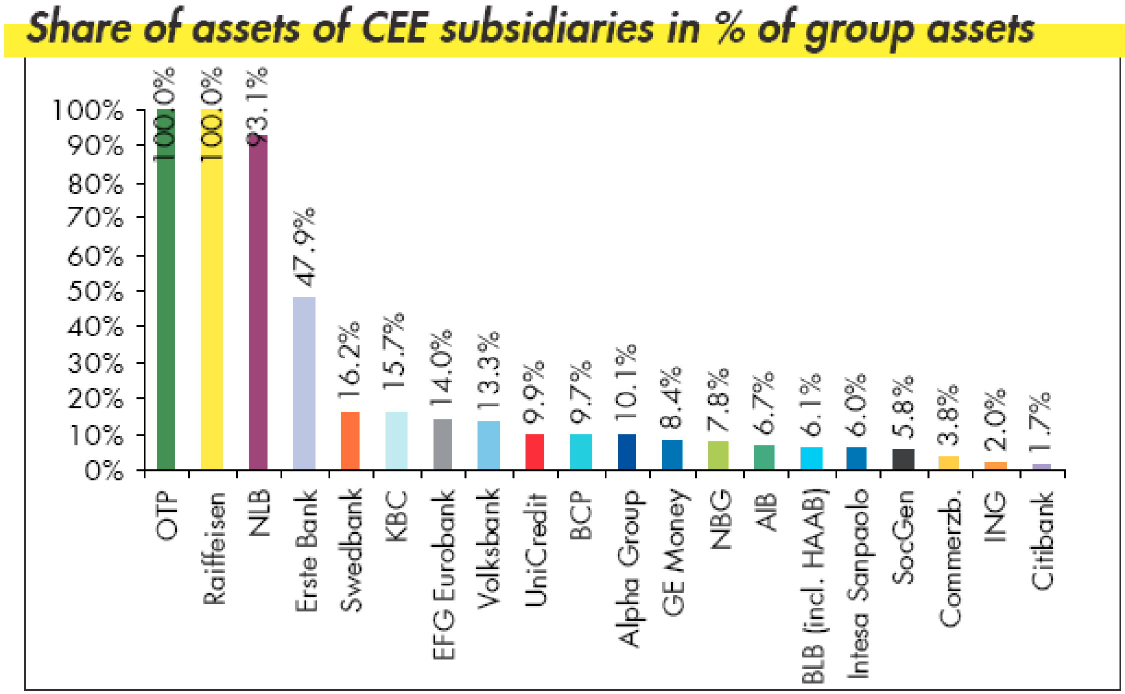
Source: Company data, local central banks

Source: CEE Banking Sector Report, Raiffeisenbank, 09/2008

What risk level accounted for in risk premium ?

CEE status

Foreign owners are purely regional consolidators



Data as of Dec 2007, representing ownership structure as of September 2008 Source: Company data, local central banks

Source: CEE Banking Sector Report, Raiffeisenbank, 09/2008

Originally both globally & EU highly integrated banks accountable to their EU & global shareholders …but **many parent banks** received state preferred equity – in fact partially **nationalized**

CEE bank exposure to global banks is limited…

CEE heterogeneous bank and country status

„Parent by parent“ exposed to CEE specific country/bank risks…

Market presence[1] and branch networks

2008	PL	HU	CZ	SK	SI	ES	LT	LI	BG	RO	HR	AL	RS	MO	BH	KO	MC	BY	RU	UA	KZ	MD	GE	No. of countries	No. of outlets[2]
Raiffeisen International	115	148	108	159	15				179	472	67	100	93		96	44		90	246	1144				15	3077
UniCredit	1058	81	56	95	14	1	2	3	263	136	145		53		169				73	569	140			16	2858
Société Générale	270		389		58				132	830	113	36	89	22			19		648	14		74	33	14	2727
Erste Bank		197	636	273						562	115		61							71				7	1915
IntesaSanpaolo		140		247	46					57	228	34	216		48				61	580				10	1657
OTP		408		90					375	104	100		100	34					158	158				9	1527
KBC	389	206	251	172					126				43						52					7	1239
EFG	297								260	287			128							146				5	1118
GE Money[3]	405	65	150	60			35			25									41					7	781
National Bank of Greece									229	128		25	204				61							5	647
ING	415	2	1	1					2	144									n.a.	1				8	566
Volksbank		59	54	48	10					230	24		21		49					50				9	545
NLB					215				1				120	17	109	34	37							7	533
Swedbank/ Hansab.						94	77	128											3	191				5	493
BLB / Hypo Group		209			14						69		41	7	87									6	427
Commerzbank	107	11	5	2															n.a.	301				6	426
Alpha Bank									88	151		26	130				18			11				6	424
Citigroup	237	38	11	11					1	8									60	1				8	367

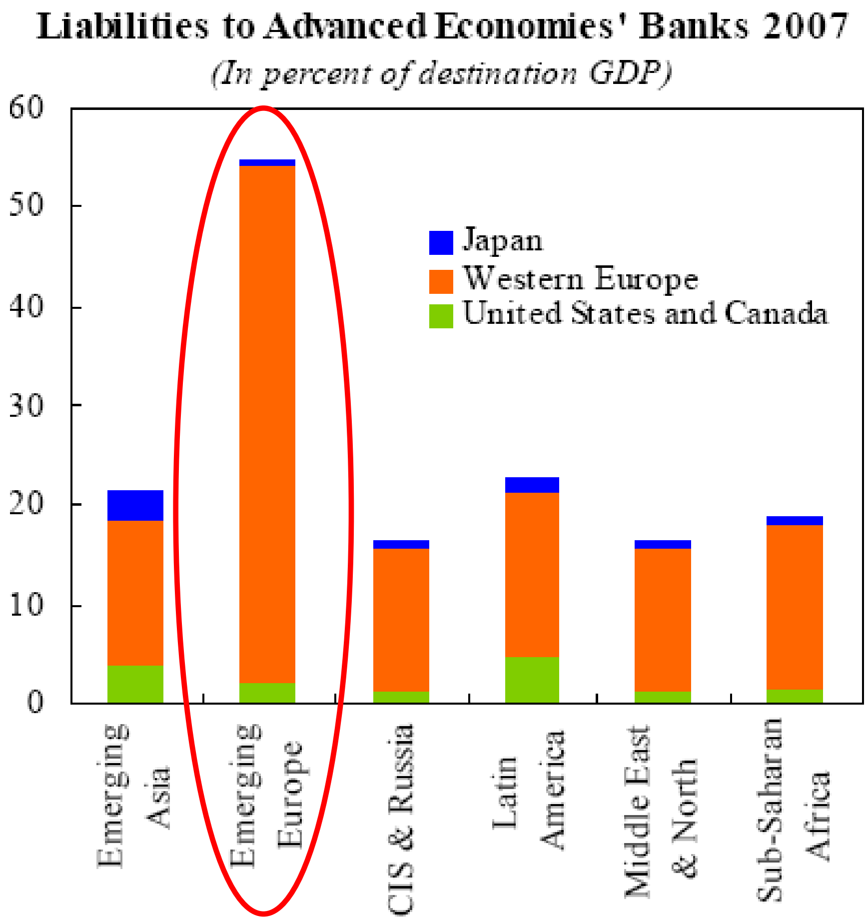
... Number of branches per country ... Number of branches of new market entries

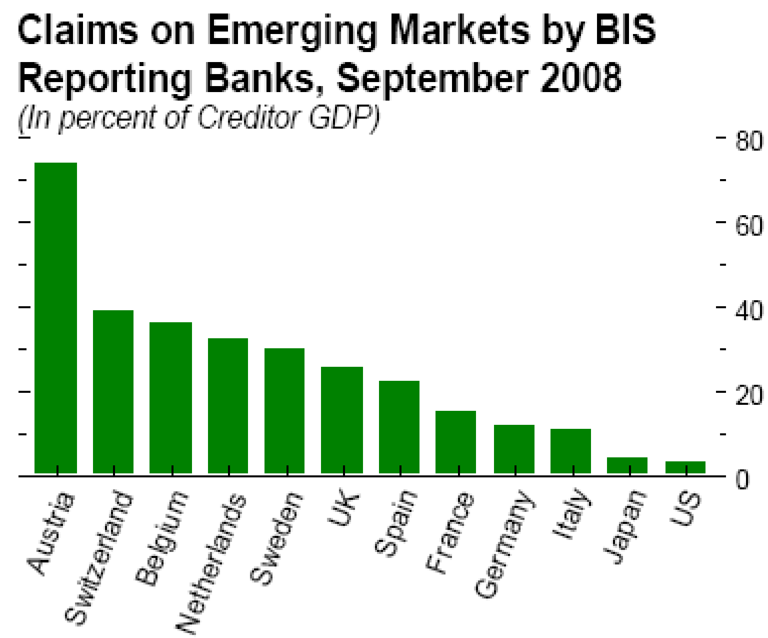
1 Majority stakes only, data as at 31 December 2007, reflecting current ownership structure
2 Data as at 30 June 2008
3 Incl. 200 BPH branches in PL
Source: Company data

Risky countries/subsidiaries add-up in different bank portfolios. What response?

CEE status

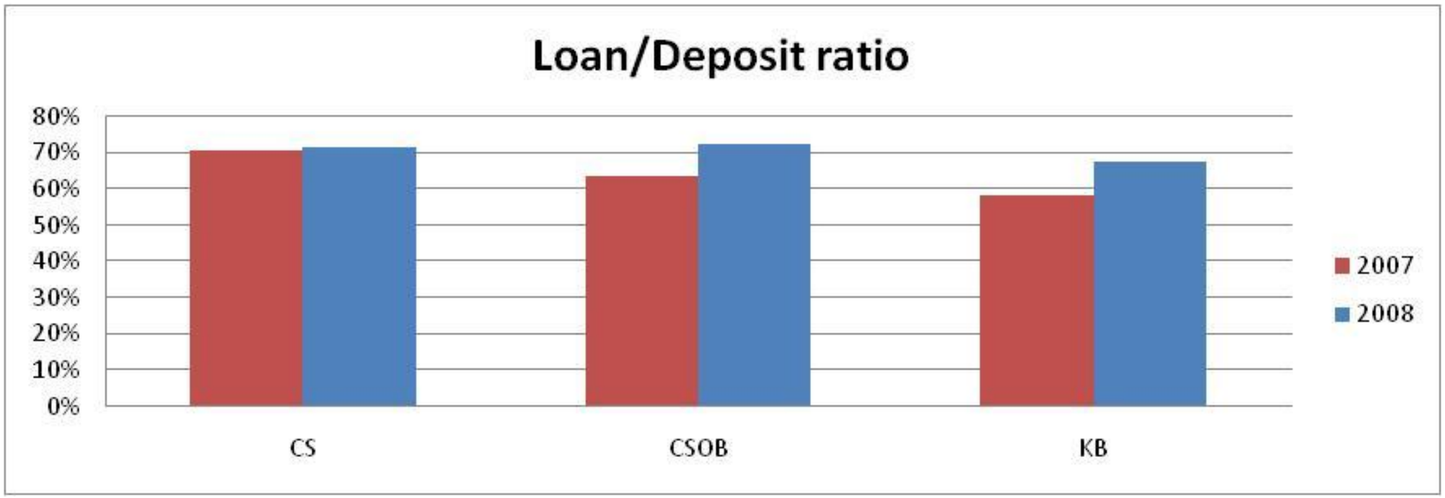
CEE banks dependant on Western Europe and vice versa

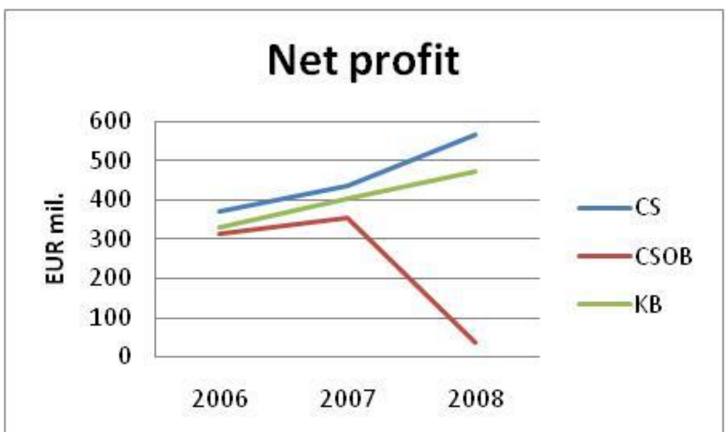


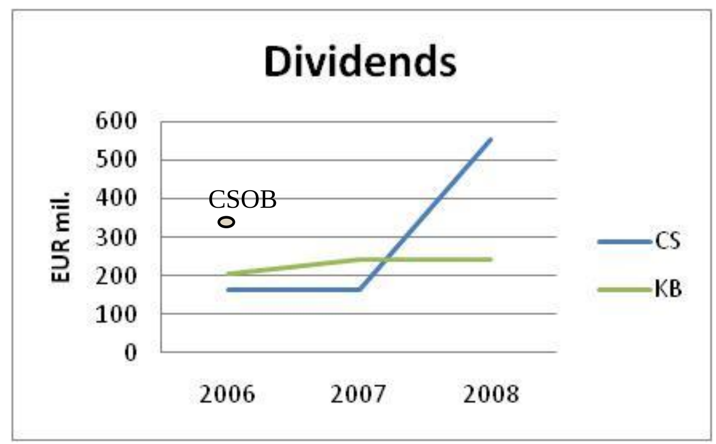


Source: IMF

Leading Czech Banks are in a good financial shape so their parents repatriate profits







Source: Banks' reports

CEE status

Financial Supervision and Regulation in the CR (past)

Passive financial regulation and supervision

- Inexperienced staff
- Liberal licensing policy
- Regulation and supervision only for banks
- Regulatory Failure of Basel I for the Czech environment -> flat 20 % risk weights for credits to any OECD member country bank, including weak domestic banks

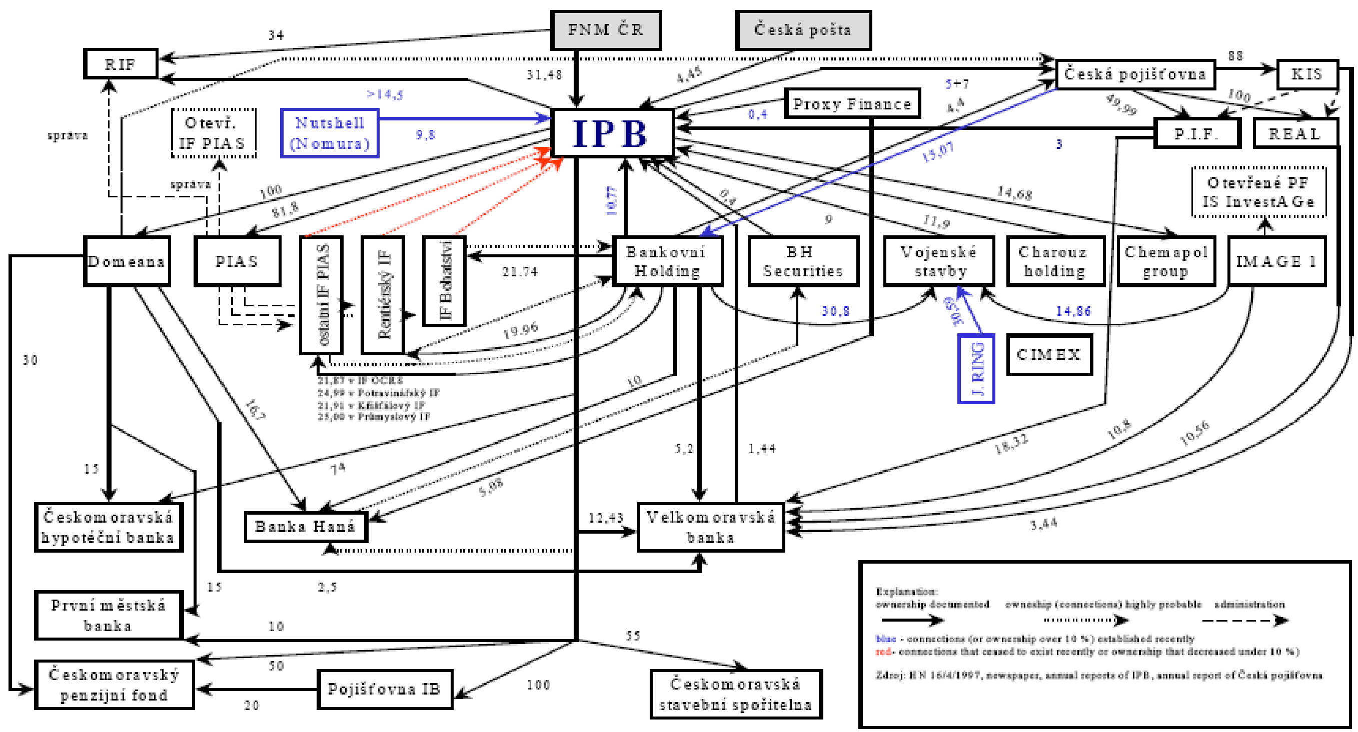
Difficult situation/high challenge for Czech regulators in early 1990s

CEE status

Financial Supervision and Regulation in the CR (past)

Ad hoc supervision on unconsolidated basis

Ownership Structure of IPB Bank (1997)



Source: Chmelik, 1997

Emergence of Opaque Financial Groups…

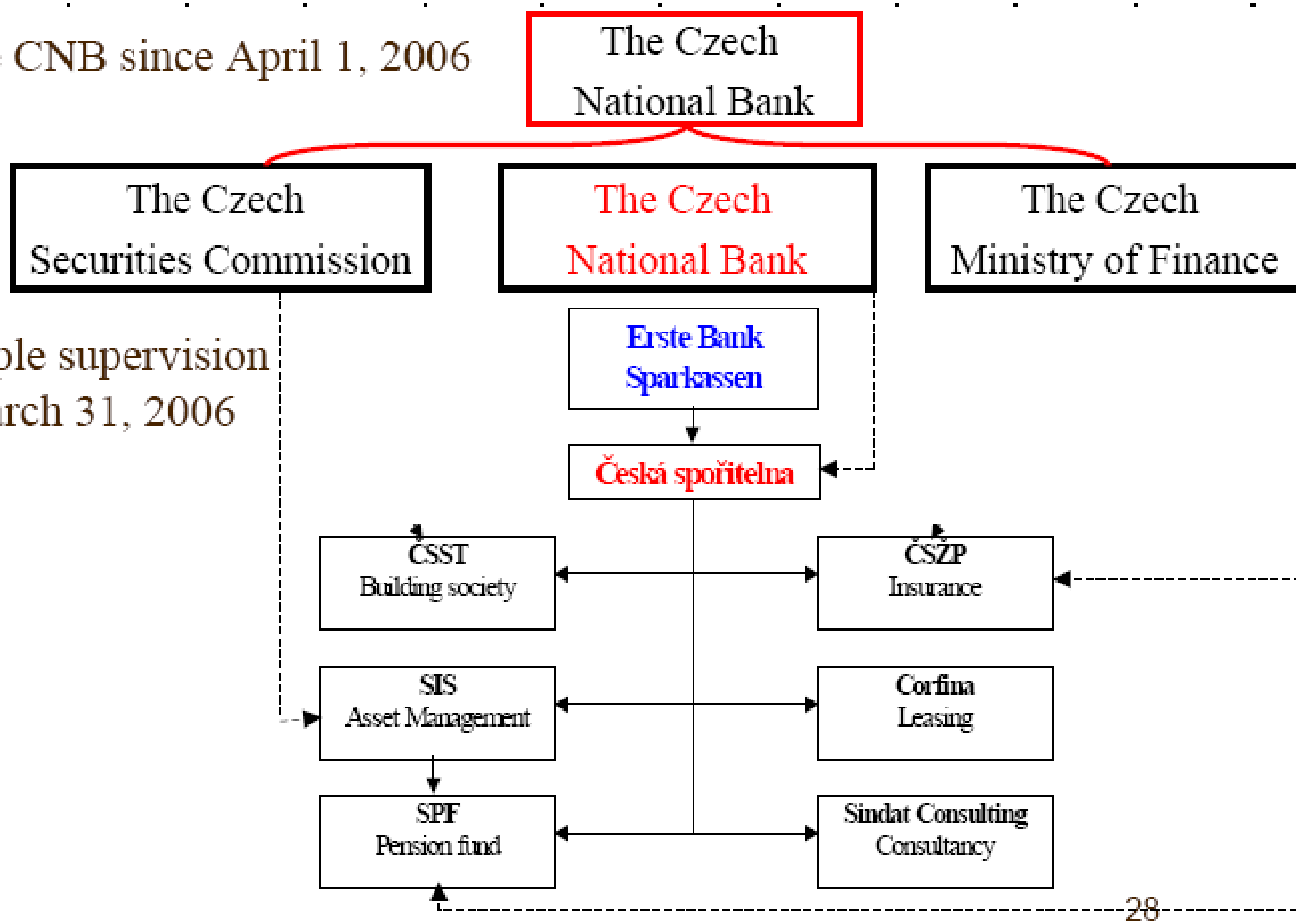
CEE status

Financial Supervision and Regulation in the CR (past)

Supervision on Consolidated Basis

only the CNB since April 1, 2006

…multiple supervision until March 31, 2006



CEE status

Financial Supervision and Regulation in the CR (now)

… still triple supervision of some Czech banks…

1. CNB Supervision (Host supervision)
2. Internal Erste Bank Supervision
3. Austrian Supervision of Erste Bank and its subs (Home supervision)

What about Super-regulators in the US and EU???

EU de Larosiere report…

International colleges

CEE status

Financial Supervision and Regulation in the CR (now)

consolidated financial regulation and supervision

- Regulation and supervision for all financial bodies
- **EU FASP ,**
- **IMF and WB Financial Sector Assessment Program (FSAP) of the CR 2000 - 2002; OK**
- **The Lamfalussy Report;**
- De Larosiere report and EU New challenges

Difficult split of rights and responsibilities of home-host- EU ? regulators

CEE status

General problems Financial Supervision and Regulation

- **Enforcement failed due to both supervisors and failure of selfregulation** – proper law should be supervised and enforced rather than generate further set of legislation. CEE experience…
- **Minimal moral hazard.** Shareholders and governments should bear the consequences of their own past decisions. This is especially important in the today’s very diverse situation of both individual banks (banking groups) and national economies. More prudent players should not be levied the same costs as bigger risk takers. Economically and financially more stable countries should not carry the same costs as countries with riskier and more unbalanced economic policies in the recent past.

Detail issues in BASEL II in transition economies (1)

- The more information transparency is provided to the market by bank, the more advanced and independent approaches to measuring capital adequacy (e.g. internal rating models) are allowed, because the regulation then relies to a larger extent on market discipline, monitoring leaders, and the rule of law. Besides adopting benchmarking standardized approaches, banks are motivated to creatively develop and integrate their own, originally internal methods (e.g. IRB methods). A key part for NBCA is *the responsibility taken by supervisors when evaluating the processes and (back-, stress-) testing the methods adopted. This is very much different and more demanding role from the previous situation especially in transition economies such as Eastern Europe , Vietnam,...*
- At the same time, *regulator accepts the burden of responsibility for decision-making (and implicit unspecified guarantee), understanding that regulated entities cannot survive if they invest in risk-free assets only.* The very substance of financial intermediaries one can find also in optimal monitoring and management of risk asset portfolio in order to maximize their risk-adjusted profits within existing environment and funds. This modern regulatory design has incorporated institutions (rules, organization of supervision) as a framework for real economic life of financial intermediaries based upon the existence and management of inevitable risk within stochastic world. *It should generate only reasonable costs of regulation without excessive capital requirements.*
- Without going into technical details, one can question at least three open points. First, in contrast to previous BCA concept, the NBCA regulator relies both upon unbiased data flow but also upon unbiased processes and methods that are safeguarded by the longer assessment periods. In interactive situation when regulator regulates the regulated entity based upon its internal data, process and internal methods submission, the issue of asymmetric information (known from off-site supervision) does not disappear. Just the opposite might be true (e.g. controversial approval of parameters´ changes of already approved internal model), requiring additional regulatory sources and costs.

Detail issues in BASEL II in transition economies (2)

- Second open point might be linked to the issues around weak form of the efficient market hypothesis (EMH). Most of the proposed models and their testing are based upon historical data, but banks look for financing of new viable projects which have no history (such as pro-forma business plans for UMTS phones). Reliance on historically rooted risk assessments in such projects can mislead both the banks and regulators (what happened internationally in UMTS case, the financing of which suddenly turned profitable utilities and banks into insolvency situation in just one year), and reliance upon those generally accepted supervisory tools can imply huge unintended costs of regulation (e.g. cost resulting from implicit quasi guarantee or indemnification contract between banks and the state), demonstrating the inevitable regulatory risk. Problem analogical to the implications of weak form of EMH can be solved ?
- Last open point refers to the issue of mitigation of credit risk. The concept of expected credit risk is based upon properly secured credits, which is often not the case for emerging markets (limited enforcement, vaguely defined guarantees, collaterals, credit derivatives, low recovery rate of collateral etc.). Then the relevant additional capital requirements, based in NBCA on measurement of unexpected credit risk, confuse the measurement of expected and unexpected risk. Banks must be extremely conservative in assessing credit risk mitigants and carefully apply the models developed by their parent banks for their markets. [1]
- [1] Leasing companies could also be included.

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- Response and Consequences
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Conclusion

Change in Terms

~~Central European Country~~

✓Eurozone member

✓Non-Eurozone member

Consequences

Up-to-date EU economic policy/rescues

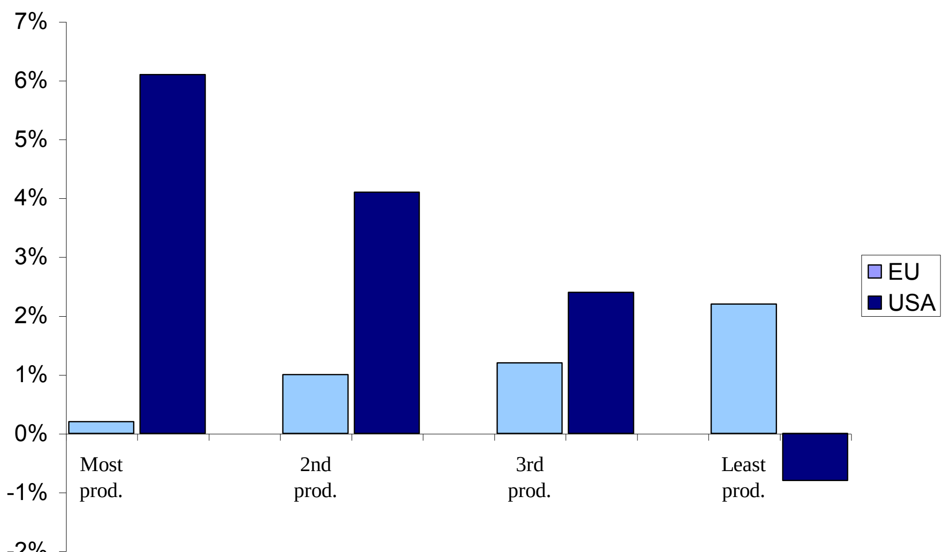
EU leaders agreed on Friday 20 March 2009:

1) To lend up to EUR 75bn ($102bn) to boost the IMF's capital to $500bn (from $250bn).
2) To provide EUR 50bn ($68bn) emergency funding available to help non-eurozone members.

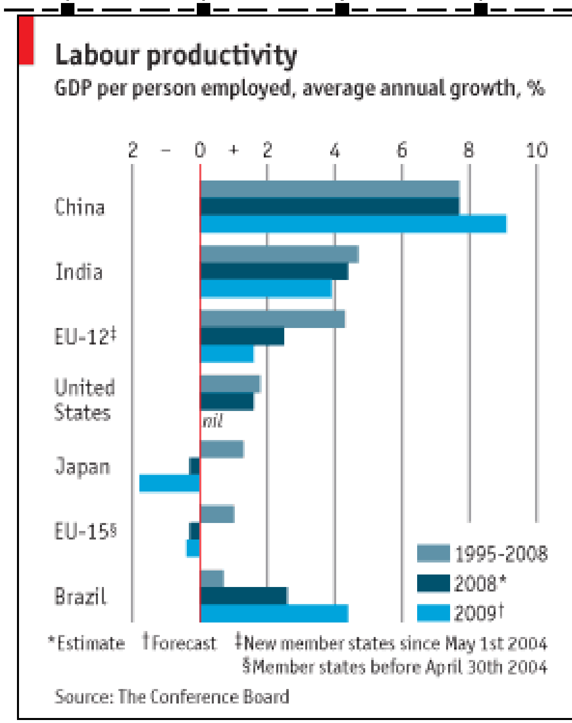
- The Czech Republic as EU Presidency supports free foreign trade in contrast to some EU countries (e.g. France‘s supports of domestic investments of Renault and Peugeot Citroen)

Conclusion

Growth of Employment by Productivity Quartiles is a Long-Term Signal (China and CEE similar pattern as USA)



Source: Mejstřík & Chytilová (2008) based on Gretschmann (2006)

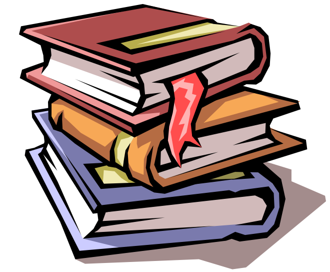


Source: The Economist 11/2009

Some un-wise bail-outs and state subsidies might block necessary structural/ innovation changes and fix old problems

EU old member states might lag behind China and US in terms of productivity…CEE might not

Useful sources



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