



# **Competitiveness of the Czech and Slovak economy: What difference does Euro make?**

EU, DG ECFIN Brussels, Friday 19 November 2010

**Michal Mejstřík**, professor and Chairman

**Petr Janský**, Junior research fellow

Institute of Economic Studies,

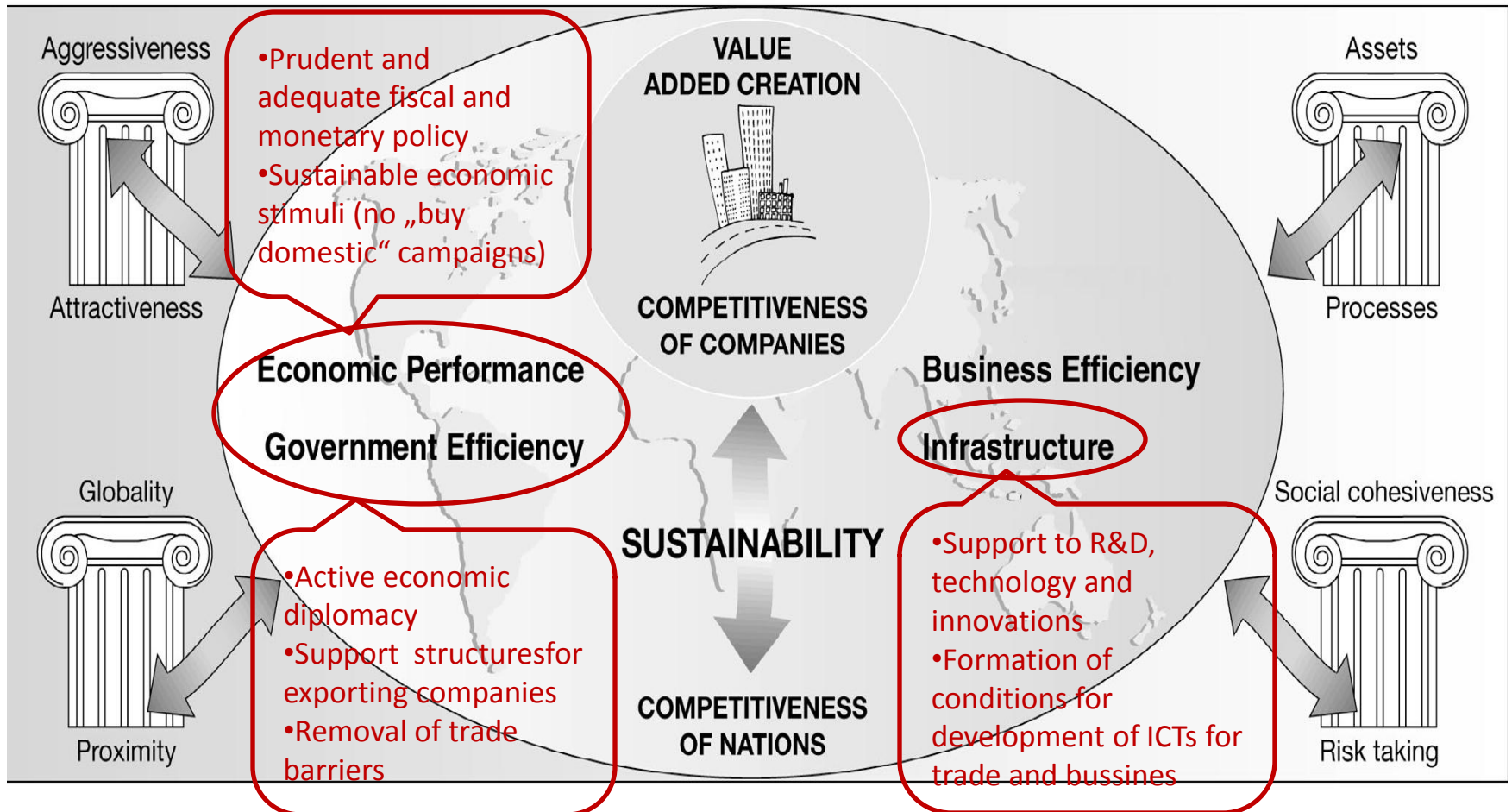
Charles University in Prague

# Contents

- 1. Introduction – Schumpeterian approach**
- 2. First leg - sustainable macroeconomic development both in ST, MT and LT**
- 3. Second leg - Competitiveness supported by the innovation and institutions**
- 4. Conclusions**



# Global framework and „creative destruction“



In all of these areas, civic engagement may lead to substantial improvements



Two legs for country survival – macro and micro

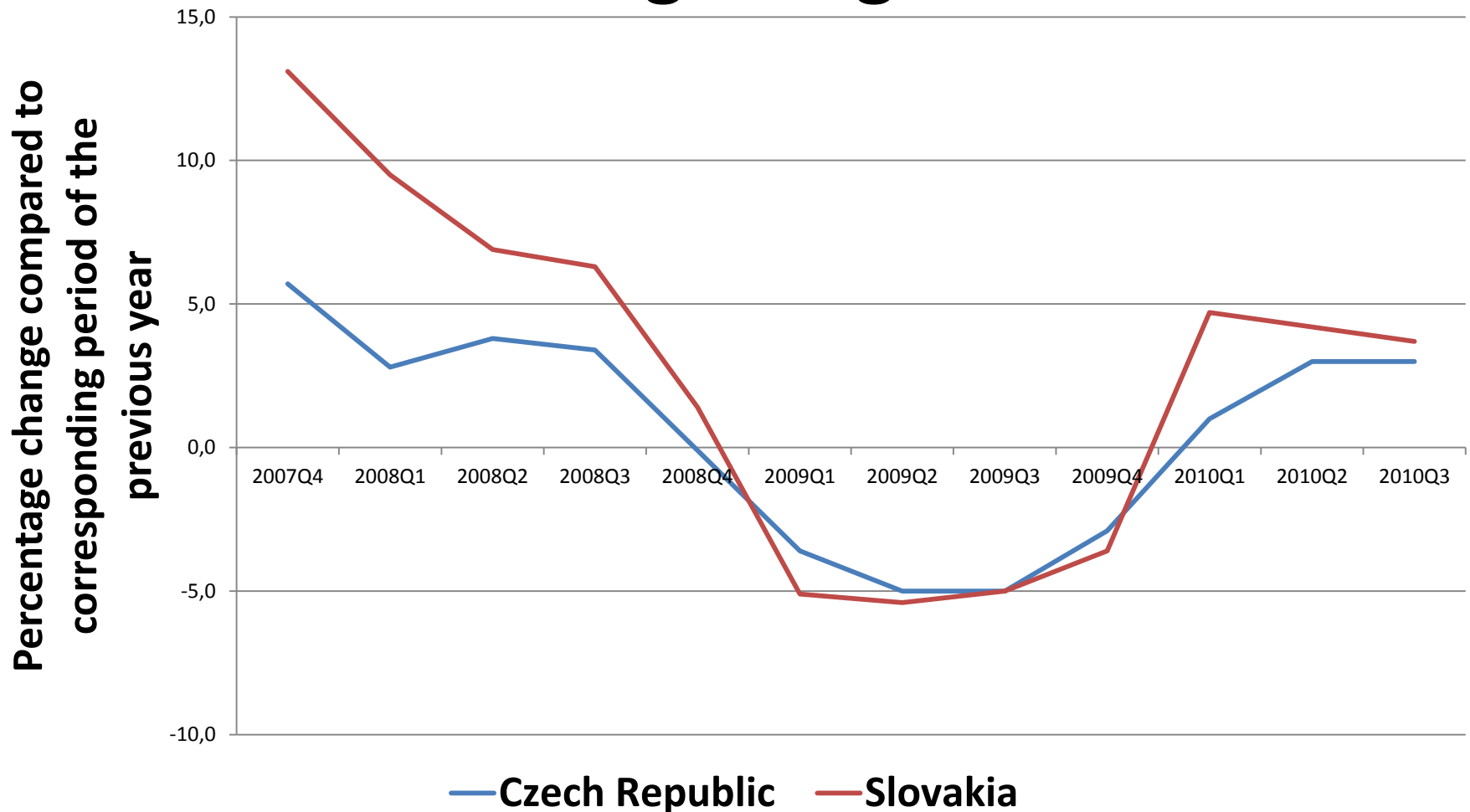
- Two speed EU ? Different impacts of the crisis on peripheral EU member states/PIGS vs. core&Cz&SI
- Long vs. short-term responses to the development
- What are key interrelated legs based upon rules?
  - ✓ First leg – macroviability - fiscal structural
  - ✓ Second leg - competitiveness
- Unique features of Czech & Slovak economies (export oriented, low loan/deposit ratio, low share of FX loans, low inflation and interest rates etc.) - better than PIGS
- Future strategy of the CR & SI – “PIGS” country or “Finnish-type”/”German-type” country?

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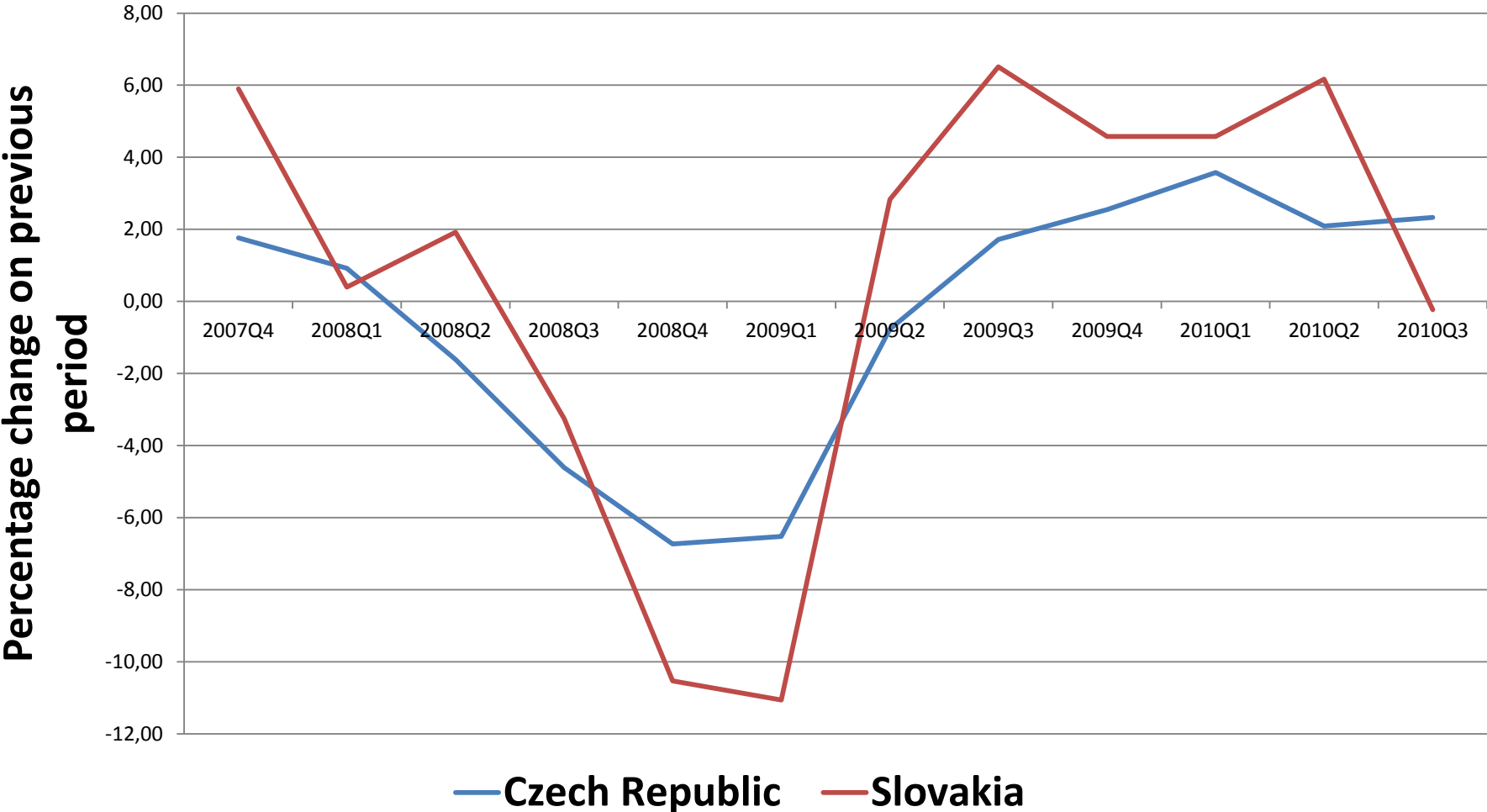


# GDP growth: Czech Republic – Slovakia getting closer



Source: Eurostat, Czech Statistical Office (2010Q3 estimate)

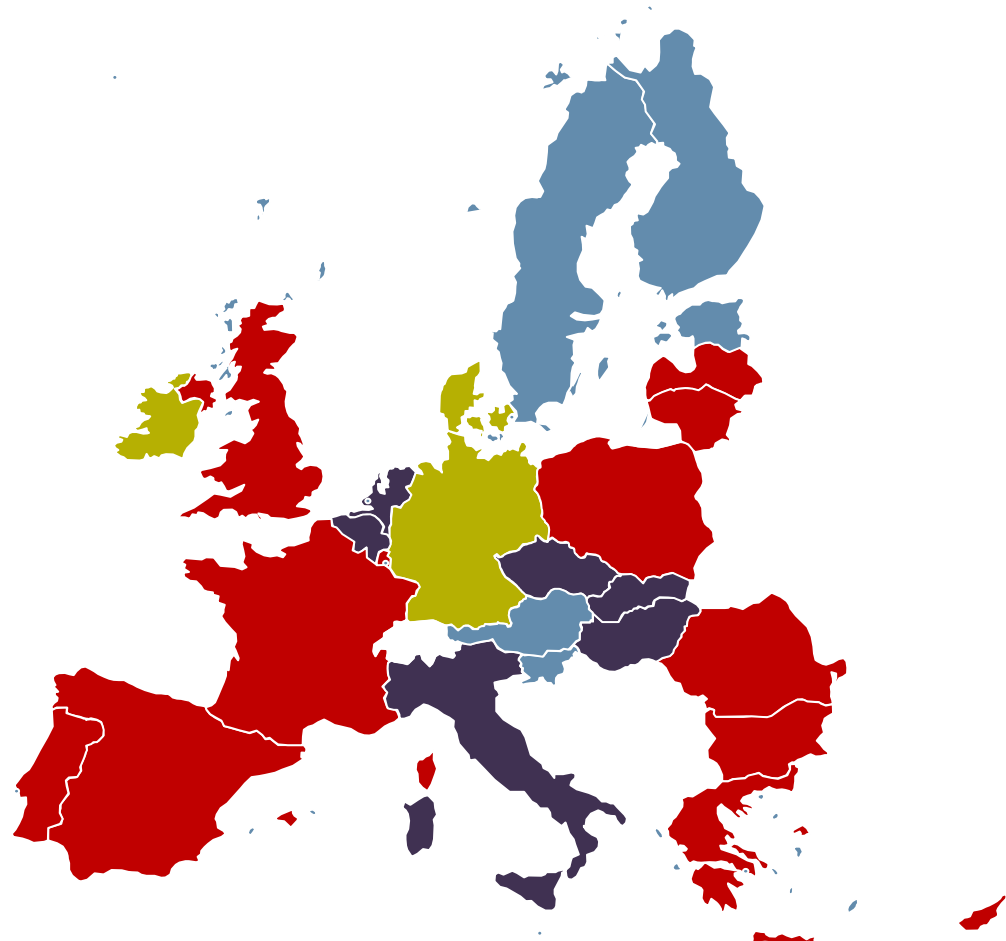
# Industry production: decent Czech Republic, more volatile Slovakia



Source: Eurostat (Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply)

# Export: Both countries trade surplus with EU27 but trade deficit with the rest

- Trade surplus with both EU27 and the rest of the world
- Trade deficit with EU27, trade surplus with the rest of the world
- Trade surplus with EU27, trade deficit with the rest of the world
- Trade deficit with both EU27 and the rest of the world

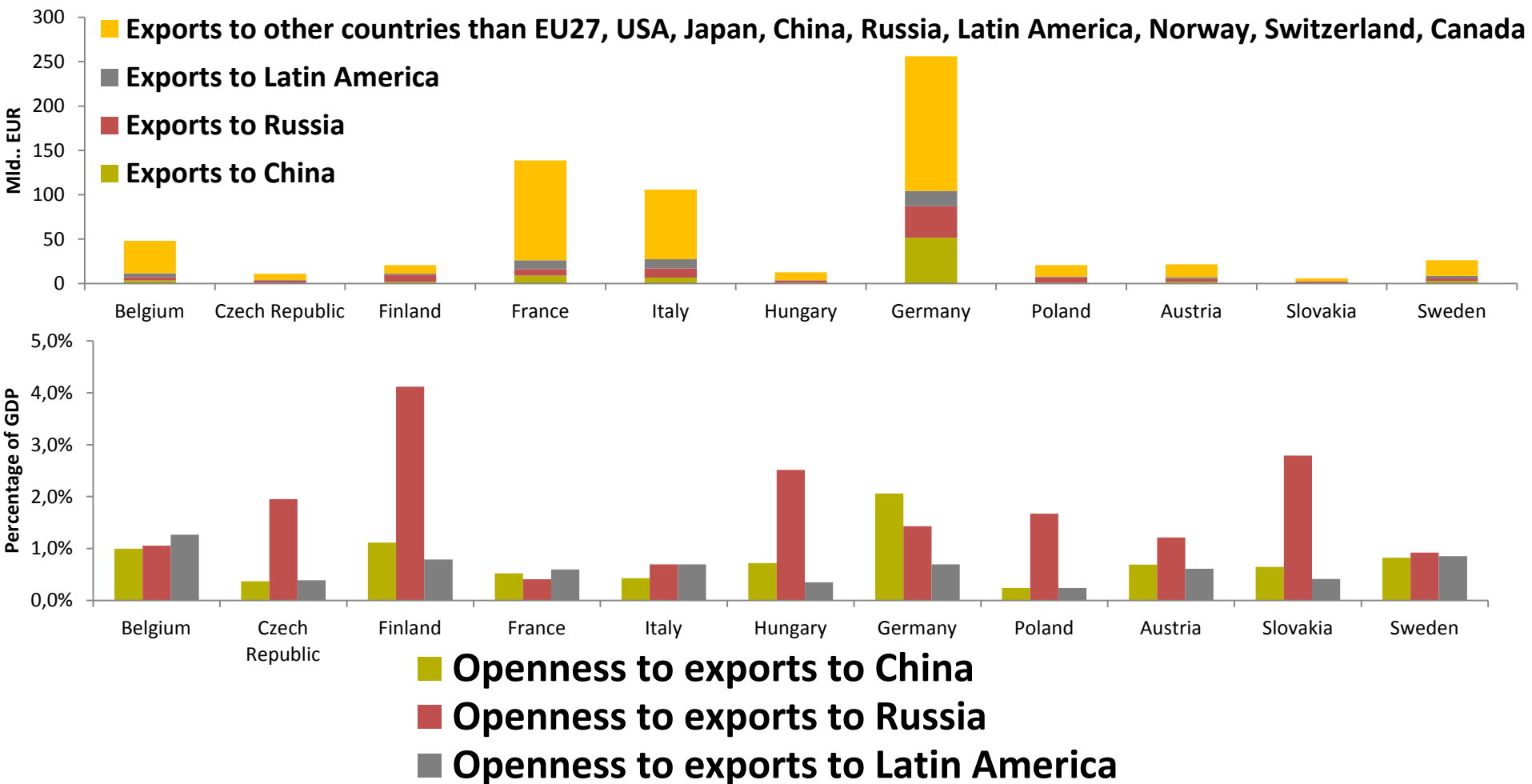


**High integration: 86% of Czech exports to EU, majority EU ownership of Czech banks & firms**

Source : Eurostat (2009) data for 2008

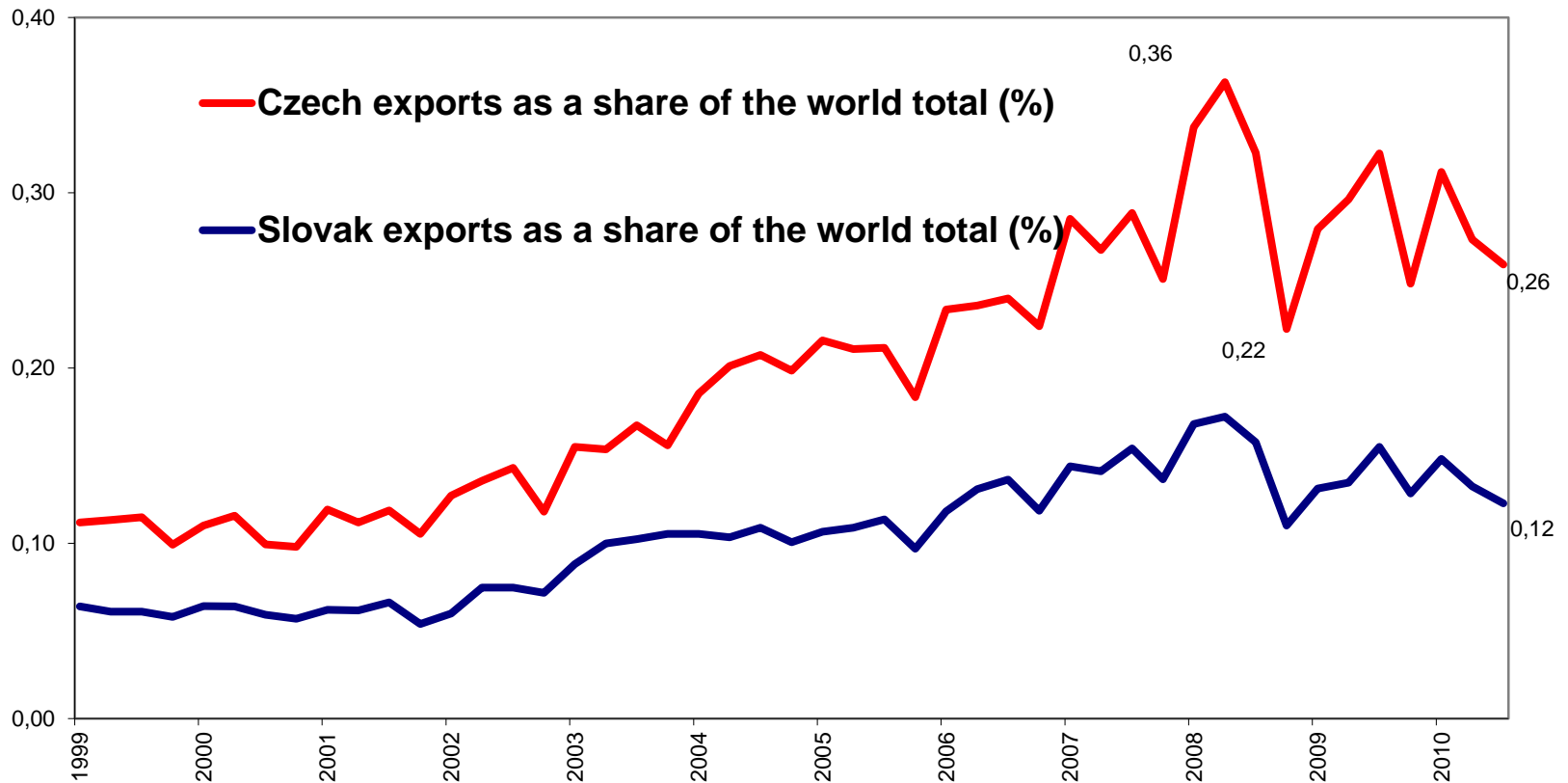


# CZ&SL Exports to the rest of the world: so far not important except for Russia



Source: Eurostat (data for 2008)

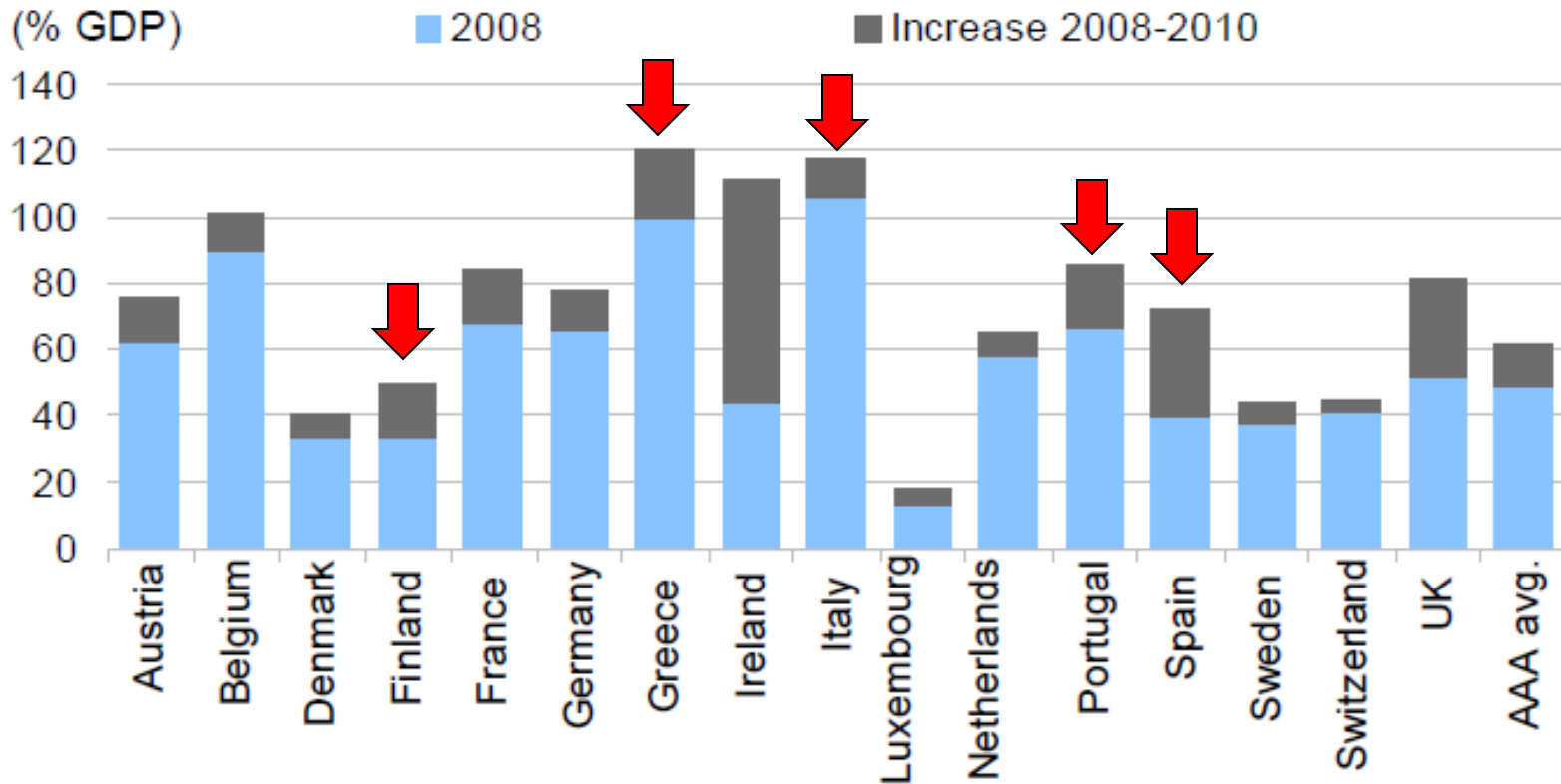
# Exports as a share of the world total: not rising since the crisis any more, mutual trade still significant



Source : Bloomberg , calculation until 30.9.2010 by A.Michl

# Macroeconomic impacts of the crisis on peripheral EU member states versus CR & SI

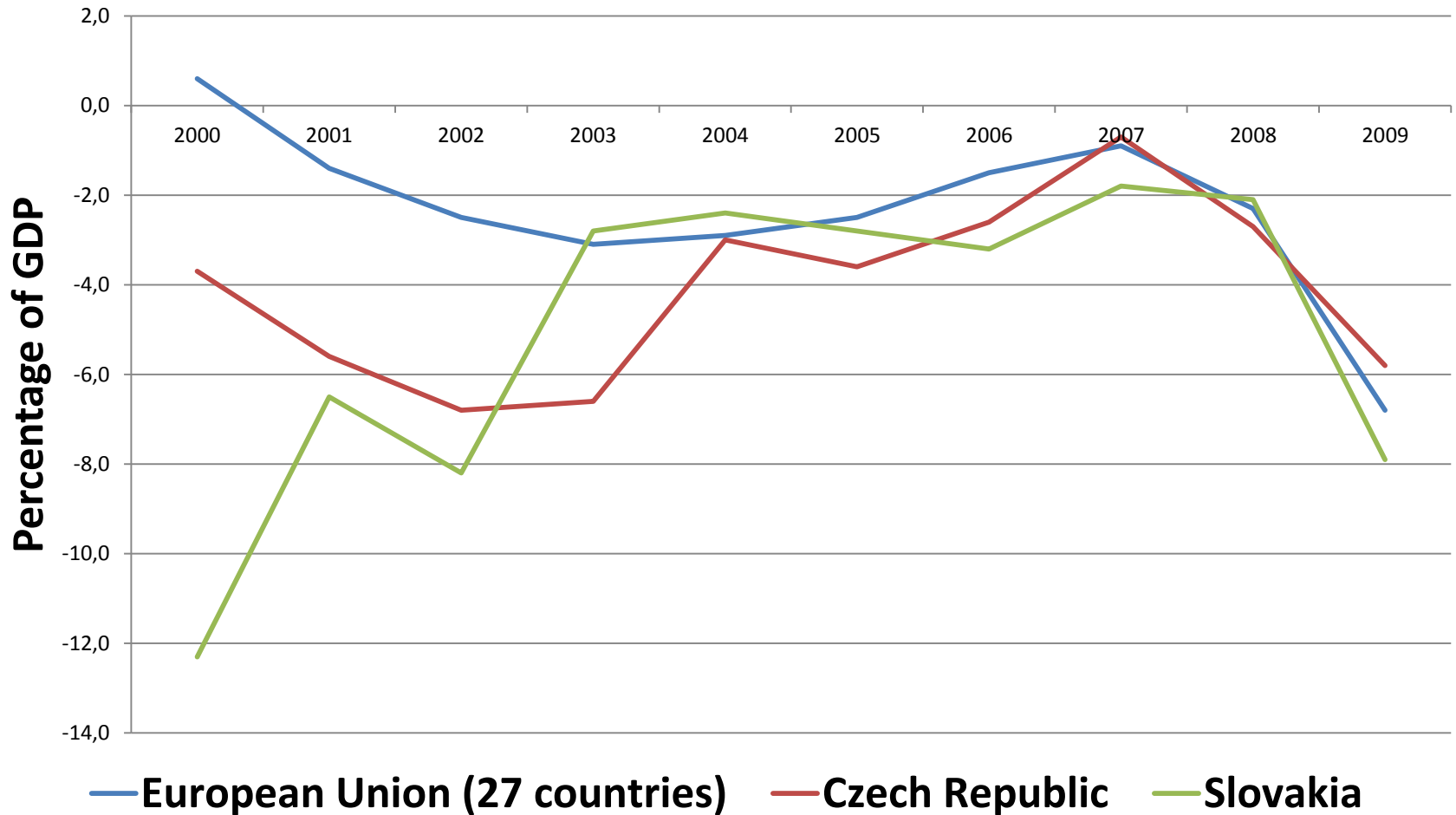
## Gross Government Debt – 2008 and 2010



➤ High debt/HDP ratio of PIIGS while debt of CR & SI relatively low

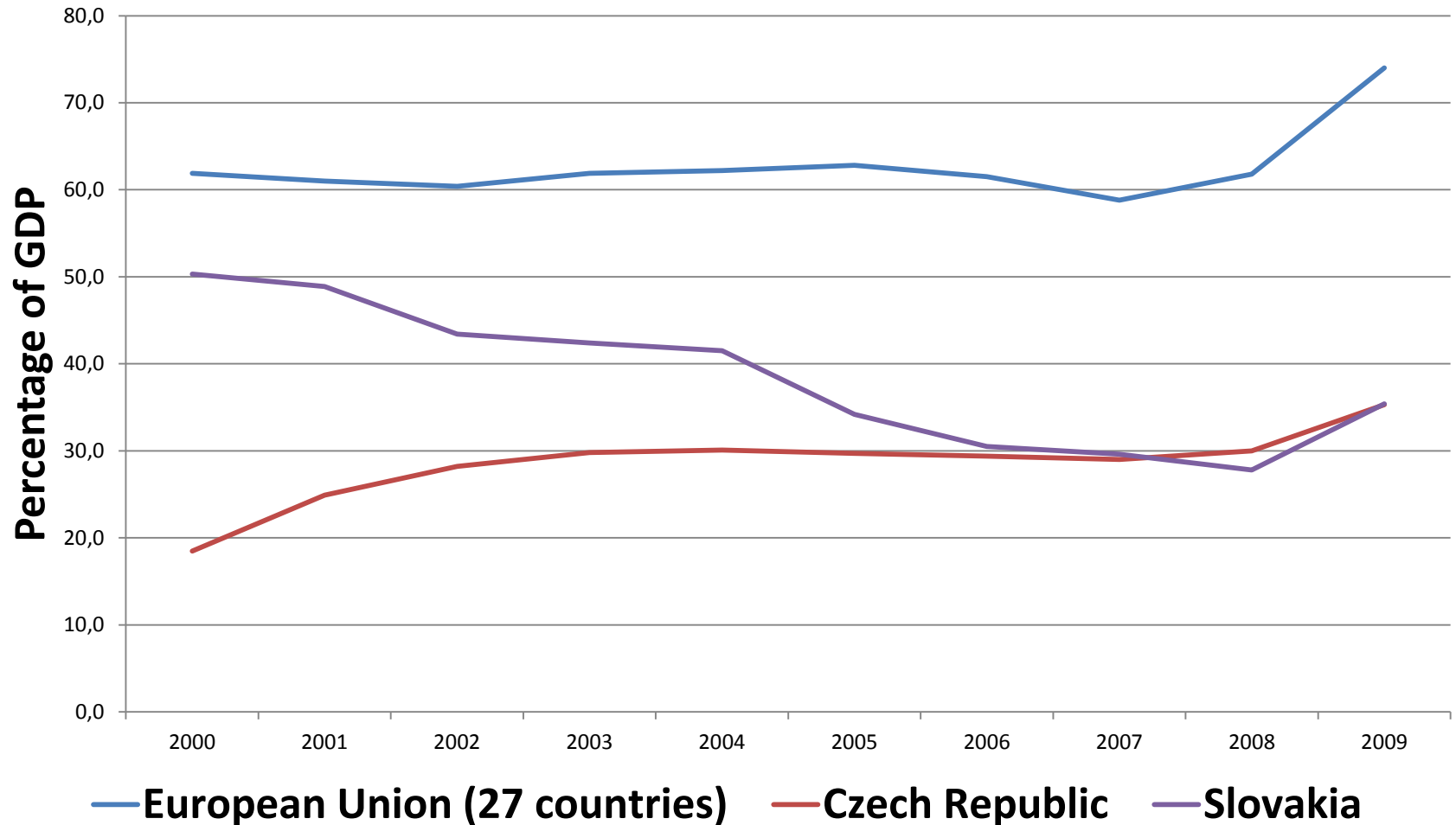
Source: FITCH

# (Net lending or) Net borrowing should be limited due to current gmt efforts



Source: Eurostat (Net lending (+)/Net borrowing (-) under the EDP (Excessive Deficit Procedure))

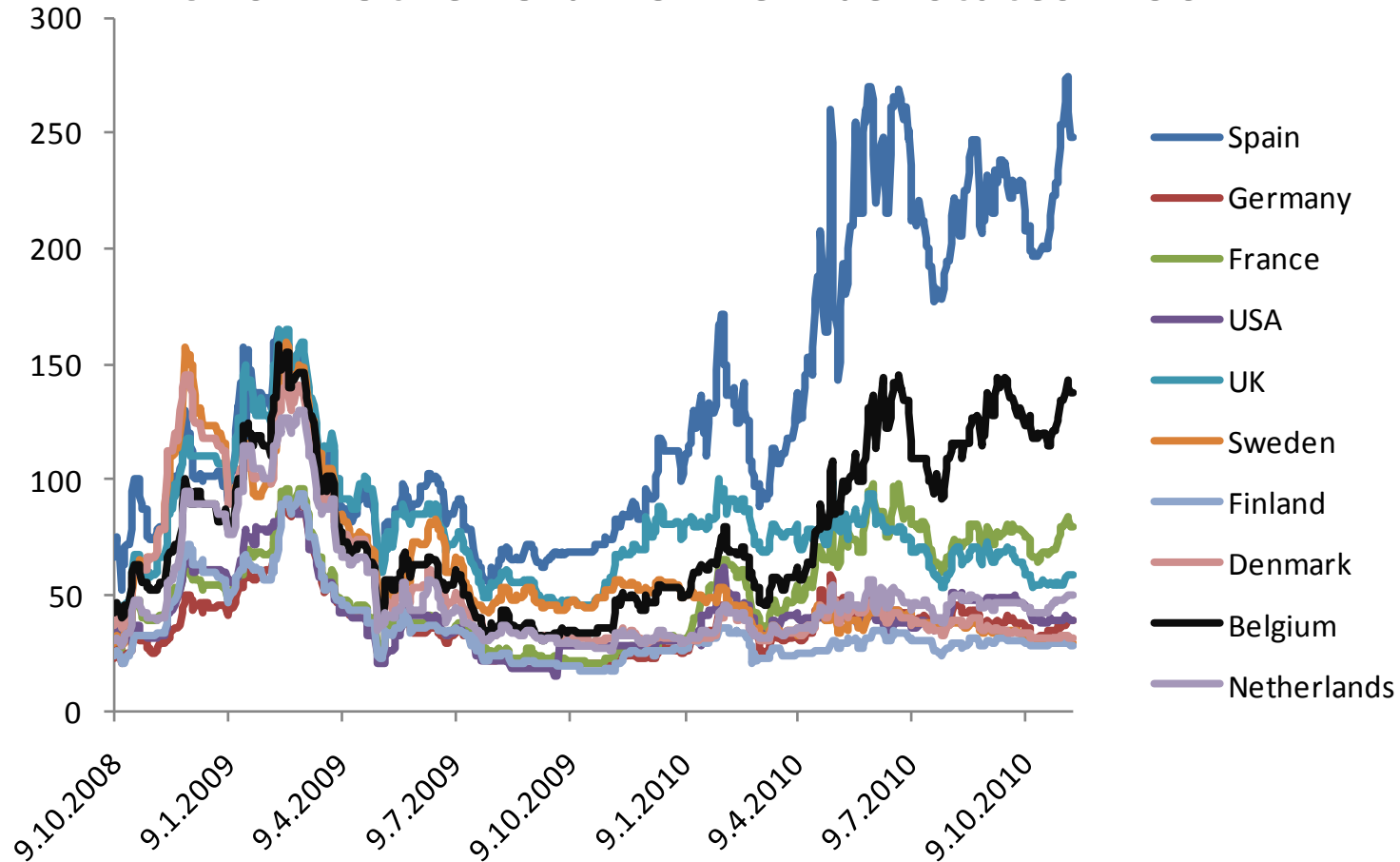
# Government consolidated gross debt still relatively low but threatened by structural deficits



Source: Eurostat (Government consolidated gross debt)

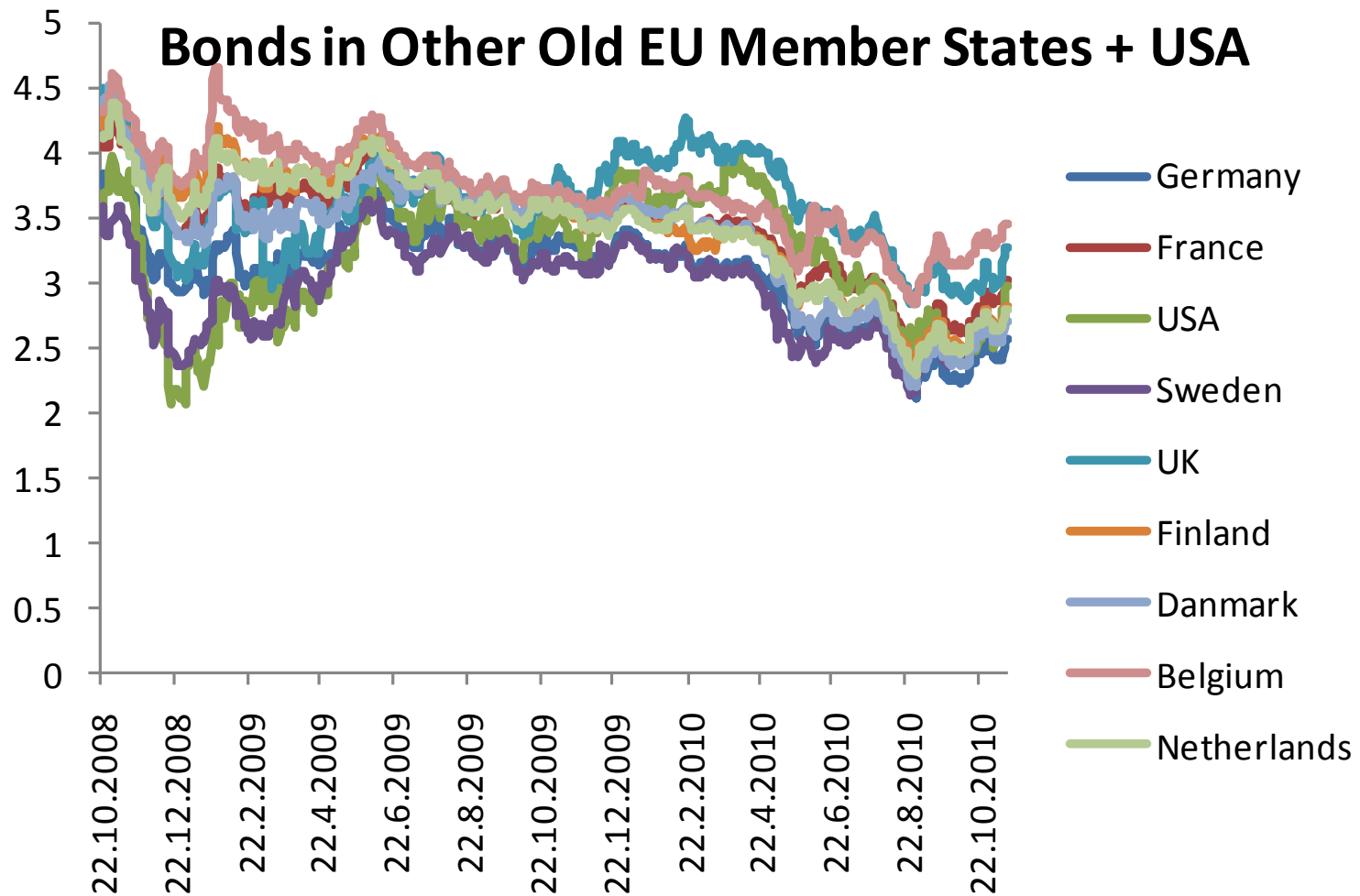
# Macroeconomic impacts of the crisis on peripheral EU member states versus CR & SI

## CDS in Other Old EU Member States + USA



Why low CDS spread in Finland and high in Belgium ?

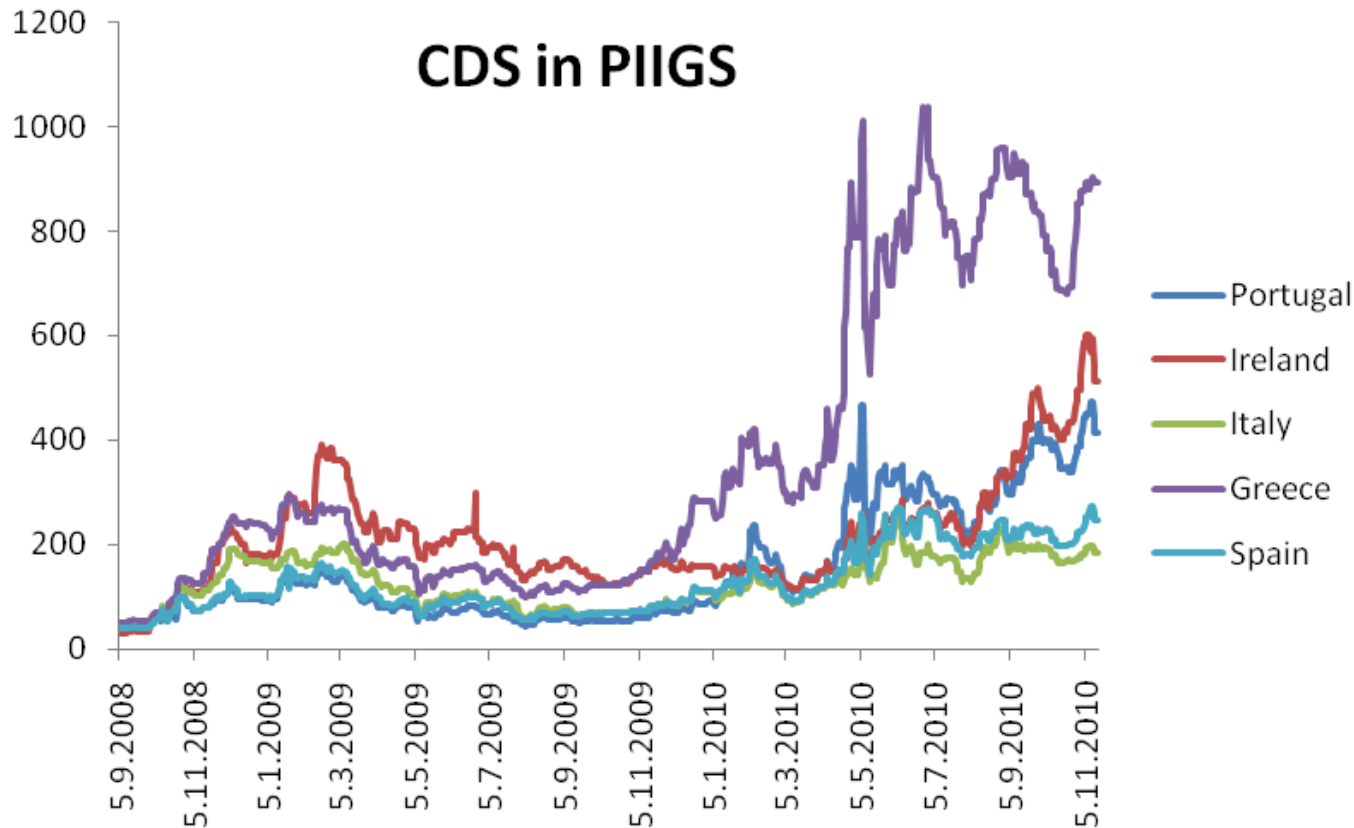
# Macroeconomic impacts of the crisis on peripheral EU member states versus CR & SI



Why low cost bonds in Finland (2.8%) vs Belgium (3.5%) ?

# Macroeconomic impacts of the crisis on peripheral EU member states versus CR & SI

## Eurozone PIIGS countries credit risk reflected by the market (CDS)

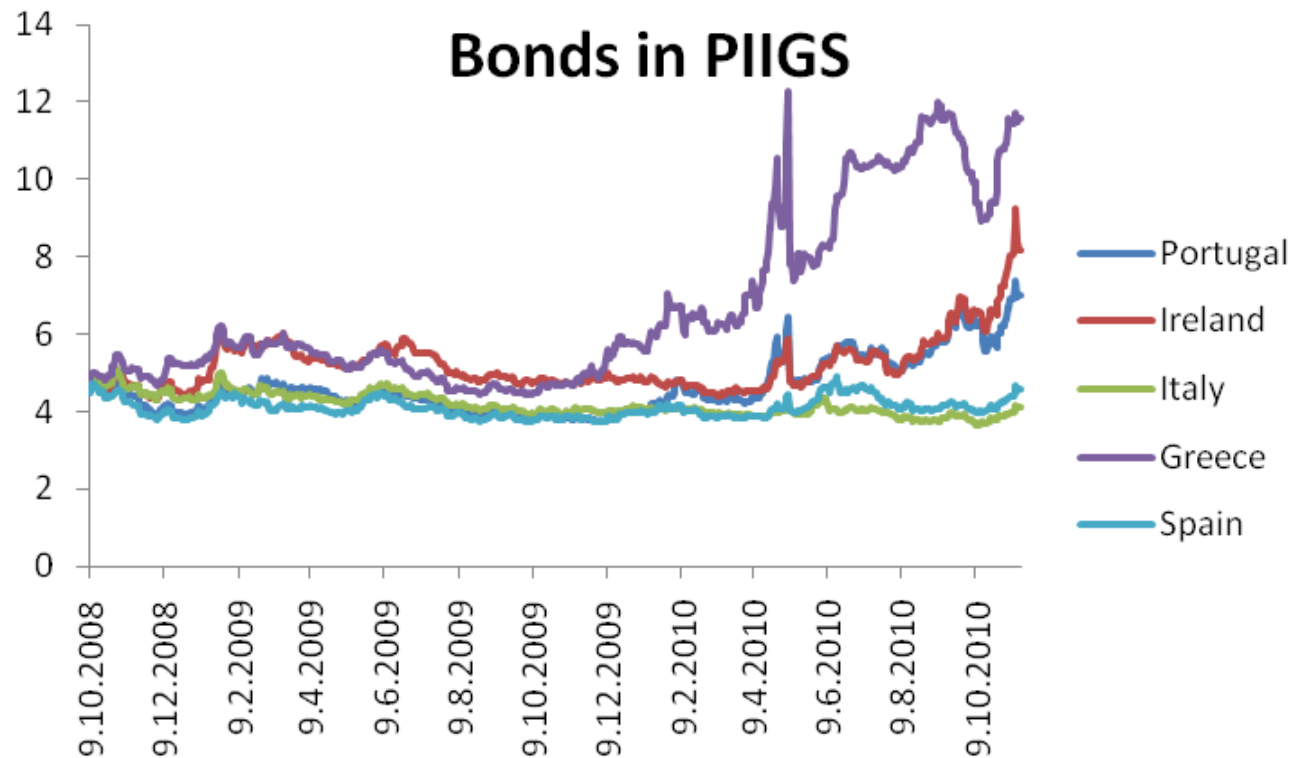


- Higher CDS spread = penalty from the market.  
Minimum Italy with 183 and Spain with 248

Source: Thomson Reuters, quotes in bps for sovereign 5Y credit default swaps until November 15, 2010



## Eurozone PIIGS countries credit risk reflected by the market (T-bonds)

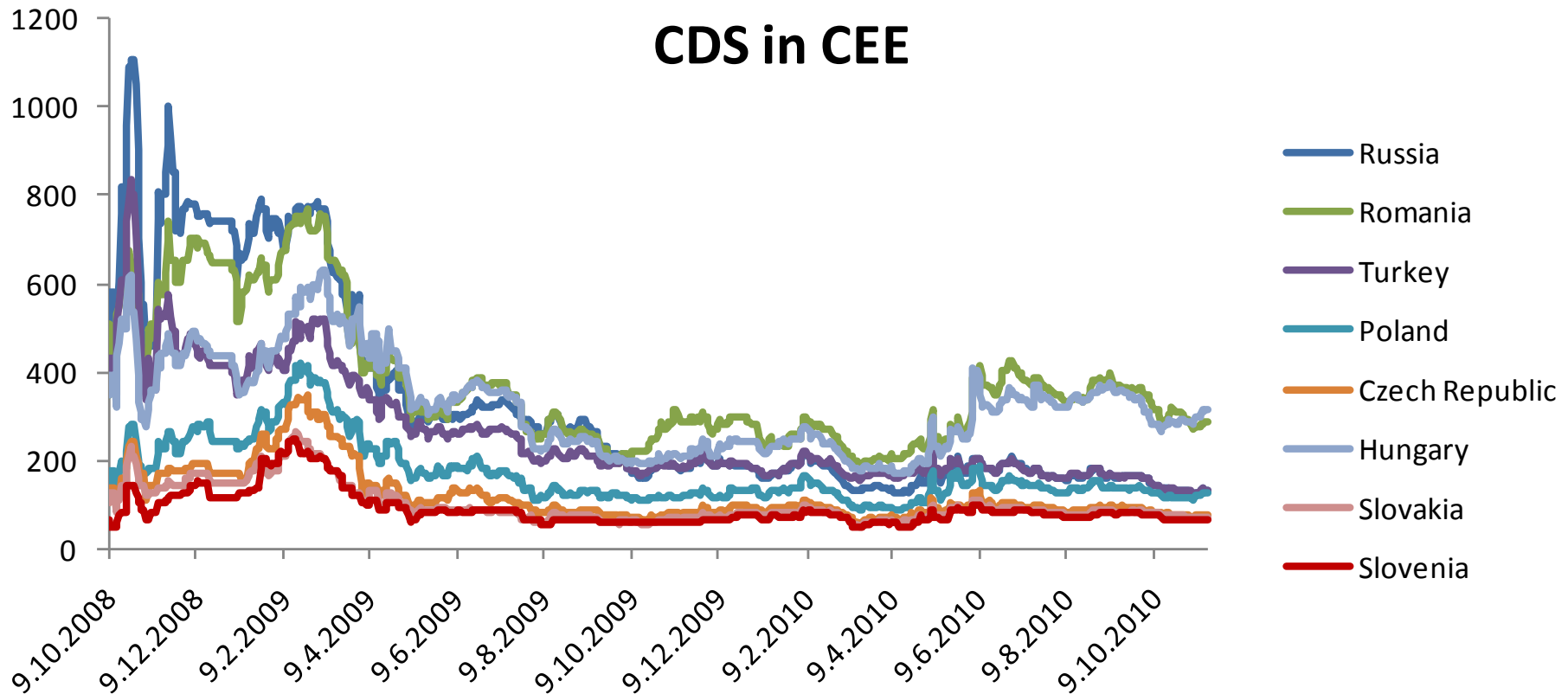


- Situation is getting more costly for Greece, Ireland and Portugal again. Minimum for Italy with 4.1% and Spain with 4.56%

Source: Thomson Reuters, data in % for 10YT until November 15, 2010

# Macroeconomic impacts of the crisis on peripheral EU member states versus CR & SI

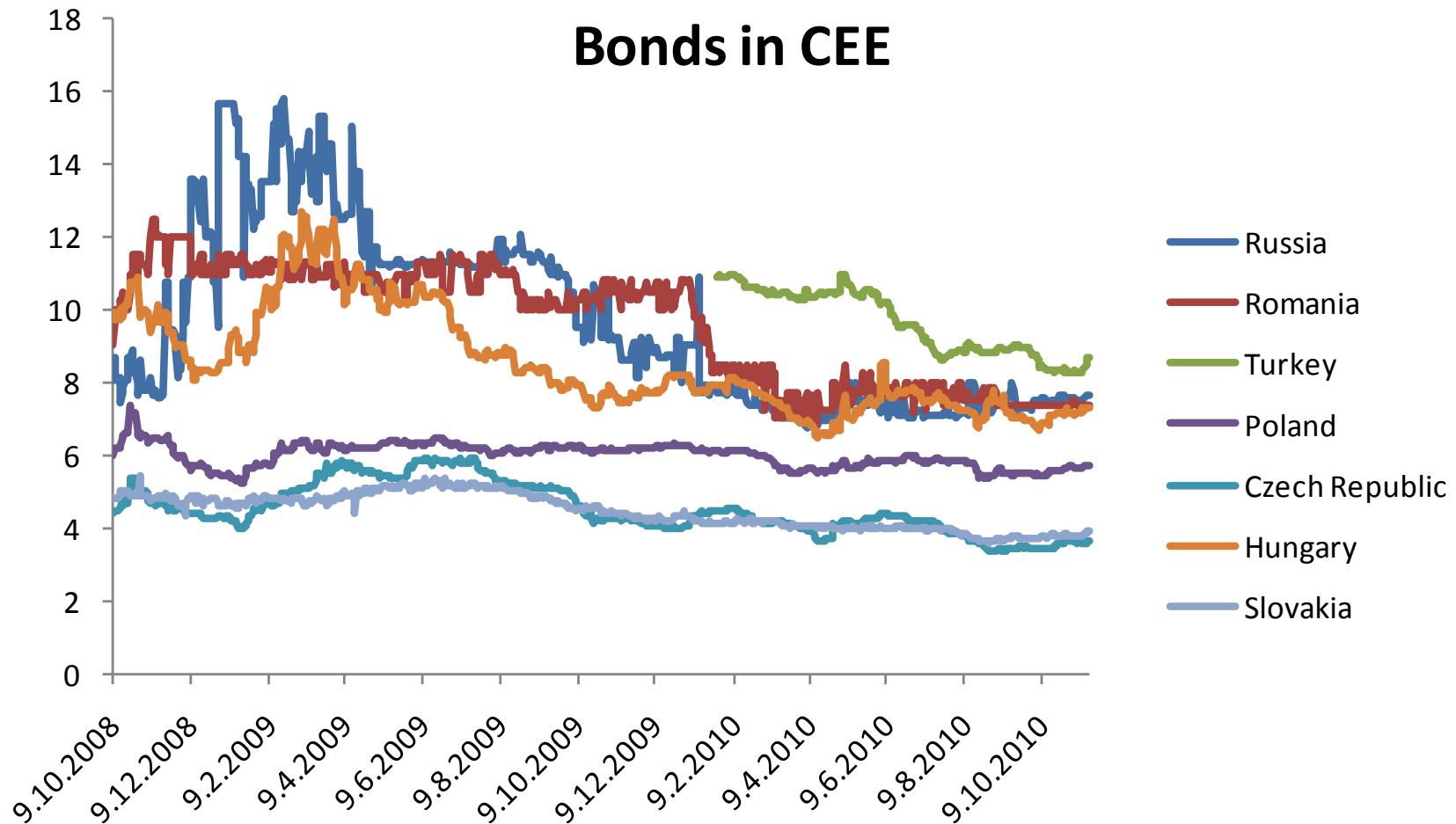
## CDS in CEE



- Currently CDS spread is relatively low in the CR (76) and Slovakia (71) compared to some CEE countries such as Hungary (314) and Romania (286) and all PIIGS eurozone member states (range within 186 – 892)

Source: Thomson Reuters, quotes in bps for sovereign 5Y credit default swaps until November 15, 2010

# Macroeconomic impacts of the crisis on peripheral EU member states versus CR & SI

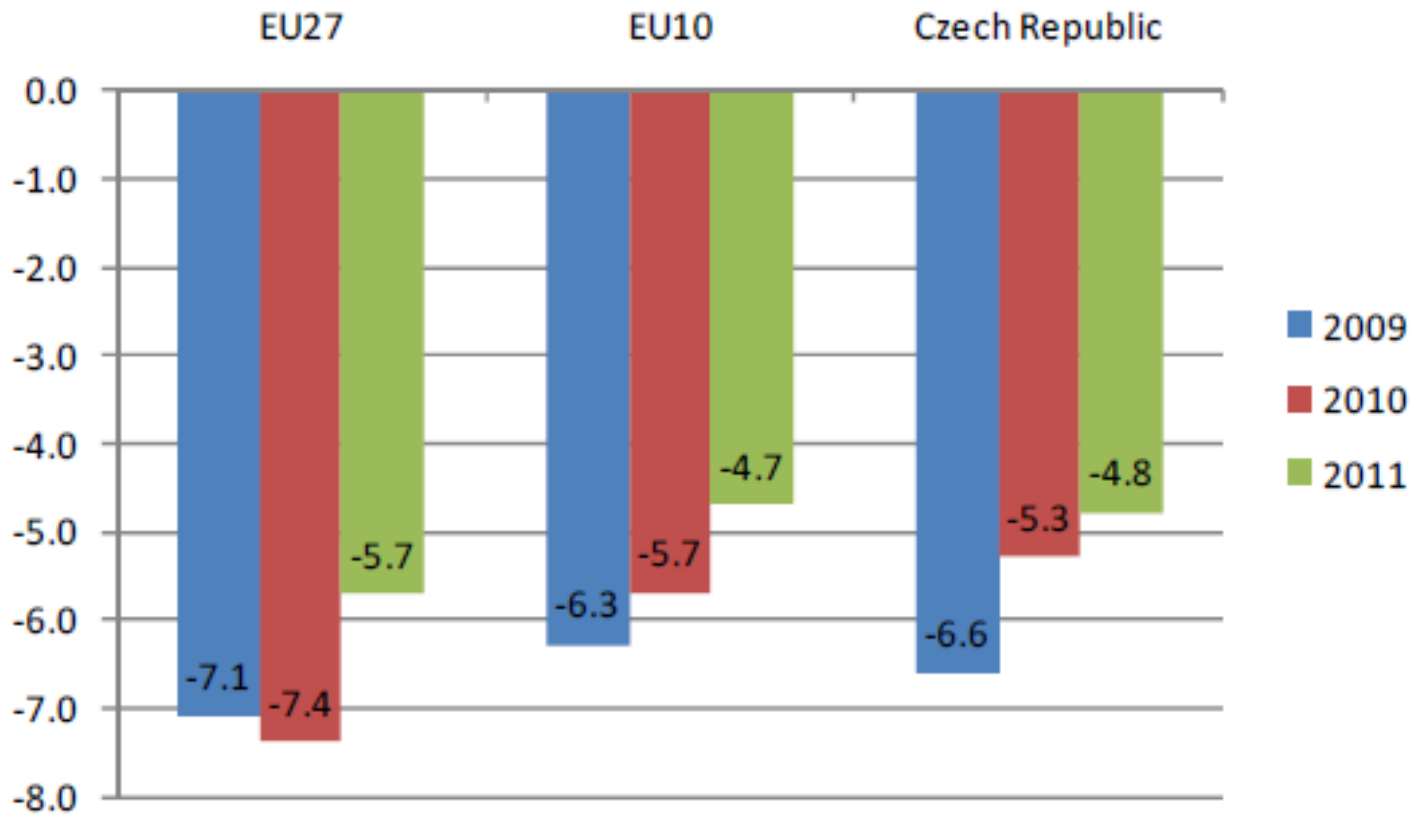


- ..relatively low CDS spread implies relatively low Treasury bond yields in the CR (3.625%), Slovakia (3.922) but sustainable ?

Source: Thomson Reuters, data in % for 10YT until November 15, 2010

## Fiscal sustainability

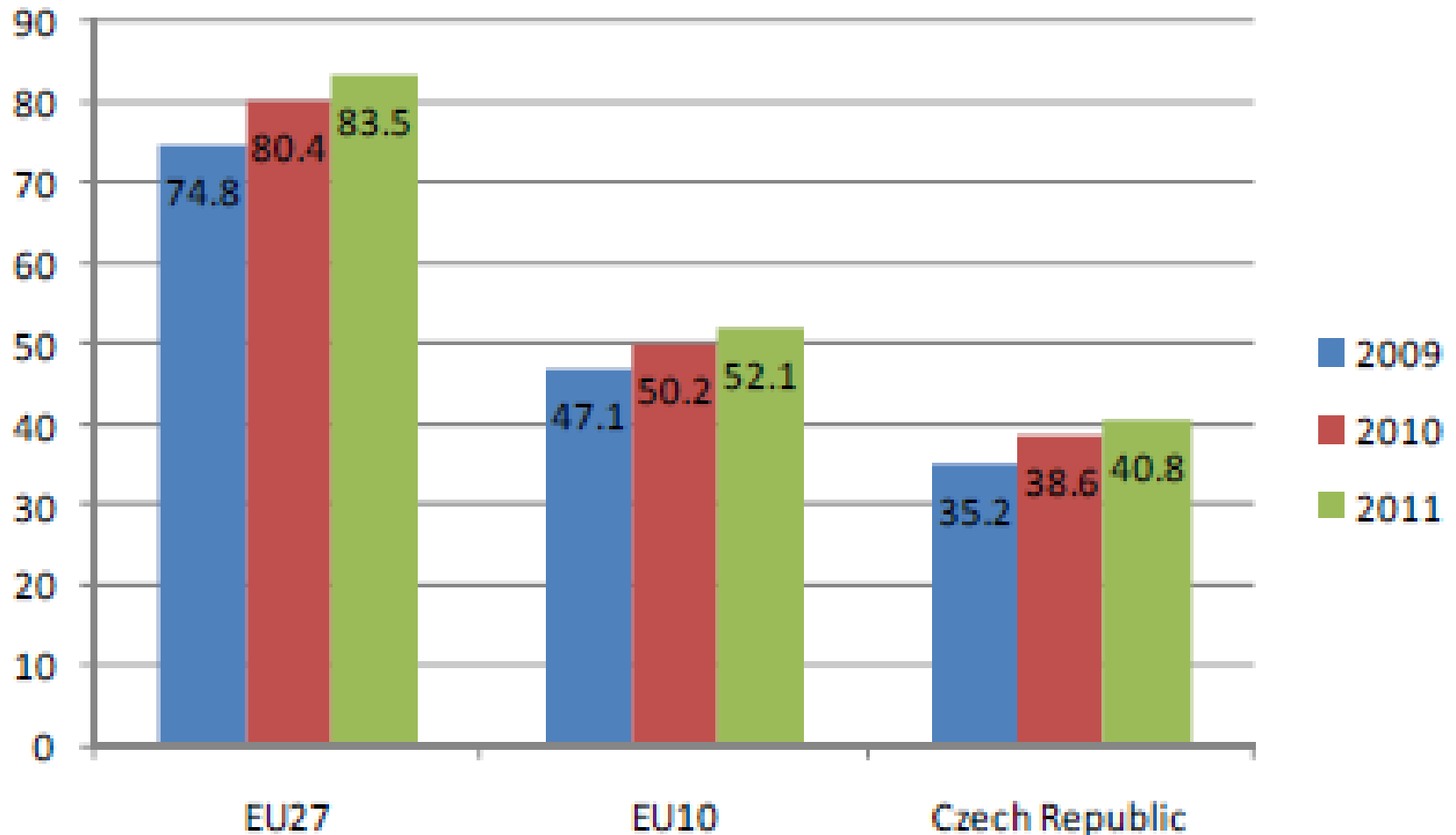
...planned decreasing fiscal deficits in the CR (% GDP)



- Implying relatively low Treasury bond yields in the CR
- But sustainable due to new gmt fight with structural deficits?

Source: World Bank - Convergence Program Updates, January 2010

# Fiscal sustainability ...but increasing public debt/GDP ratio (%)



Source: World Bank - Convergence Program Updates, January 2010

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Competitiveness supported by the innovation and institutions

## Two types of competitiveness

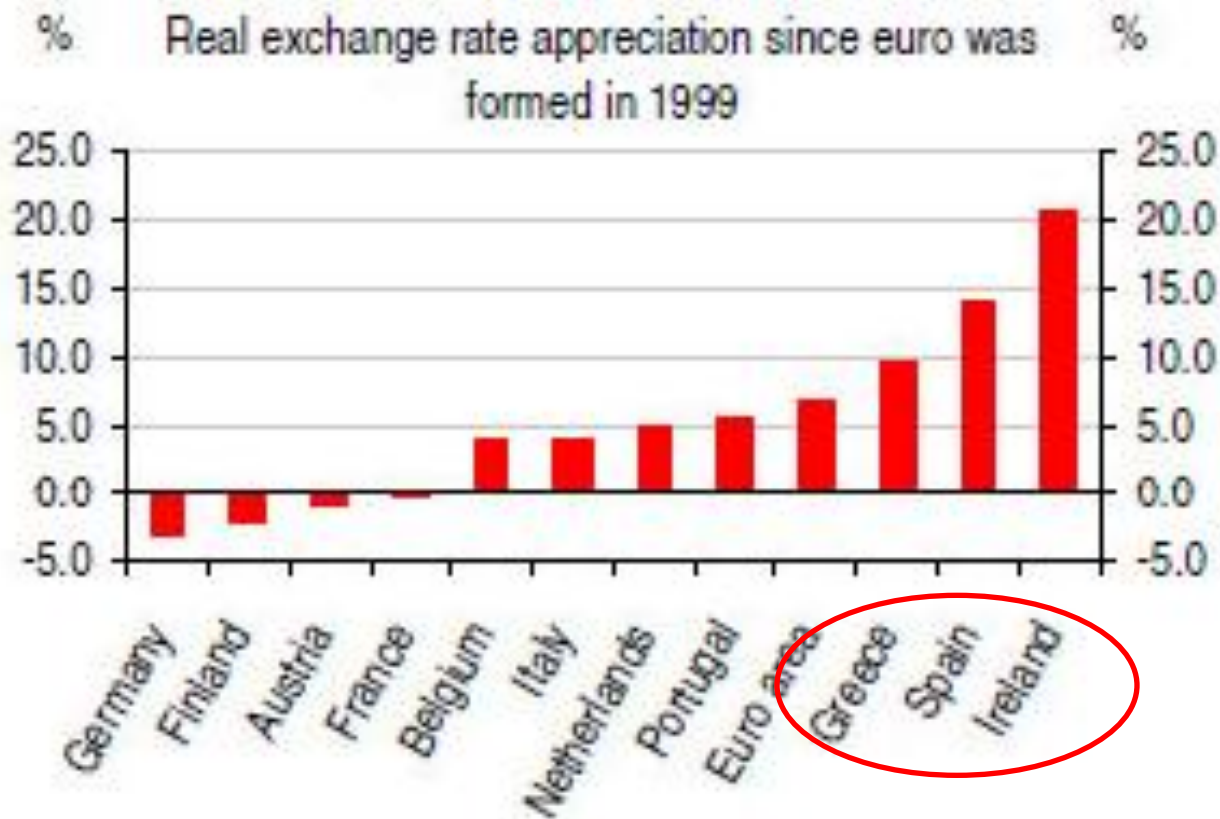
### ➤ **Price/cost competitiveness**

- ✓ Higher productivity growth vs. prices/salaries (some Euroarea members – ESP, GRE etc.)

### ➤ **Non-price competitiveness**

- ✓ effective state administration
- ✓ indices of competitiveness include innovation
  - World Bank/Doing Business
  - World Economic Forum/The Lisbon Review  
Global Competitiveness Report
  - The EIU - IT industry competitiveness index
  - The IMD in Lausanne etc.

# Decreasing competitiveness of PIIGS (Euro...)



Weighted average of a basket of bilateral exchange rates adjusted with relative consumer prices. Weights are derived from manufacturing trade flows and capture both direct bilateral trade and third country competitiveness. Source: BIS



# Competitiveness supported by the innovation and institutions

## Price/cost (un)competitiveness – Spanish case

**Table 1: Indicators of the competitiveness of the Spanish economy**

	Relative labour costs *	Relative wage costs in manufacturing **	Manufacturing/total employment (%)	Construction/total employment (%)	Current account balance (% of GDP)
1998	100.0	100.0	18.6	9.8	-1.1
1999	100.7	97.4	18.4	10.4	-2.7
2000	102.2	100.0	18.1	11.1	-4.0
2001	102.9	100.9	17.8	11.6	-4.3
2002	103.3	101.6	17.6	11.7	-3.8
2003	104.0	104.9	17.1	11.8	-4.0
2004	105.7	107.6	16.7	12.1	-5.9
2005	107.9	111.9	16.1	12.5	-7.5
2006	110.5	115.6	15.5	12.8	-9.0
2007	113.0	118.3	14.9	13.1	-10.0

Source: Bruegel calculations based on AMECO and Price and Cost Competitiveness Databases. Note: \* REER vs EU16 based on unit labour costs, total economy. Normalised as 1998=100; \*\* REER vs EU16 based on unit wage costs, manufacturing. Normalised as 1998=100

# Competitiveness supported by the innovation and institutions

## The EU is still lagging behind the US

	Average annual labour productivity growth per person employed			GDP ppe 2007 (EU-27=100)	GDP phw 2007 (EU-25=100) (*)	GDP pc 2007 (EU-27=100)
	1996-2001	2001-2006	2007			
Austria	1,6	1,4	1,4	120,4	107,9	127,7
Belgium	1,3	1,4	1,1	131,2	133,8	118,9
Bulgaria	2,4	3,3	3,3	35,6	34,6	37,9
Cyprus	2,6	0,2	1,1	84,7	73,9	91,6
Czech Republic	2,0	4,1	4,6	73,1	59,7	81,0
Denmark	1,4	1,7	0,0	107,1	112,3	124,0
Estonia	8,5	6,9	6,6	67,5	54,2	71,4
Finland	2,2	2,0	2,1	113,4	107,1	118,3
France	1,2	1,2	0,8	123,6	129,4	110,6
Germany	2,0	1,6	1,0	106,6	119,3	114,0
Greece	3,1	2,5	2,7	105,4	77,9	98,2
Hungary	3,2	4,0	1,5	74,8	60,3	64,1
Ireland	3,2	2,2	1,6	135,4	115,9	145,9
Italy	0,9	0,0	0,5	108,0	94,9	101,3
Latvia	6,0	6,7	6,6	53,6	45,3	57,9
Lithuania	7,2	5,9	6,7	60,2	51,5	59,8
Luxembourg	1,5	1,6	0,2	182,3	180,8	279,2
Malta	2,6	1,1	1,1	90,1	85,0	77,1
Netherlands	1,4	1,6	1,1	113,1	130,4	131,2
Poland	5,5	3,6	1,9	61,4	49,7	54,4
Portugal	1,8	0,6	1,7	68,4	62,2	73,6
Romania	0,9	6,9	4,7	40,5	N/A	40,2
Slovakia	3,8	5,0	8,1	76,6	69,1	68,3
Slovenia	4,0	3,6	3,3	85,7	79,3	90,1
Spain	0,2	0,5	0,8	102,5	99,6	104,1
Sweden	1,8	3,0	0,5	113,0	112,2	123,6
United Kingdom	1,9	1,6	2,3	110,8	107,4	117,8
EU-25	1,7	1,4	1,3	103,9	100,0	100,0
EU-27	1,7	1,4	1,3	100,0	N/A	N/A
US	1,8	2,1	1,0	142,0	128,4	154,3



Note: The relative levels of GDP per person employed, per hour worked and per capita have been calculated on the base of purchasing power standards.

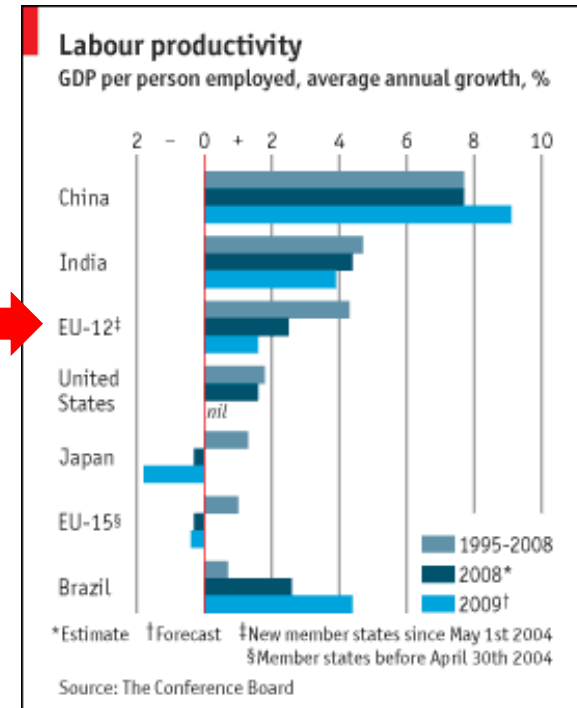
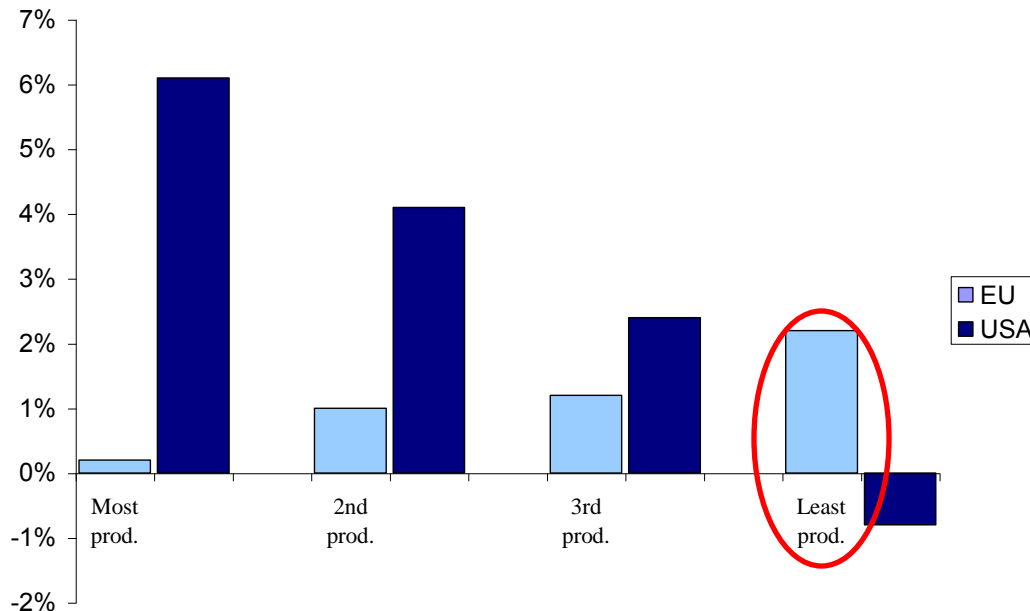
(\*) Data for Romania and EU-27 are not available (N/A), and number for the US refers to 2006

Source: AMECO (Annual macro-economic database of the European Commission's Directorate General for Economic and Financial Affairs), June 2008

# Competitiveness supported by the innovation and institutions

## Different levels of productivity – support of zombies !

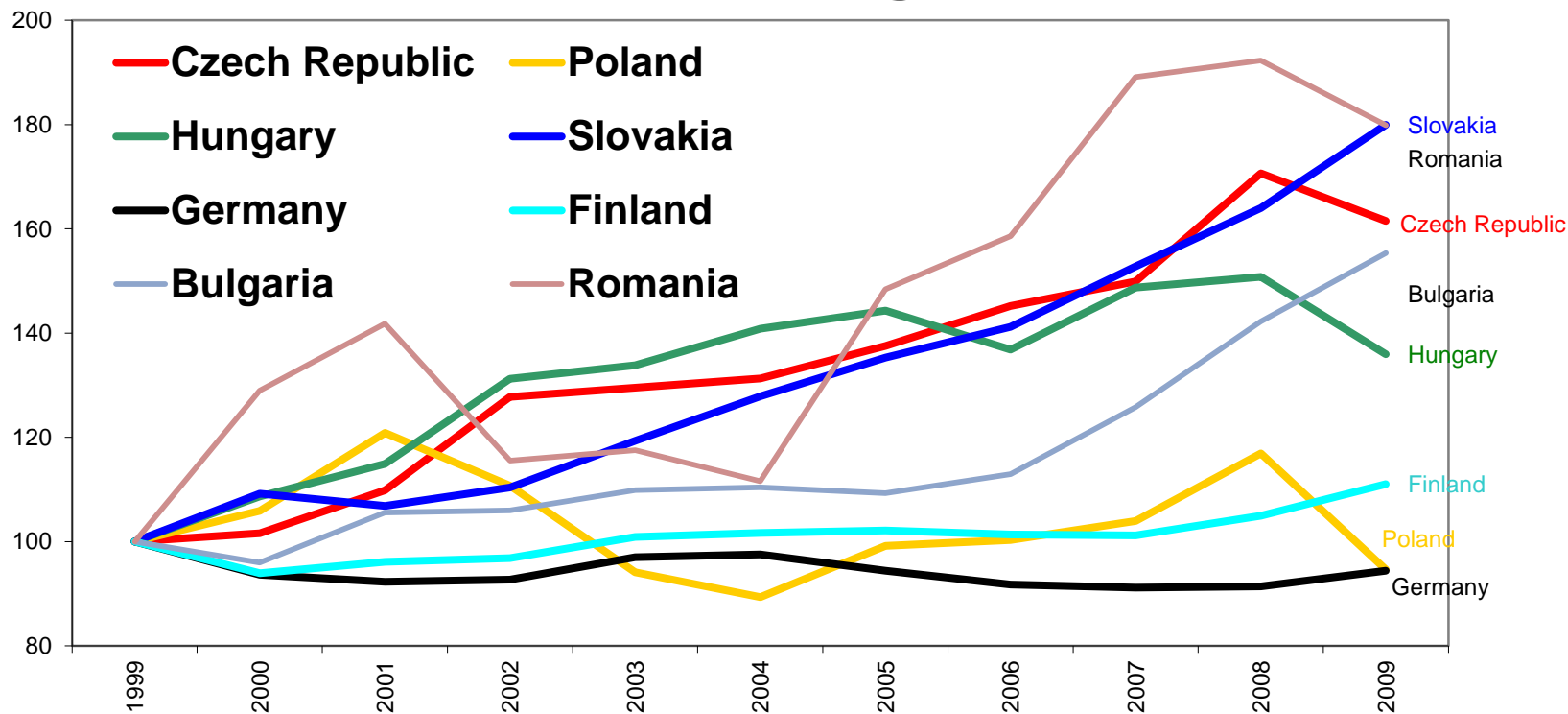
- Growth of Employment by Productivity Quartiles is a Long-Term Signal (China and CEE show a similar pattern as the US)



- Some un-wise bail-outs and state subsidies might block necessary structural/ innovation changes and fix old problems
- Old EU member states might lag behind China and US in terms of productivity...CEE growth might not !

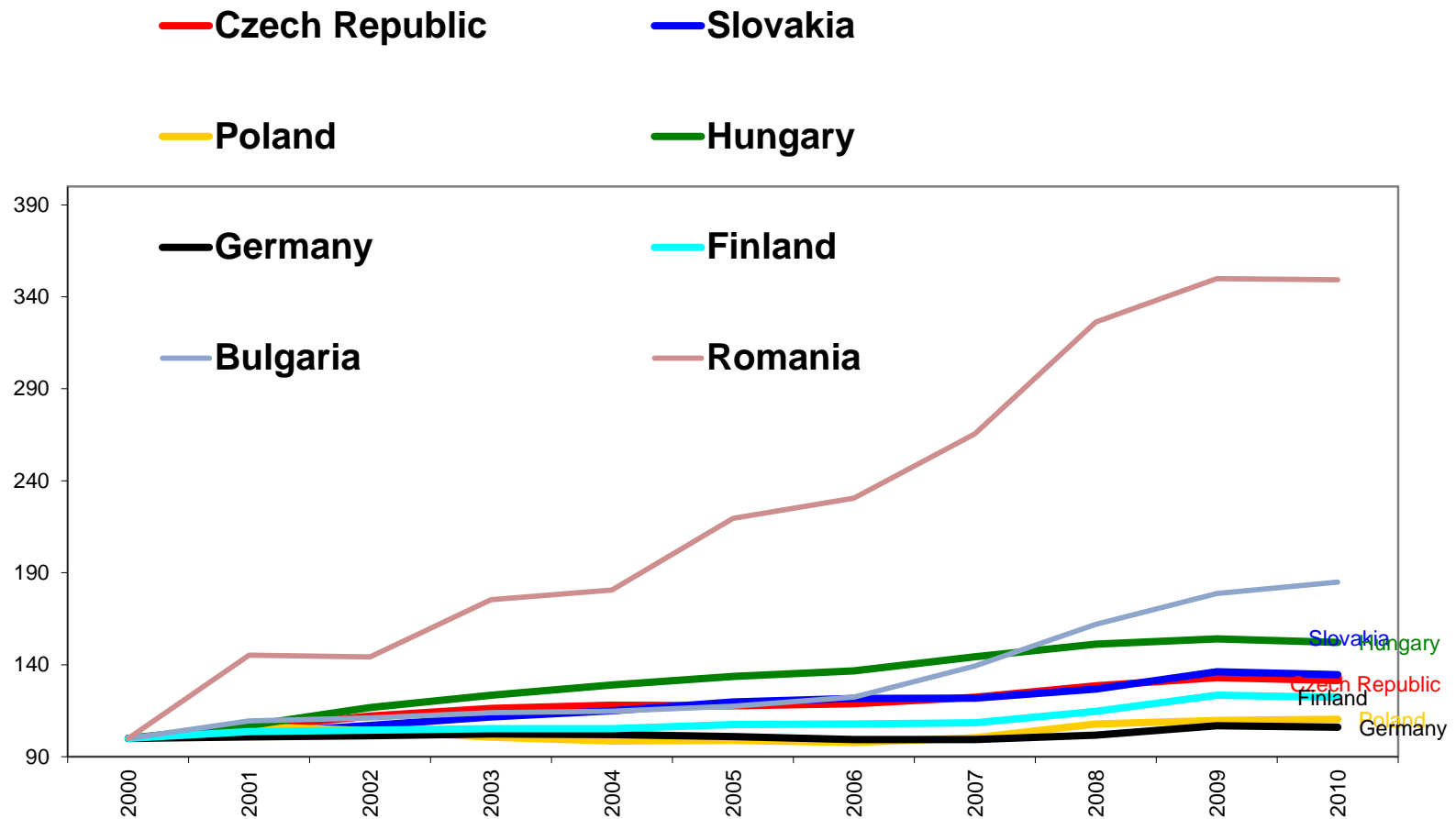
Source: Mejstřík & Chytilová (2008) based on Gretschnann (2006), The Economist 11/2009

# Price and cost competitiveness: Real Effective Exchange Rate (REER)



REER is obtained by deflating the nominal effective exchange rate (a measure of the value of a currency against a weighted average of several foreign currencies) by a suitable effective deflator, in this case the nominal unit labour costs in total economy.

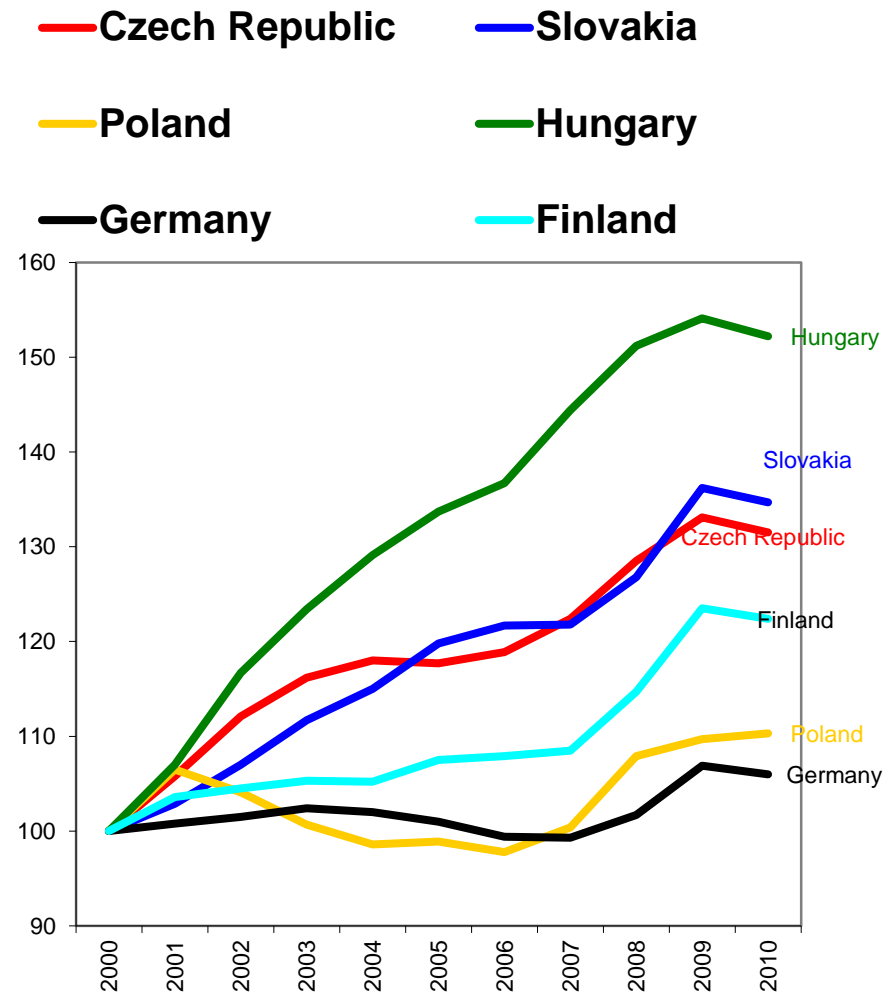
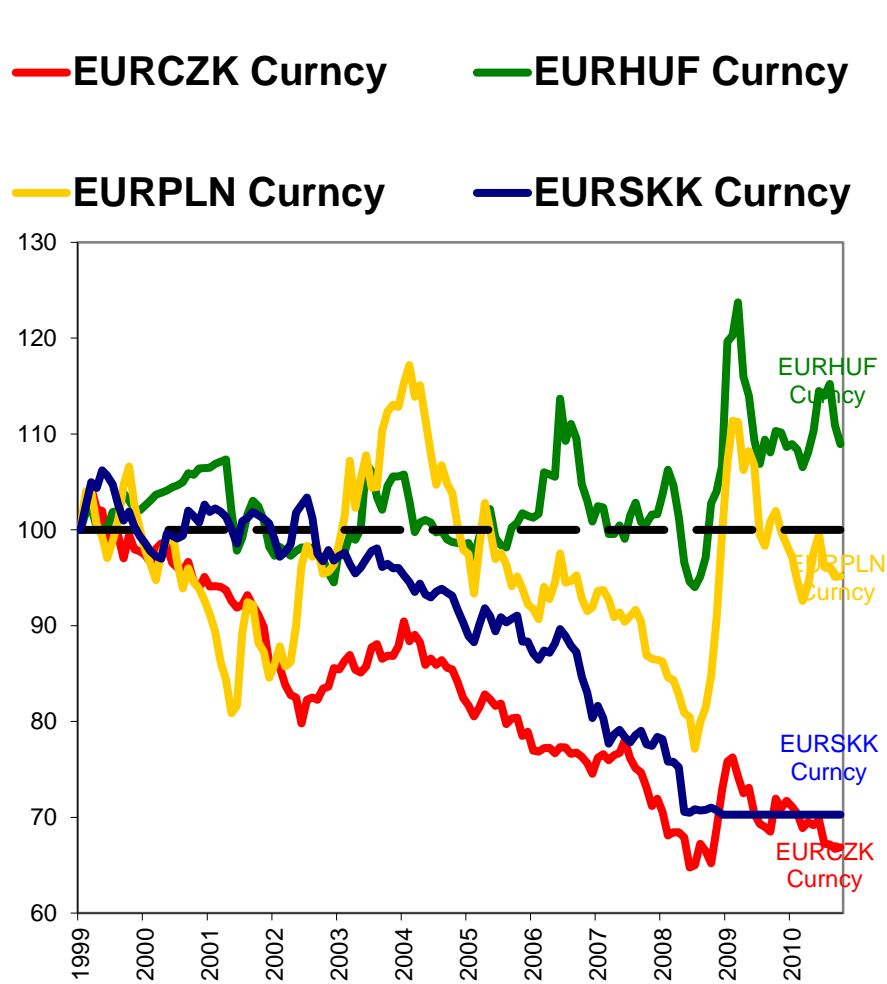
# Cost competitiveness: Unit labour costs



= total labour costs per unit of output calculated as the ratio of compensation per employee to labour productivity (defined as GDP per person employed).

Source : Eurostat, calculated until September 30, 2010 by A.Michl

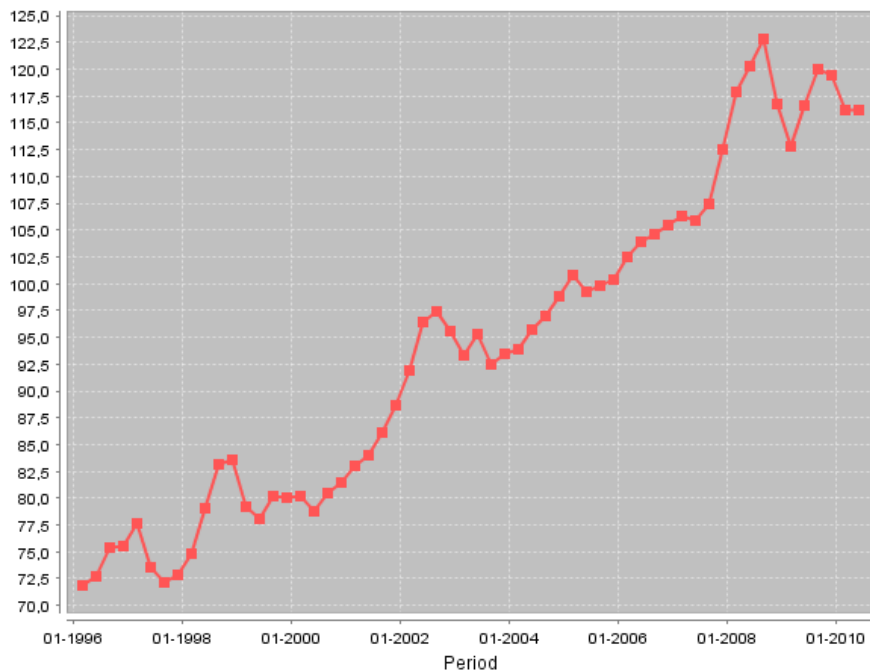
# Price and cost competitiveness: ExRate appreciated and unit labour costs ?



Source: Bloomberg, Eurostat calculations until 30.9.2010 by A. Michl

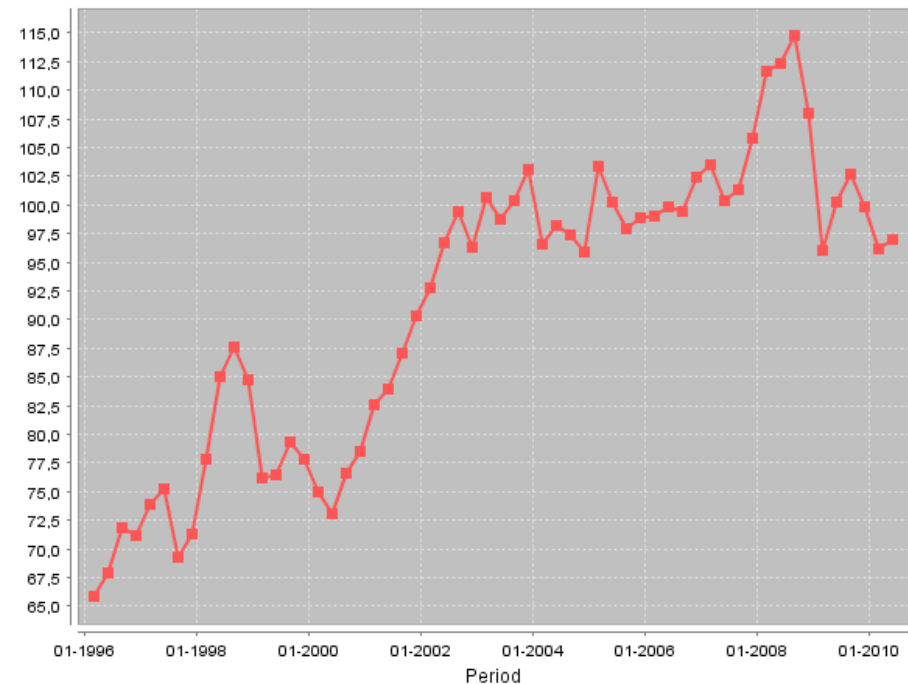
# Czech cost competitiveness has not been lost in manufacturing so much as in national economy

Real effective exchange rate of CZK deflated by GDP deflator



REER - GDP deflator - Weight: foreign trade turnover, year 2005=100 (%)

Real effective exchange rate of CZK deflated by Unit Labour Cost Index



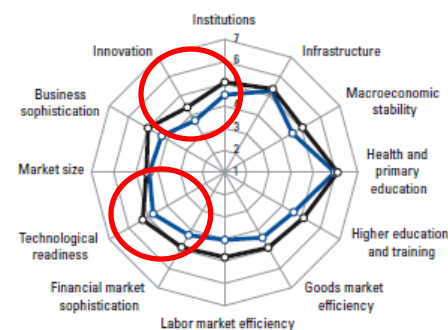
REER deflated by unit labour cost index (ULCM); manufacturing; weights: overall trade turnover in 2005; %

- Development of REER and Labour unit costs for national economy and manufacturing calculated by M.Zamecnik

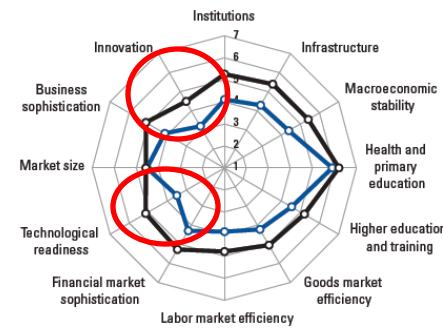
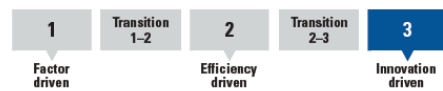
# Competitiveness supported by the innovation and institutions Southern European peripherals - PIGS

MT& LT similarities besides weak macro :  
Substandard competitiveness including substandard innovation, technological readiness and higher education and training

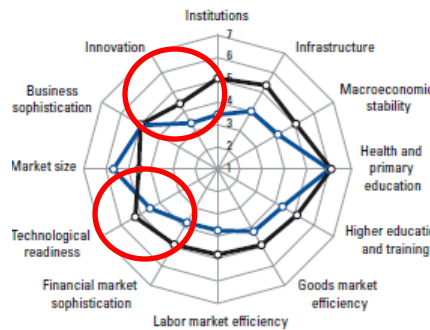
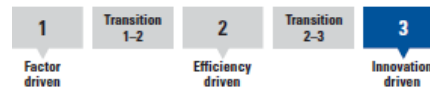
Stage of development



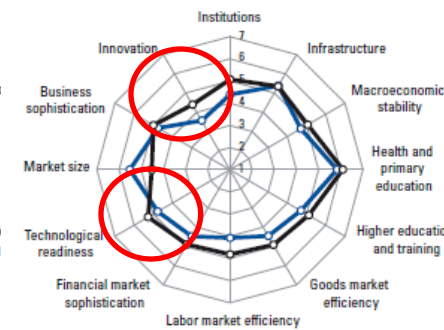
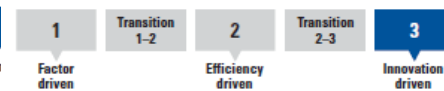
Stage of development



Stage of development



Stage of development



Source: World Economic Forum (2009)



# Lisbon review 2010 - PIGS vs Finland

Figure 21: Portugal

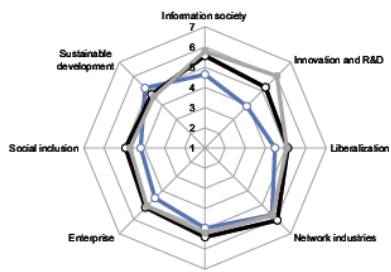


Figure 13: Ireland

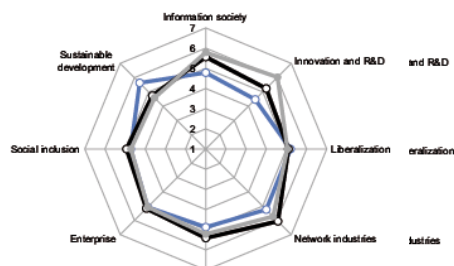


Figure 11: Greece

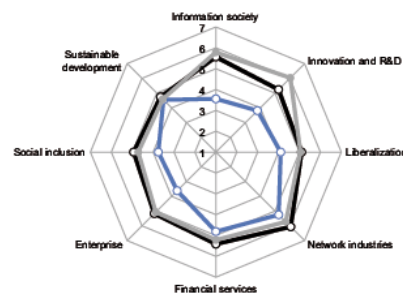


Figure 25: Spain

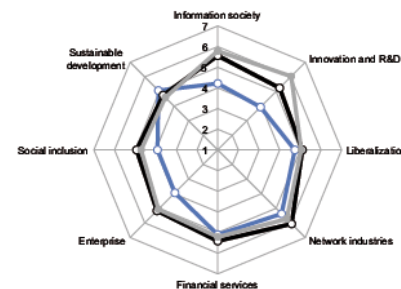
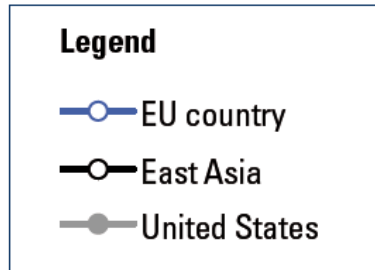
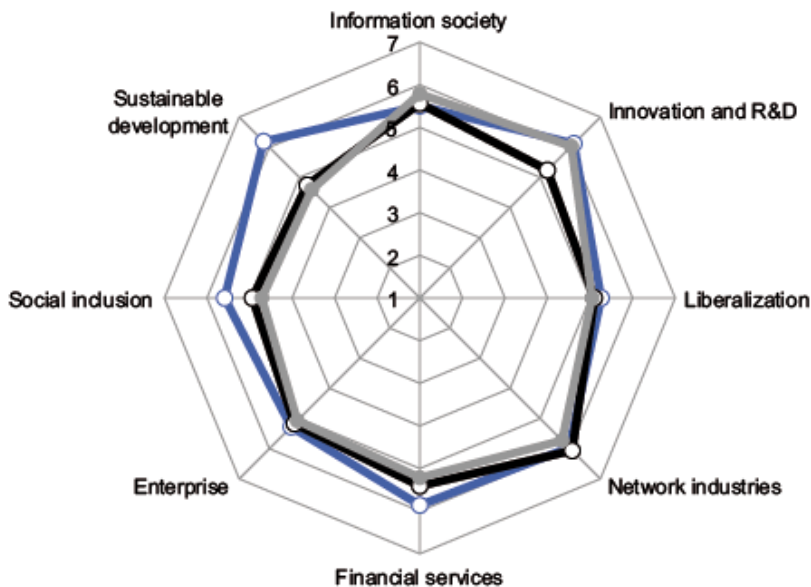


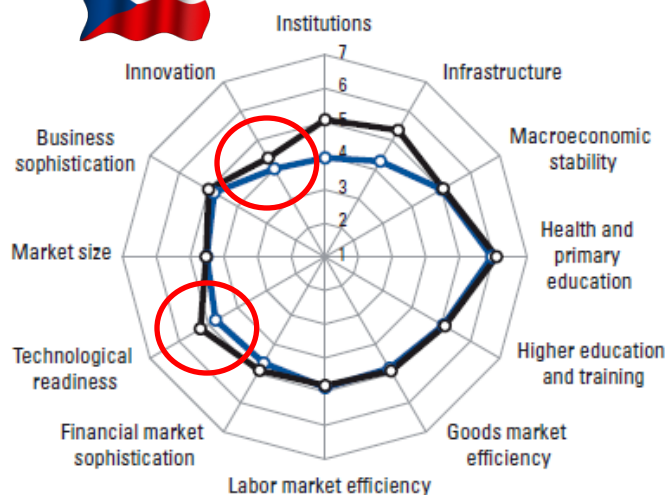
Figure 8: Finland



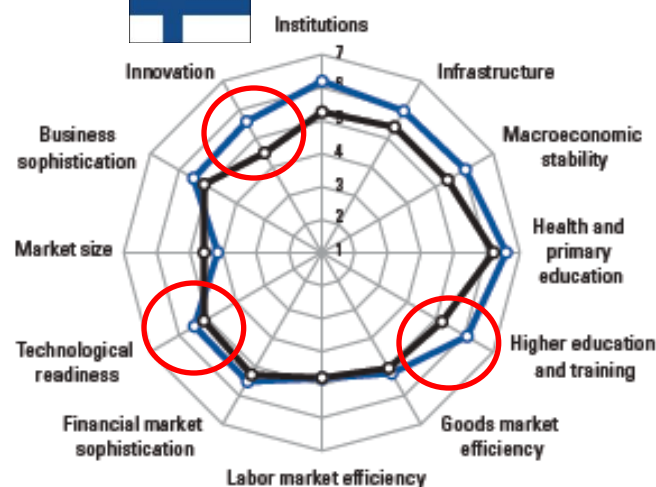
# Competitiveness supported by the innovation and institutions

## Czech Republic vs. Finland

Stage of development



Stage of development

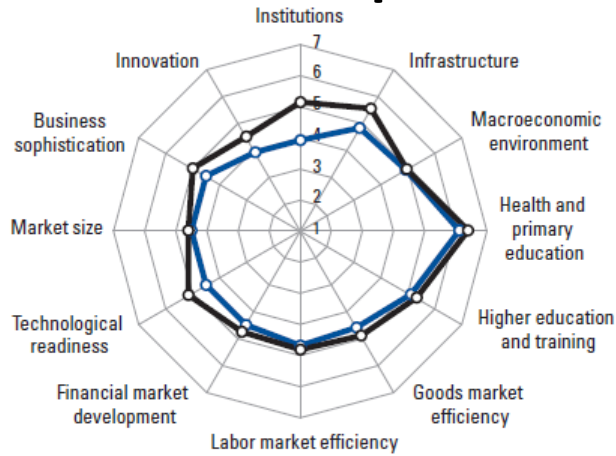


- CR follows innovation-driven economies in most of pillars
- CR lags in terms of Infrastructure, Institutions but also in **Innovation and Technological readiness, Finland is the leader**

Source: World Economic Forum (2009)

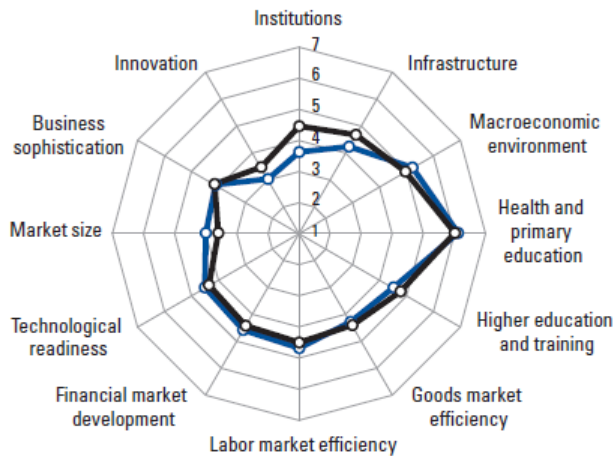
# Global Competitiveness Index: 3i's problem

## Czech Republic



—○— Czech Republic    —○— Innovation-driven economies

## Slovakia

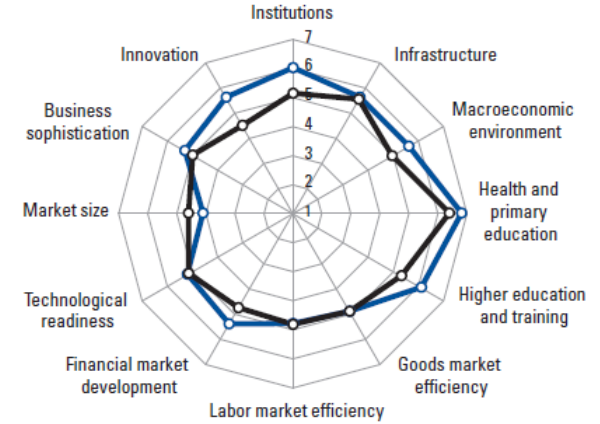


—○— Slovak Republic    —○— Economies in transition from 2 to 3

Both countries are around an average among their peers for all pillars but innovations, infrastructure, and especially institutions (3i's problem).

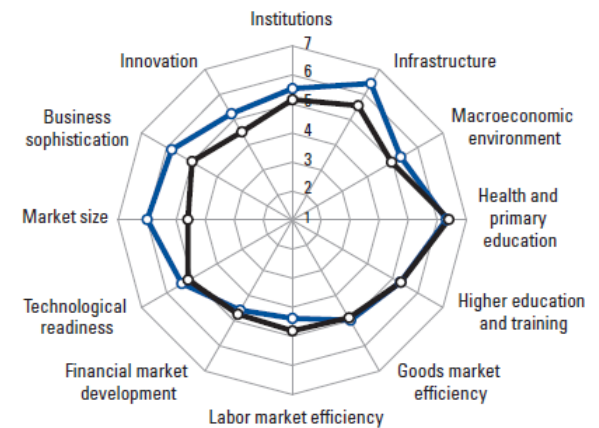
Source: WEF (2010)

## Finland



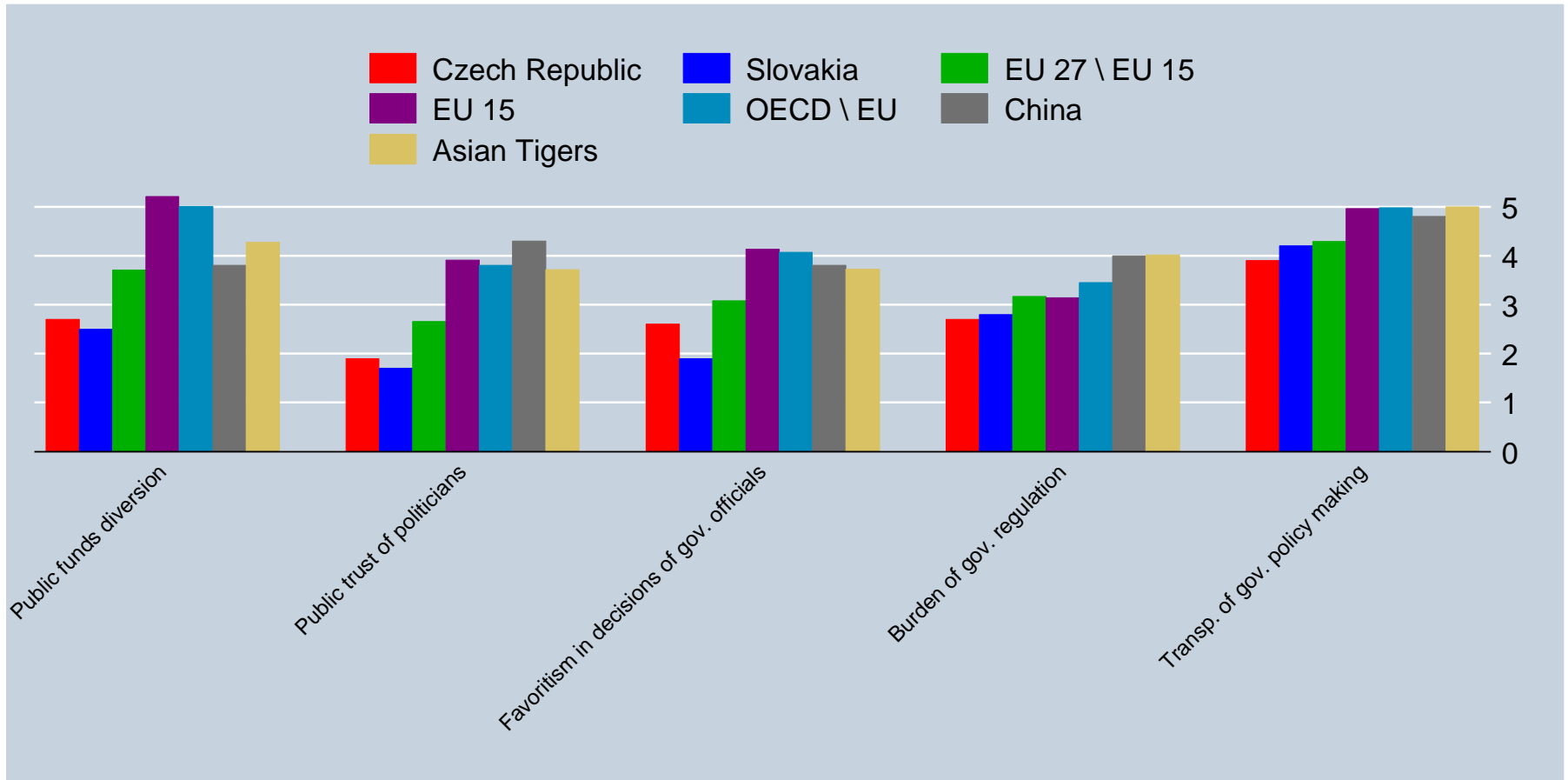
—○— Finland    —○— Innovation-driven economies

## Germany



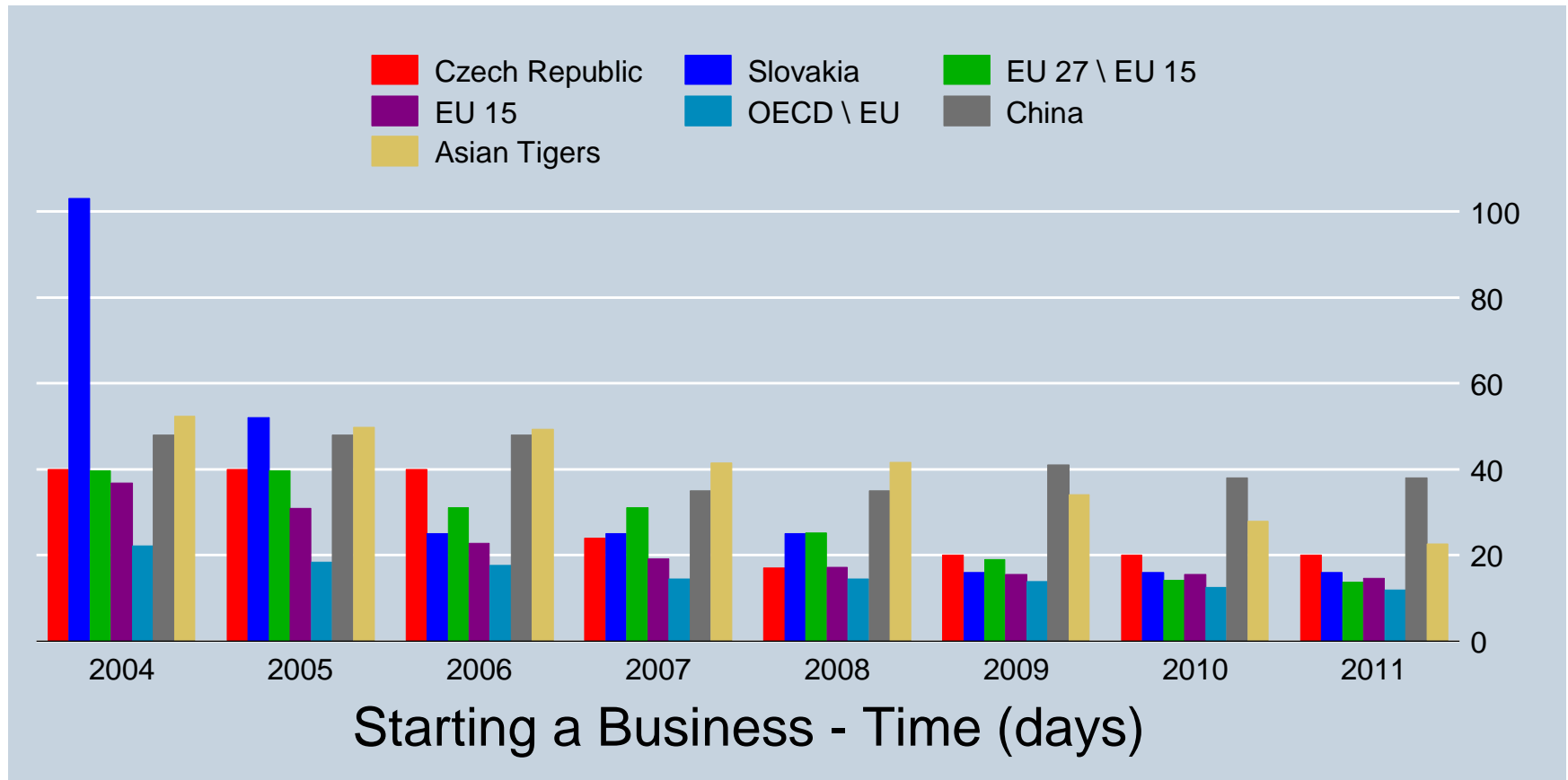
—○— Germany    —○— Innovation-driven economies

# Institutions: both countries perceived somewhat weak



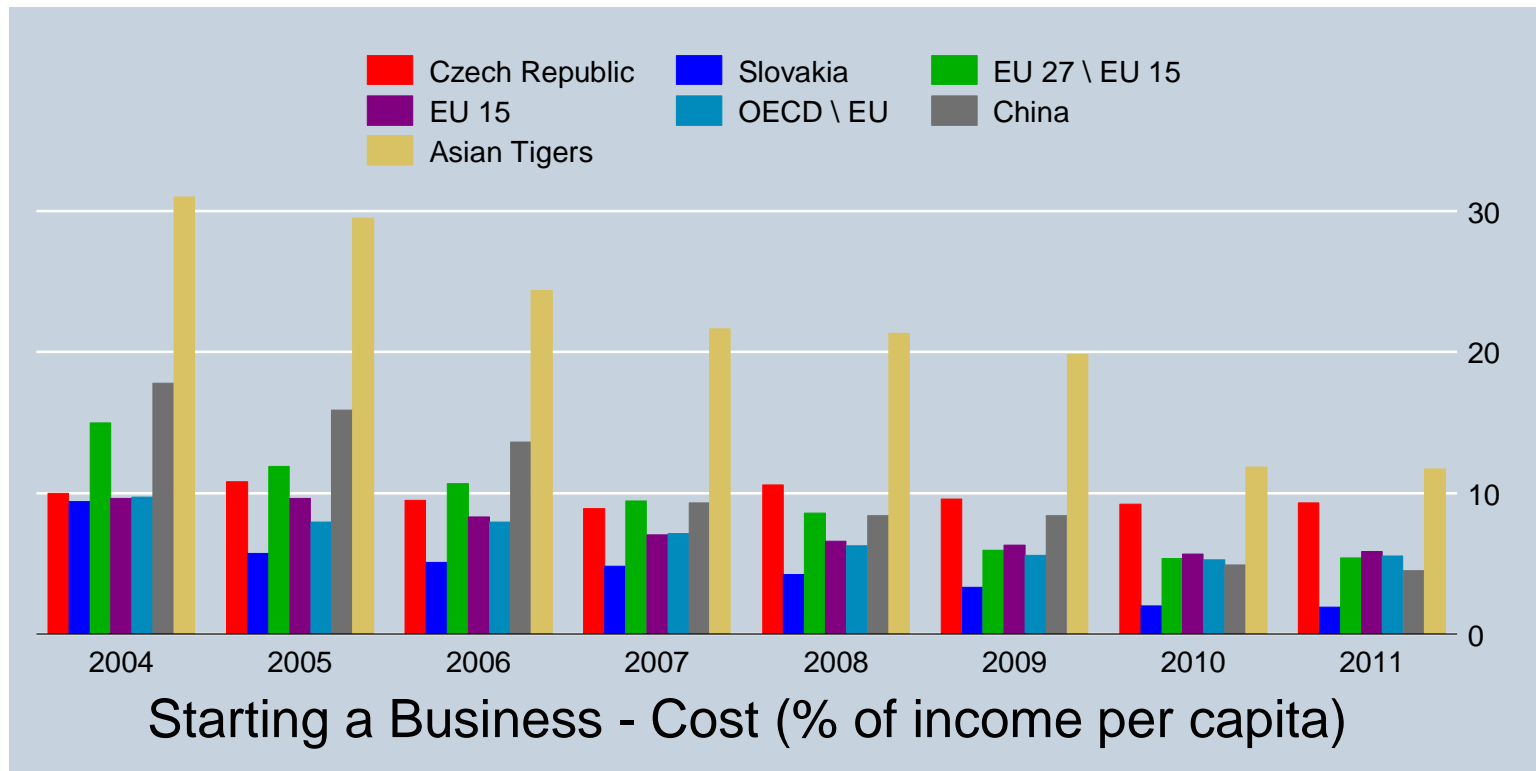
Source: World economic Forum Global Competiveness Index 2010-11

# Starting business: it takes too long in both countries



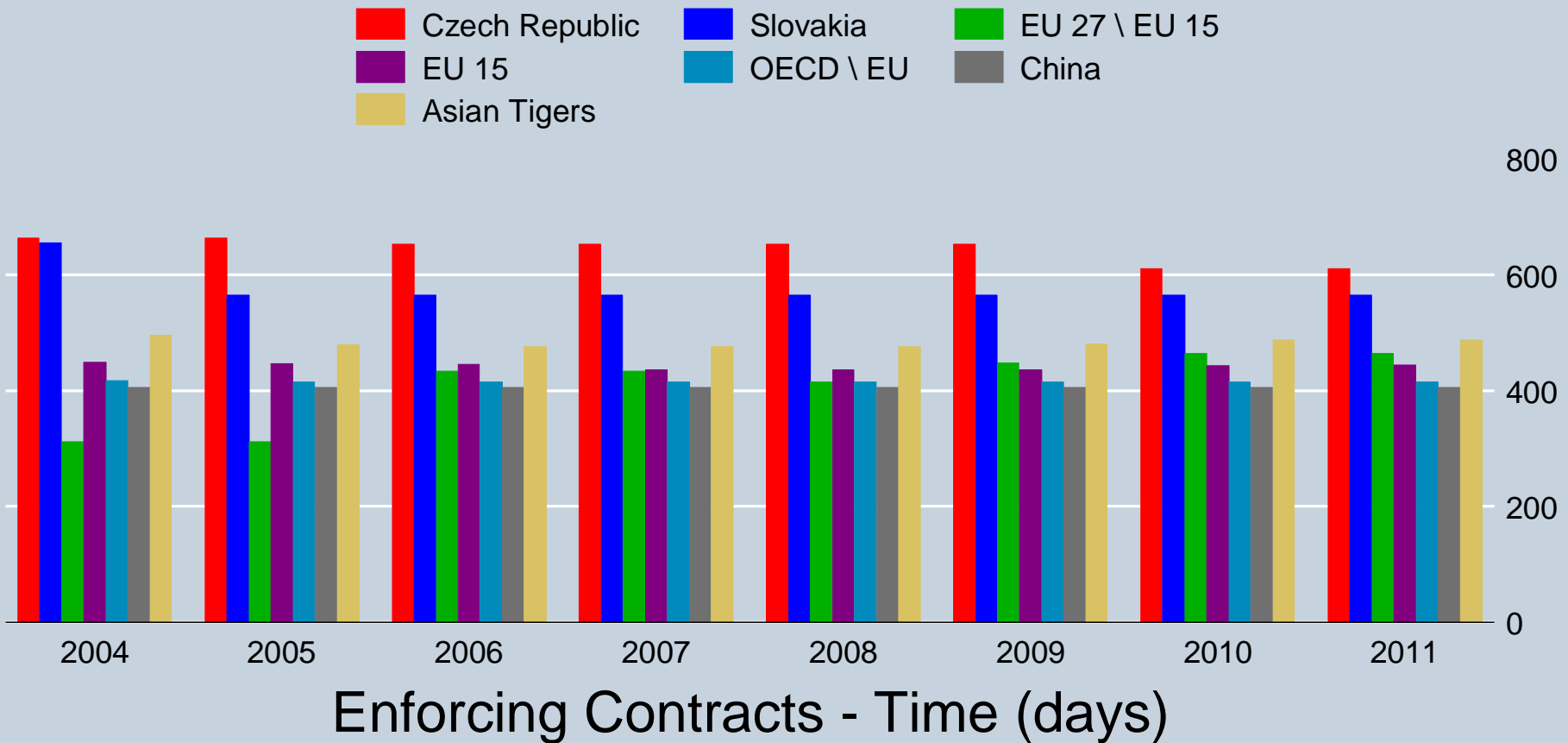
Source:World Bank/Doing Business 2011

# Starting business: but it is much cheaper in Slovakia



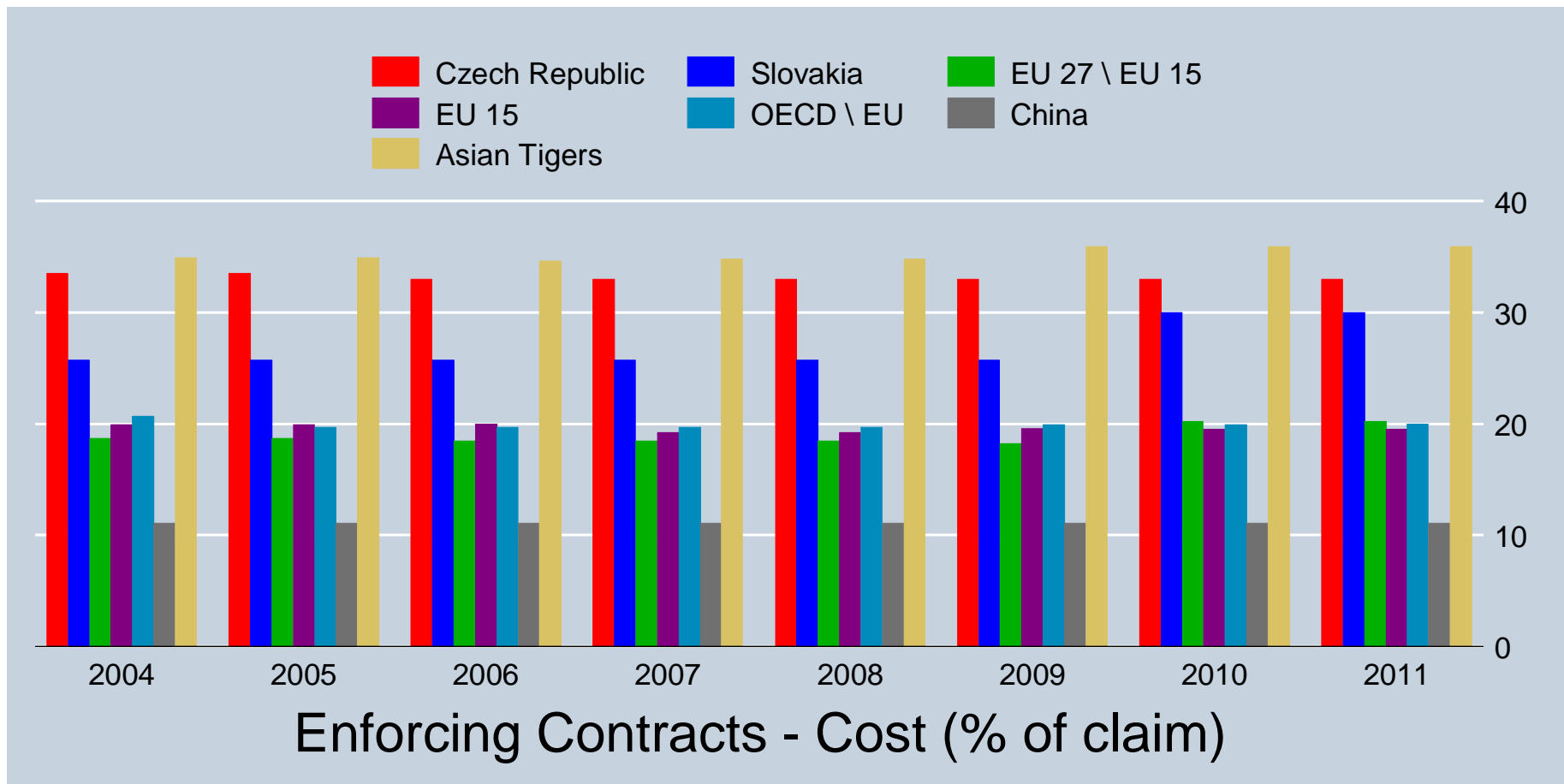
Source:World Bank/Doing Business 2011

# Enforcing Contracts: it takes too long in both countries



Source: World Bank/Doing Business 2011

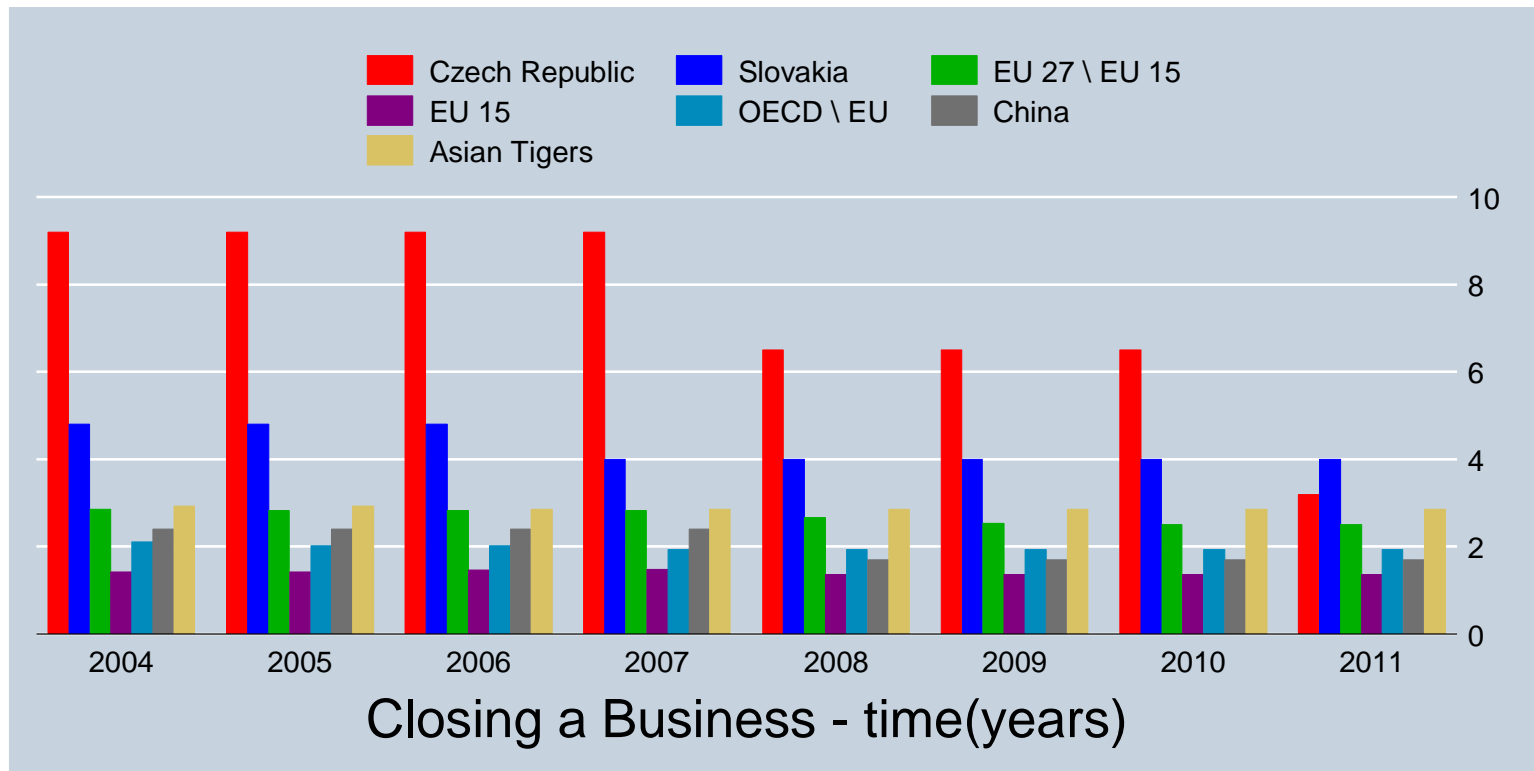
# Enforcing Contracts: and is too costly in both countries



Source:World Bank/Doing Business 2011

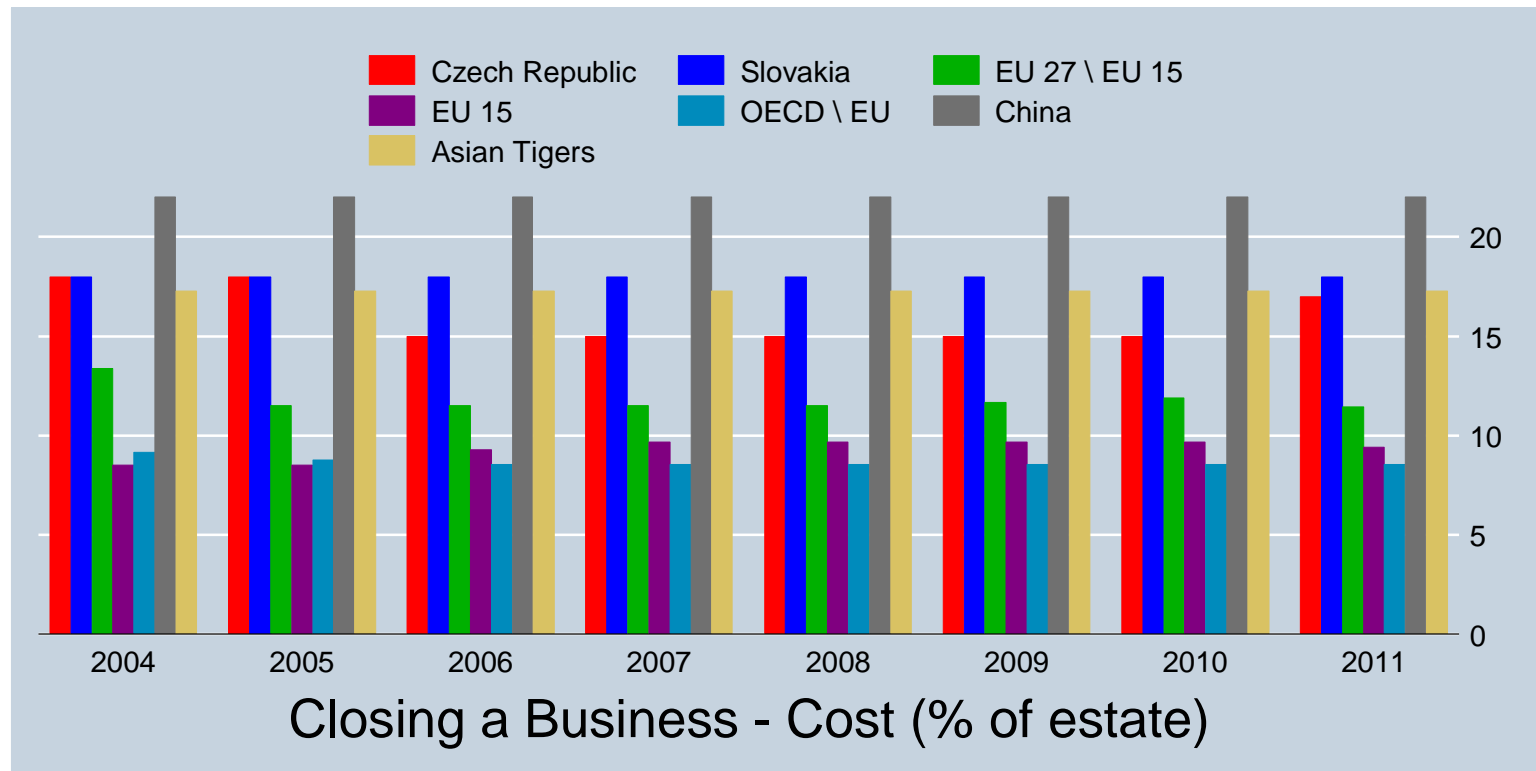


# Closing business: it still takes too long in both countries



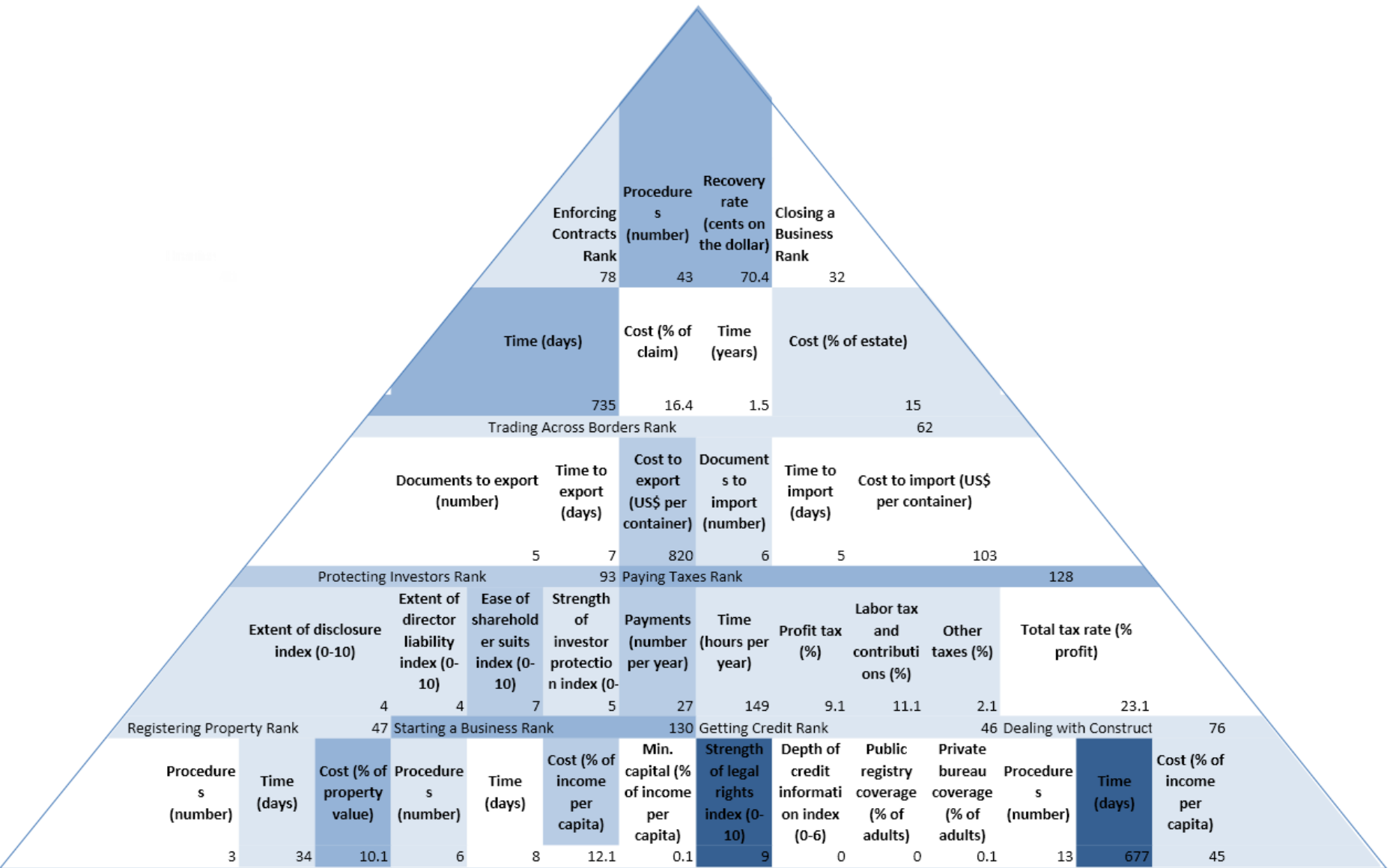
Source:World Bank/Doing Business 2011

# Closing business: and is very expensive in both countries



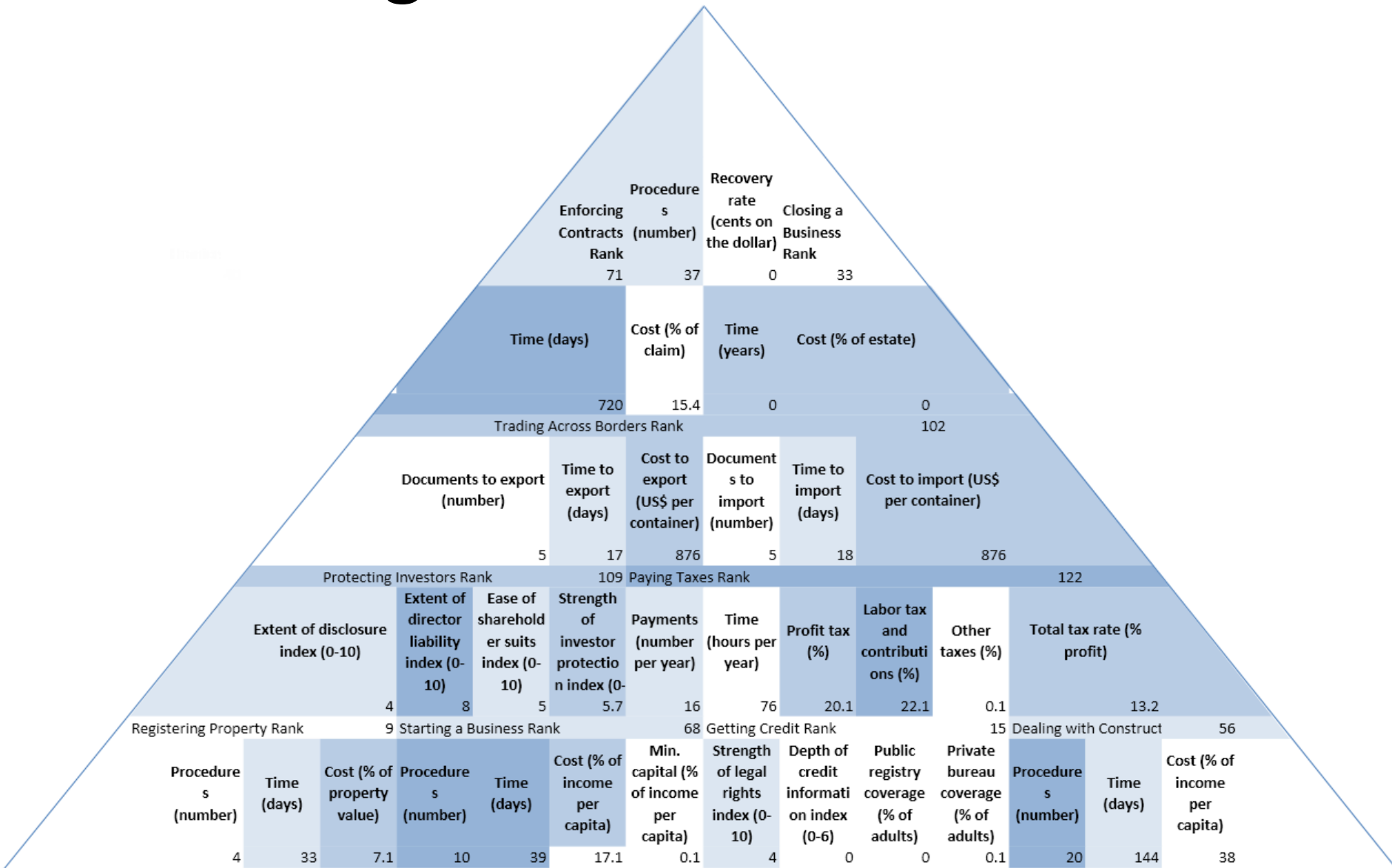
Source: World Bank/Doing Business 2011

# Doing Business in the Czech Republic?



Source: World Bank, Doing Business 2011, authors and colleagues

# Doing Business in Slovakia?







## Future of innovation

- Importance of ideas
- The need of the development of a **technological agency** (similar to the National Technology Agency in Finland)
- Besides basic research also **applied research** -> practical results
- „Taxation of innovation“ - missing effective single Eu patent (van Pottelsberghe 2010)
- Importance of materialized outputs – better protection of know-how (e.g. “built-in-box ideas” by Nokia, Nokian tyres, Linet smart hospital beds)



# Contents

1. Introduction – Schumpeterian approach
2. First leg - sustainable macroeconomic development both in ST, MT and LT
3. Second leg - Competitiveness supported by the innovation and institutions
4. Conclusions





## Conclusion for the Czech republic and Slovakia

- So far no significant difference found in the field of competitiveness due to Euro. Convergence weakens price/cost competitiveness but productivity growth partially compensates for. Similar features in global competitiveness that is much better than for peripheral countries PIIGS.
- Still much to be done. Number of the Czech issues addressed by the Final Report of National Economic Council of Government (NERV), 2009. Problems well demonstrated by delays of Czech EU structural funds for Research and Development . Still Low confidence to Policy Institutions (Ministry, Technological Agency, scientometrics and „coffee-mill selection tool“)
- Importance of policy action by the new governments after never ending discussions of sophisticated background materials...Raised again by newly appointed Czech NERV

## Final conclusion for Europe

*'Innovation-based growth requires a coherence that is lacking in Europe. This is the main problem to address.'*(Aghion 2006)

Support of Impact assessment : „...structural reforms need careful agenda-setting and prioritisation, based on a comparative cost-benefit analysis where the value of each reform would be measured by the ratio of its contribution to the overall growth potential of the country over the (social) cost of implementing the reform.This in turn would enable us to "rank" the reforms; that is, to get a more precise view as to what should be undertaken first, or as to which reforms should be implemented jointly because of complementarities in their growth impacts.(Aghion 2006)

**Unfortunately still very valid not only for PIIGS Eurozone countries...**

**...but also for the whole EU including CR & SI**

Recent EU 2020 strategy looks still rather ambivalent regarding conflicting priorities

Thanks for your attention.

Lets discuss it now!

## Useful sources

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**prof. Michal Mejstřík**

Chairman IES

mejstrik@fsv.cuni.cz

**Petr Janský**

Junior research fellow

jansky.peta@gmail.com

Institute of Economic Studies,  
Charles University in Prague

<http://ies.fsv.cuni.cz/>