Real convergence and the euro accession

The issue of endogeneity

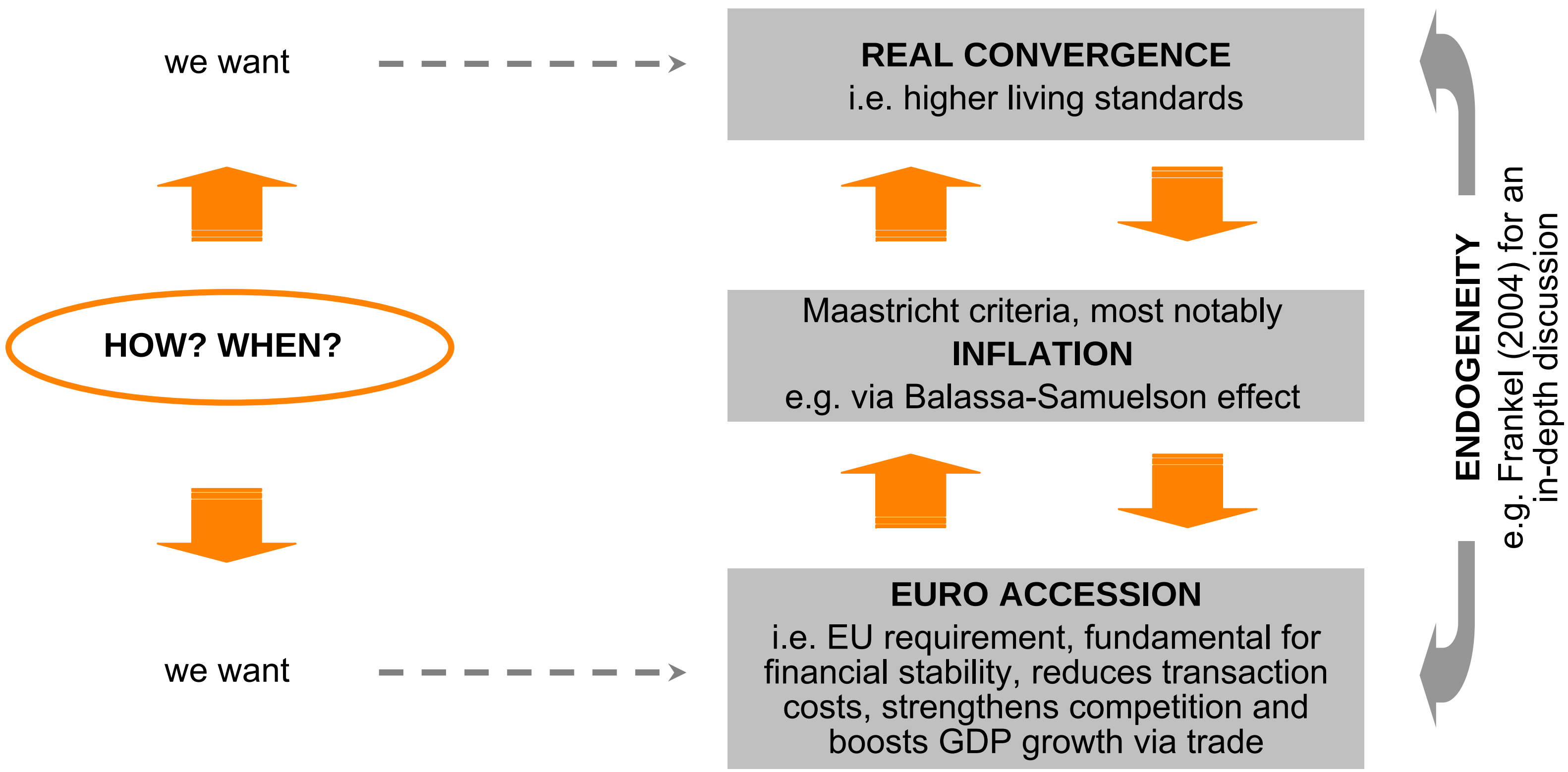
Mārtiņš Kazāks, *PhD*
Chief Economist
Swedbank

“Real convergence on the road to the euro: experience and prospects”
The Bank of Latvia Annual Conference, 7 October 2008

Agenda

Swedbank

- **Alternative definitions of real convergence:**
  - We shall refer to *convergence of per capita income levels with the euro area*
  - … but also can be defined as convergence of the sectoral structure of economies and/ or convergence of the institutions and legal frameworks

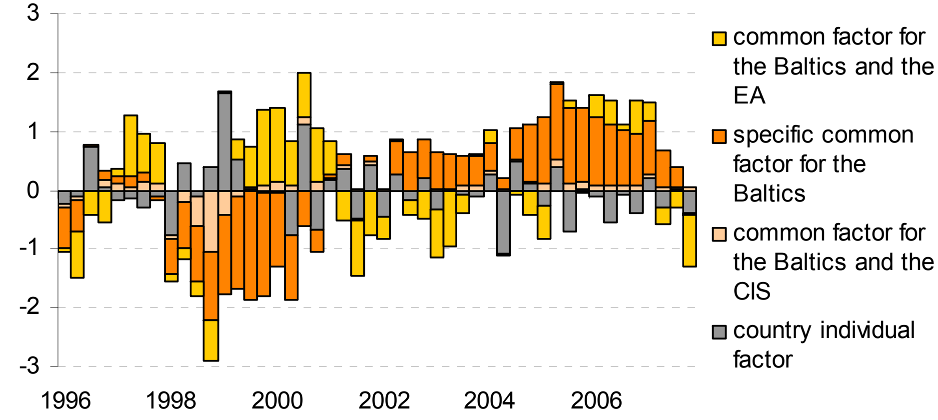


1. Euro Accession: *Theory of Optimum Currency Area*

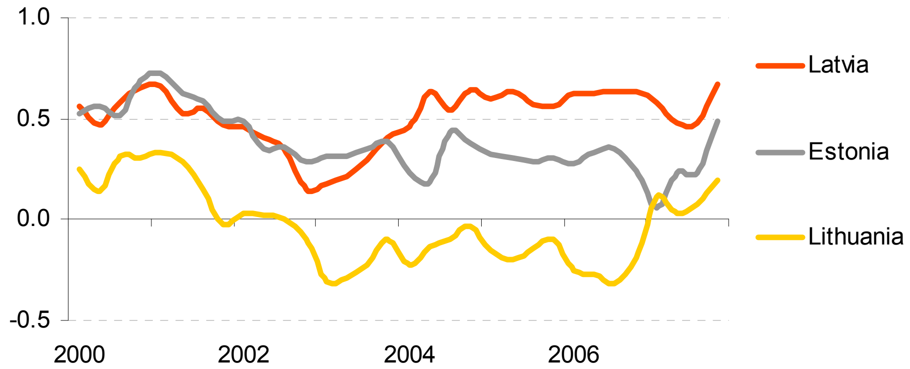
- Business cycle synchronisation and ability to adjust to asymmetric shocks, e.g. via
  - Wage elasticity and labour mobility, Mundell (1961)
  - Capital mobility and economic openness, McKinnon (1963)
  - Output diversification, Kenen (1969)

- **Empirical evidence: *strengthening business cycle synchronisation between Latvia and the Euro Area (EA)***, see Fadejeva and Melihovs (2008)
  - Method: dynamic multi-factor models
  - Data: seasonally and working day adjusted standardised QoQ GDP growth for 1996–2007
  - For earlier assessments see, e.g. Kutan and Yigit (2005), Darvas and Szapary (2003)

The contribution of the factors to the real standardized GDP QoQ growth



The 4 year moving correlation with the common factor of the EA

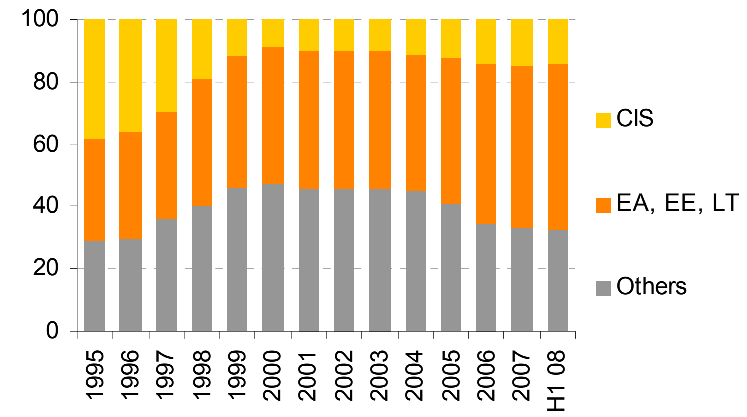


Source: Fadejeva and Melihovs (2008)

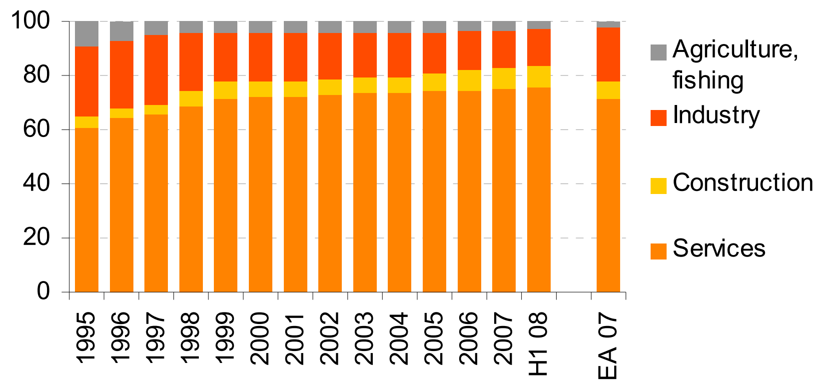
1. Euro Accession: *product market integration*

- Trade openness is growing as total trade has grown to 110% of GDP in 2007 from 96% in 2003
- And **integration with the Euro Area strengthens** as the share of EA (plus EE and LT) in total trade has grown to 56% in 2007 from 52% in 2003
- **GDP structure has approached that of the EA**, yet the share of industry seems to have diminished too much

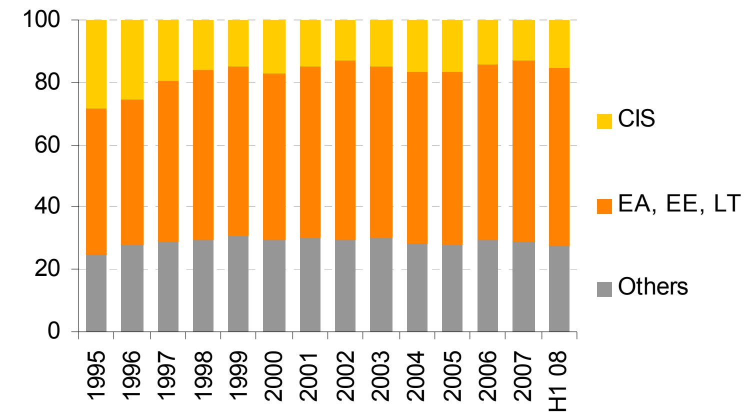
Goods export structure by countries, % of total



GDP structure by sectors, % of total



Goods import structure by countries, % of total



Note: Euro Area (EA) countries as in 2008
Source: CSB and Eurostat; Swedbank calculations

1. Euro Accession: *financial market integration*

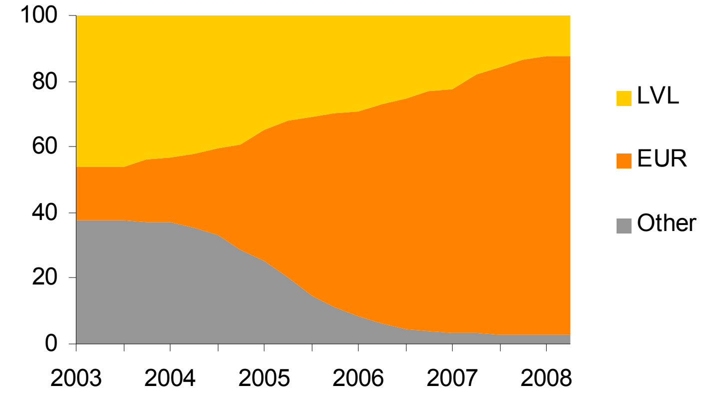
- Compliance with the *acquis communautaire* in financial services broadly achieved on the EU accession, transposition of legislation adopted under the Financial Services Action Plan is complete
- Banks dominate the financial system being closely **integrated into Nordic financial market via their parent banks**; underdeveloped stock exchange, debt and financial derivatives markets
- Swift financial deepening as domestic credit has grown to ca 90% of GDP (i.e. ca 70% of the EA average level)
- **Extensive euroisation** as the share of the euro denominated loans has grown to 85% of total loans issued to residents and 39% of resident total deposits are euro denominated

Banks' ownership structure, Q2 2008

Country	% of total paid-up share capital
Residents	*22.1*
Non-residents	*77.9*
Estonia, Sweden	50.6
Denmark	11.2
Austria	4.7
Russia	3.2
Other countries	8.2

Source: FCMC

Structure of loans to residents by currency, % of total



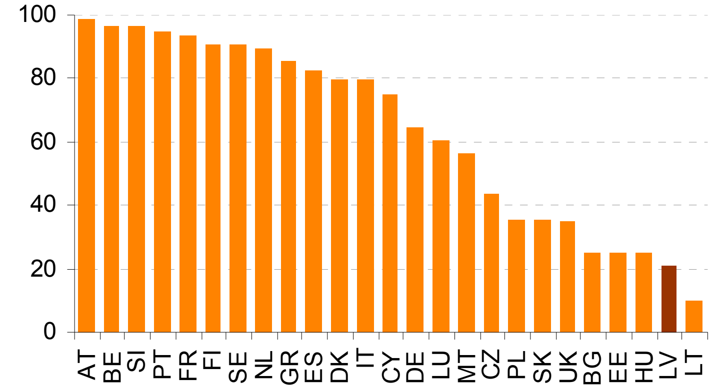
Source: the Bank of Latvia

1. Euro Accession: *labour market elasticity*

- **Wages are found to act as a shock absorber and in long run being driven by productivity**, see e.g. Zasova and Melihovs (2005)* and Swedbank Latvian macro model

- With emigration flows following the EU accession and domestic demand boom, wage elasticity decreased but recent domestic and global economic slowdown points to rising wage elasticity

Collective bargaining coverage, %



Source: ETUI-REHS

* – Zasova and Melihovs (2005) also provide an in-depth discussion on the aspects of institutional, labour mobility and functional elasticity of the Latvian labour market

1. Euro Accession: *the sooner, the better*

- **Swift euro accession shall be set as a strategic target of Latvia's economic policy**
  - Of course, integration with the EA is far from complete and it will strengthen further, but advantages of swift euro accession strongly outweigh likely disadvantages :
    - Loss of independent monetary policy? … it is limited already in view of the exchange rate peg regime and high degree of de facto euroisation
    - Waiting for stronger real convergence? … it will take too long to wait for. The Balassa-Samuelson effect will drive up inflation differential (e.g. in 2006 Latvian relative price levels of goods and services were at ca 76% and 41% of the EU averages, which is ca the same as for Slovakia) but if price rises will be in line with productivity improvements, it will not harm competitiveness
    - Endogeneity of integration … adopting the euro will promote trade with the rest of the EA (and thereby real convergence) and strengthen cyclical synchronization. If otherwise, the risks of asymmetric shocks in the meantime are substantial
- The current economic slowdown provides **a window of opportunity to aim for the euro accession** as inflation will recede and with adequate economic policies is it feasible to meet the Maastricht criteria.
- Setting the euro accession as a strategic target, will help the implementation of structural reforms that are necessary **to speed up real convergence**

2. Real Convergence: *progress so far*

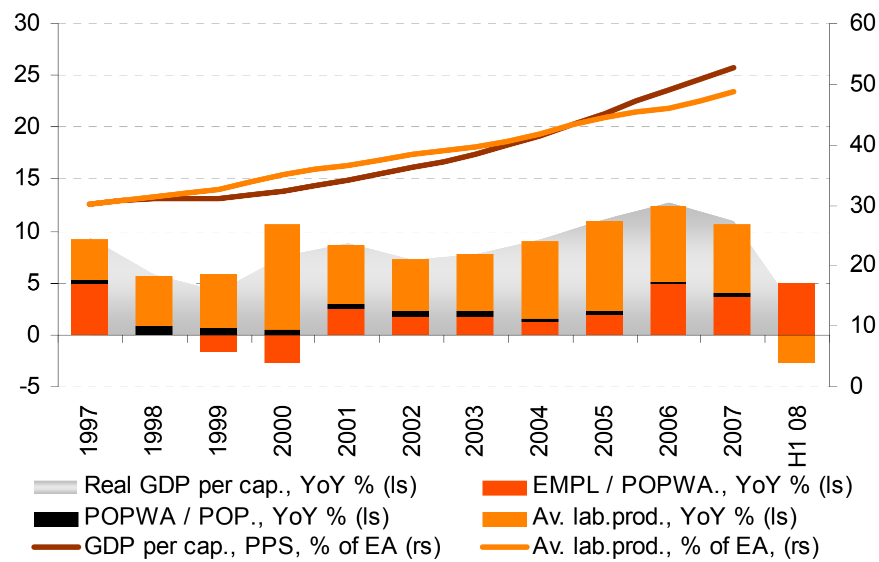
- Real convergence a success: **incomes relative to the EA up by ca 75% over the last 10 years** driven by
  - Initial macro stabilisation and structural reforms of the 1990s to eliminate inefficiencies inherited from central planning
  - And further enhanced by EU accession (e.g. more efficient legal/ institutional framework, product and financial market integration, EU funds' support, falling risk premium)

- GDP per capita convergence due to
  - Better labour utilisation (comparison to 2007):
    - Employment up by 118th since 1997
    - Participation rate up to 62% from 54% in 1997 for the age group of 15–74
    - Population down by 6.7% (i.e. -163th) while the share of population in working age up to 79% from 75% in 1997
  - Productivity growth on average 6.4% pa over 1997–2007, which explains just over ¾ of GDP per capita growth

$$\underbrace{\frac{GDP}{POP}}_{\text{GDP per capita}} = \underbrace{\frac{POPWA}{POP} \times \frac{EMPL}{POPWA}}_{\text{Labour utilisation}} \times \underbrace{\frac{GDP}{EMPL}}_{\text{Average labour productivity}}$$

where *POP* – population
POPWA – working age population
EMPL – employment

GDP per capita & average labour productivity



Source: CSB and Eurostat; Swedbank calculations

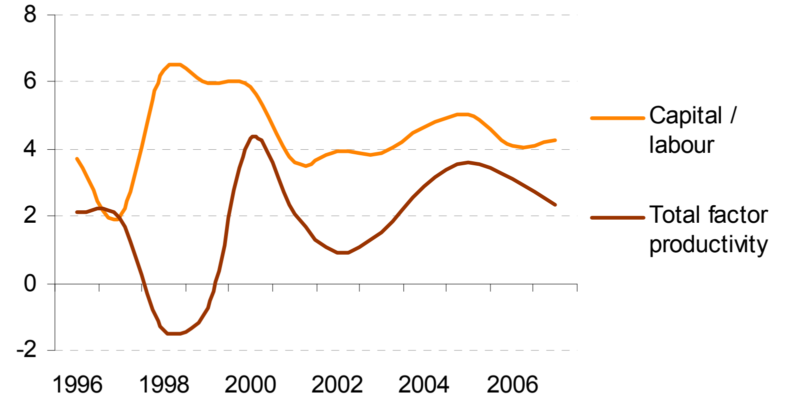
2. Real Convergence: *progress so far*

- Productivity growth largely in line with the neo-classical growth theory, i.e. labour vs. capital abundance and convergence of factor prices
  - Using Cobb-Douglas production function with constant returns to scale and α=0.36 (e.g. Kazaks et al (2006)) we see that capital-labour ratio has contributed ca 2/3 of productivity growth or on average 4.5% pa
  - Contribution of TFP on average 1.9% pa, which is the lowest between the EU8 countries (see Arrabitel et al (2008))… **quick but not that smart growers?**
- **Still huge growth potential**
  - Average labour productivity significantly less than 50% of the EA average: must discount for a longer working week and ca a half fewer part-timers than in the EA countries

$$GDP = EMPL^{(1-\alpha)} \times CAPITAL^{\alpha} \times TFP$$

$$\underbrace{\frac{GDP}{EMPL}}_{\text{Average labour productivity}} = \underbrace{\left(\frac{CAPITAL}{EMPL}\right)^{\alpha}}_{\text{Capital deepening}} \times \underbrace{TFP}_{\text{Total factor productivity}}$$

Capital / labour ratio and total factor productivity, YoY %



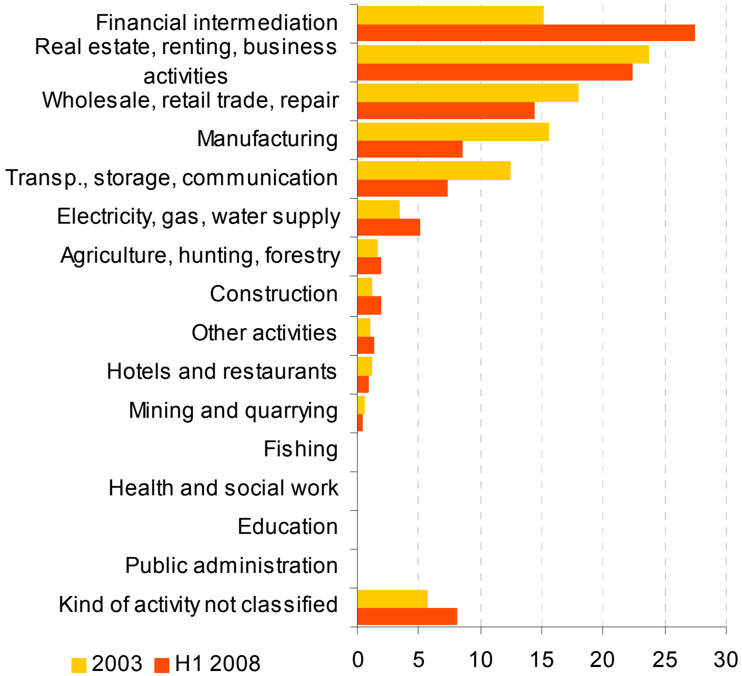
Source: CSB; Swedbank calculations

2. Real Convergence: *need to continue reforms*

- Conditional vs. unconditional convergence
  - Conditional convergence seems to hold controlling for investment, macro and structural policies, demographics, institutions, trade policy, human capital, see e.g. Barro and Sala-I-Martin (2004)
  - Unconditional convergence does not seem to hold, see e.g. Pritchett (2004) or consider stagnation in Portugal and Eastern Germany

- **The current economic structure/ policies are not adequate to support rapid real convergence**
  - Labour market, e.g.
    - Working-age population to fall by ca 1.1% pa between 2011–2030, i.e. ca 0.4pp lower than a fall in total population*
    - Rising inequality likely to encourage emigration: Gini coefficient up from 34 in 2000 to 39 in 2006 (32 in EU10, 29 in EA)
  - Productivity, e.g.
    - TFP improvements likely to remain weak as FDI has overlooked tradable sectors
    - Exports specialisation skewed towards low value-added-sectors, see Vitola and Davidsons (2008)

Stock of FDI structure by NACE sectors, % of total



Source: the Bank of Latvia

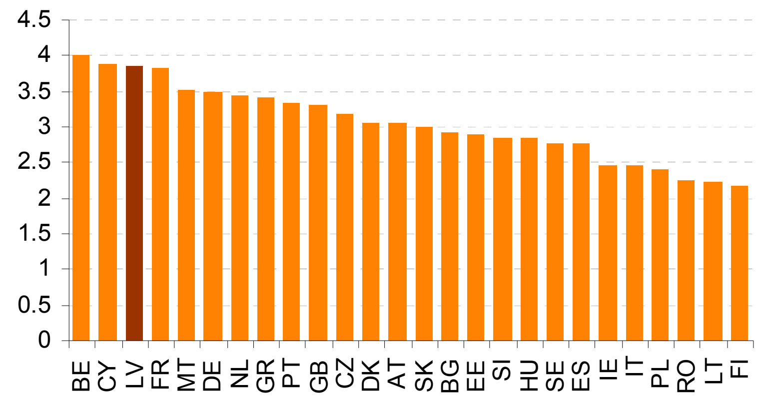
* – the Economist Intelligence Unit forecast

2. Real Convergence: *policy action by the government*

How to enhance productivity?... institutions, trade and financial integration, export-driven growth, sustainability and long term horizon decision-making/ motivation…

- **Efficient public sector governance**, e.g.
  - Effective and lean institutions
  - Size of government, i.e. when does it start to impede economic growth?
- **Efficient institutional environment**, e.g.
  - Doing business survey: ample scope for improvement!
  - Avoid political rent seeking
- **Sound macroeconomic policies, fiscal discipline, sustainability**, e.g.
  - Should not seek to offset contraction by impeding rebalancing amongst tradable and non-tradable sectors (cut current expenditure in favour of long term growth)
  - Flexicurity: reduce regional and skills mismatches in labour market
  - Swift euro accession to endogenise appropriate policy response

The number of employees in government sector in the EU countries in 2006, % of population



Source: Eurostat

Doing business in Latvia (“+” improvement, “–” worsening)

Indicators	2009	Change from 2008
Starting a business	35	-5
Dealing with construction permits	78	+5
Employing workers	103	-4
Registering property	77	+14
Getting credit	12	+1
Protecting investors	53	-4
Paying taxes	36	-6
Trading across borders	25	-7
Enforcing contracts	4	+1
Closing a business	86	-19
Aggregate rank	**29**	**-3**

Notes: set of 181 countries
Source: the World Bank

Conclusions

- Still a huge real convergence potential yet it will not happen automatically and therefore shall not be taken for granted (e.g. Portugal and East Germany)
- Euro should be introduced quickly taking advantage of the current economic slowdown, as it will support sustainable macroeconomic policies and enhance further swift real convergence
- Government should take appropriate policy action to increase public sector efficiency, improve institutional framework and follow sound sustainable macroeconomic policies

Pragmatic view: only a combination of sustainable macroeconomic policies and a structural reform can guarantee success in long run

Thank you!