

Economic Convergence and Structural Change in Central, East and Southeast Europe: a New Path or the Blind Alley ?

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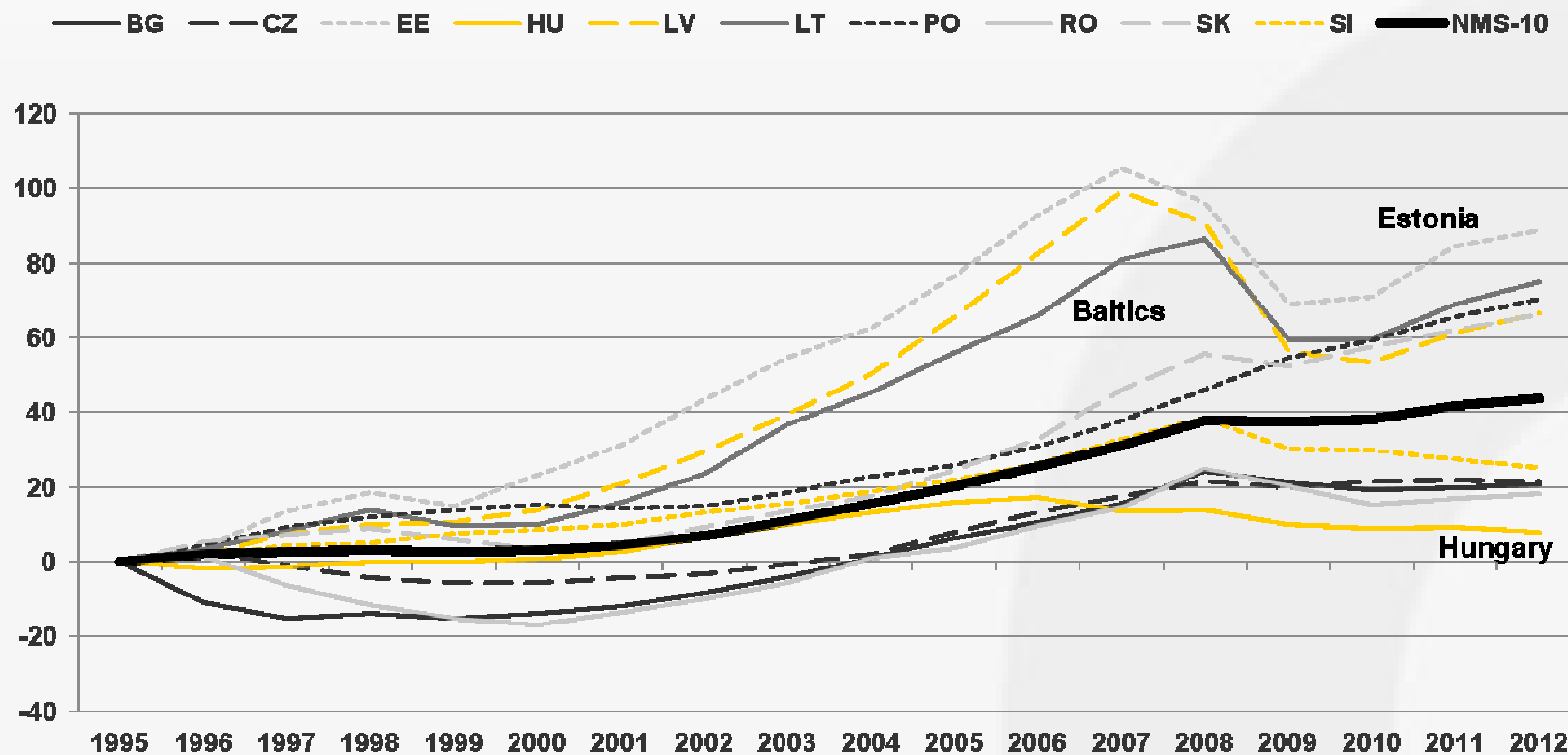
RBI-IDM-HFR Konferenz Wirtschaft und Politik in Ostmitteleuropa
10 Jahre nach der EU-Erweiterung, Vienna, 6th November 2014

Post-crisis convergence slowdown: a lasting phenomenon ?

Average annual GDP growth rates, 1995-2015, in %

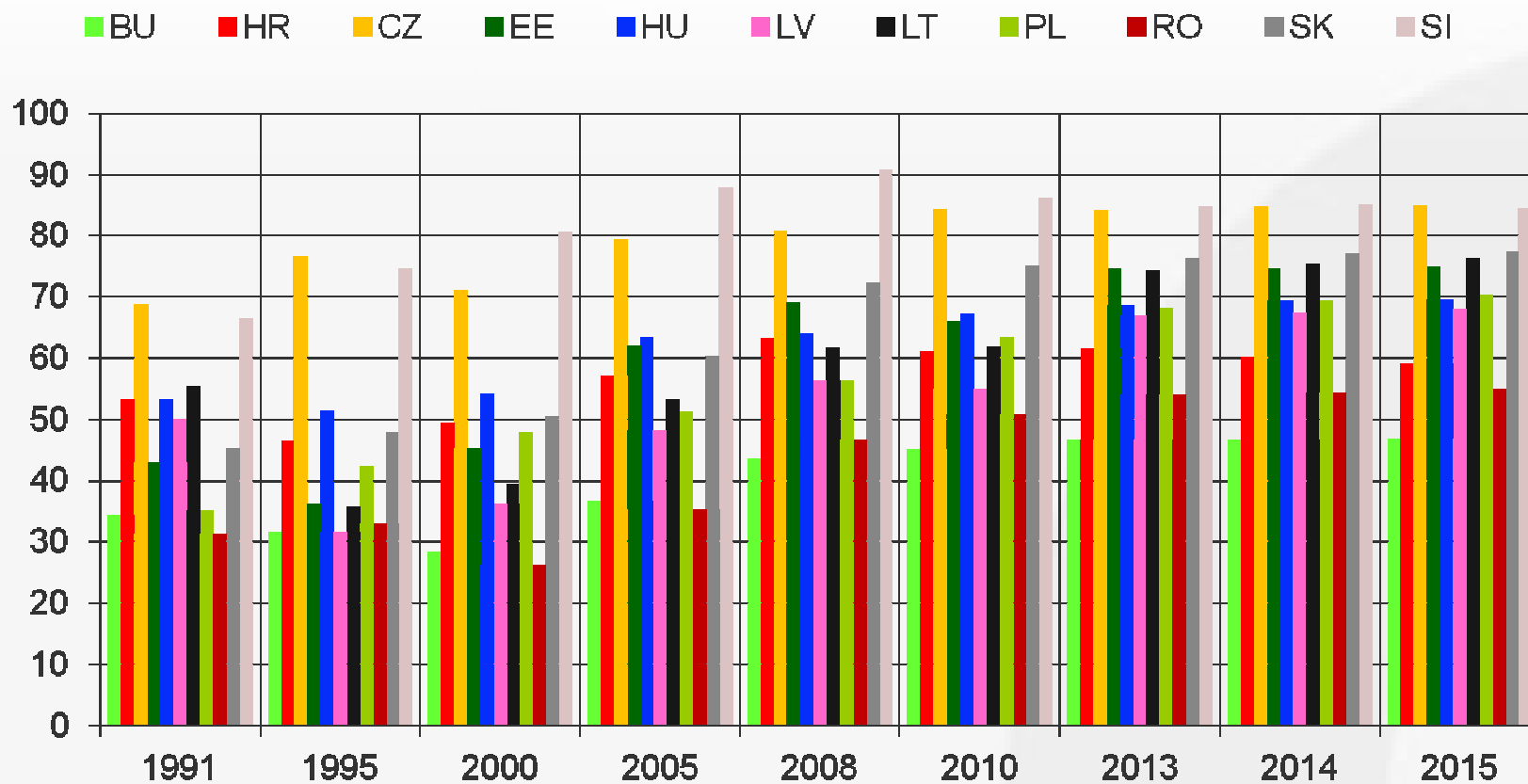
Period	1995-00	2000-05	2005-10	1995-08	2008-12	1995-12	2013-15*
Bulgaria	0.23	5.49	2.69	3.63	-0.77	2.58	1.7
Czech Republic	1.84	4.09	2.70	3.49	-0.19	2.61	1.1
Estonia	6.68	7.94	0.00	6.64	-0.92	4.81	1.8
Hungary	2.94	4.16	-0.18	3.10	-1.26	2.06	2.2
Latvia	5.20	8.23	-0.68	6.46	-2.94	4.17	3.1
Lithuania	4.54	7.79	1.02	6.30	-1.48	4.42	3.2
Poland	5.41	3.08	4.72	4.66	3.03	4.27	2.7
Romania	-0.38	5.72	2.51	3.66	-1.23	2.49	2.1
Slovakia	3.40	4.91	4.70	5.08	1.19	4.16	1.9
Slovenia	4.33	3.63	1.79	4.31	-2.14	2.75	0.8
NMS-10	3.38	4.31	3.09	4.29	0.68	3.43	2.2
EU-27	2.84	1.80	0.90	2.32	-0.23	1.71	1.1
Memo: diff. (NMS-EU) convergence rate, in pp	0.54	2.51	2.19	1.97	0.91	1.71	1.1

GDP growth convergence, index 1995=100, differences to EU-27 average, in percentage points



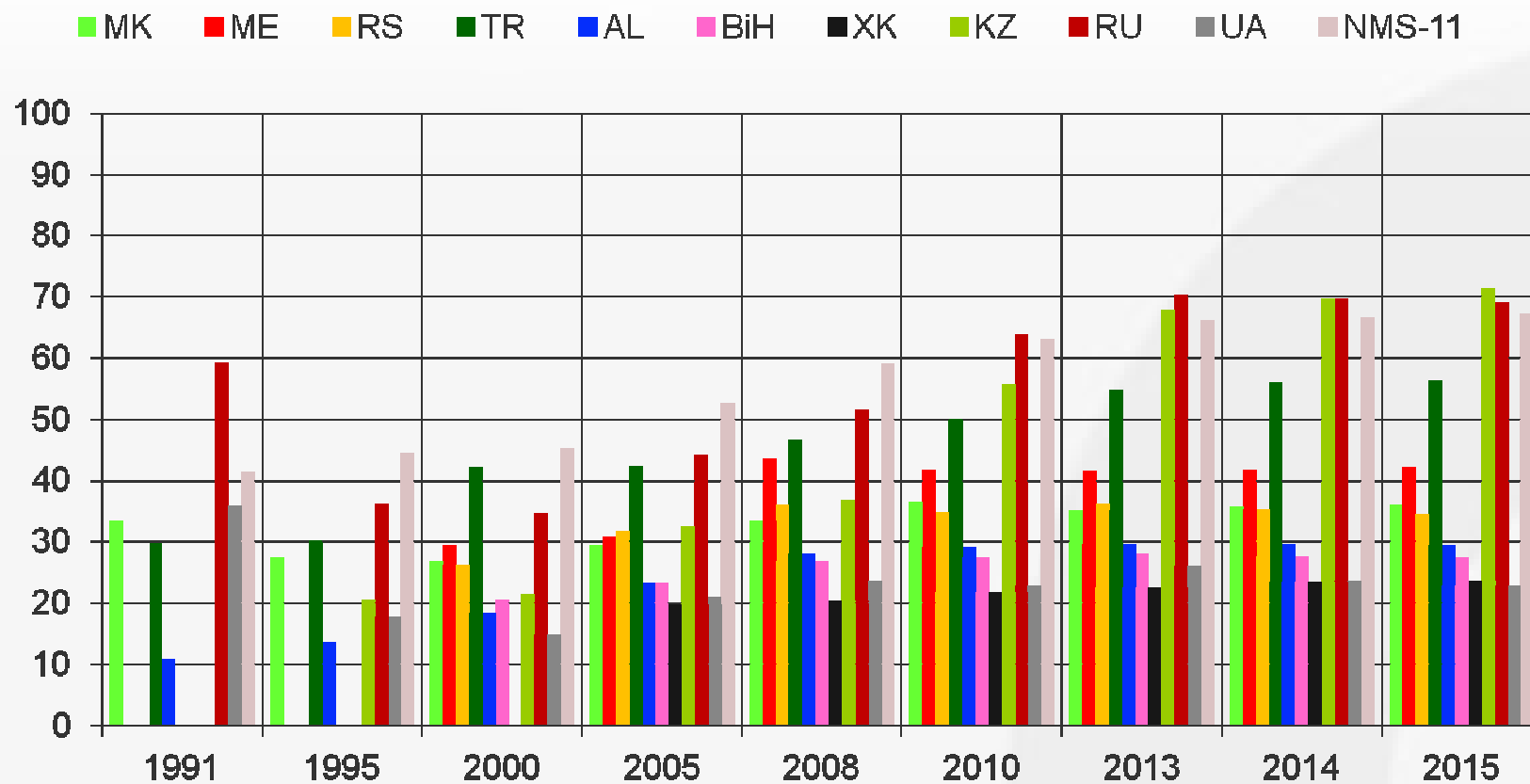
Income convergence during transition and EU accession

NMS real per capita GDP, EU-28 average = 100



Source: wiiw estimates and forecasts.

Income convergence: candidates and neighbours real per capita GDP, EU-28 average = 100



Source: wiiw estimates and forecasts.

Concepts of convergence (selected)

β – convergence:

The real (absolute) convergence implies a systematic tendency for poorer countries to grow faster than the rich ones:

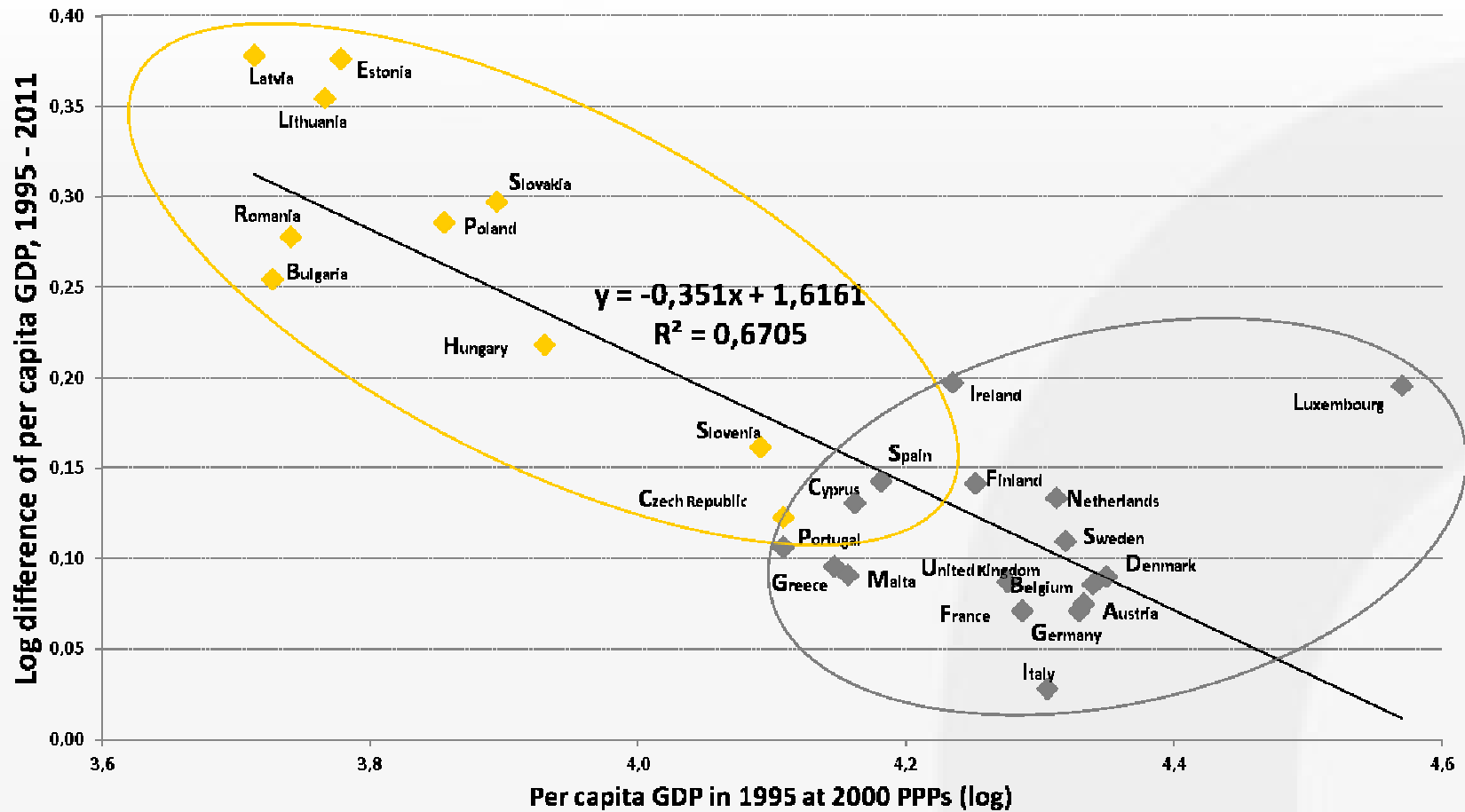
$$[y(t)-y(0)] = \alpha + \beta y(0) + \varepsilon \quad (1)$$

where: $y(t)$ resp. $y(0)$ is a logarithm of per capita income in country i in year t and 0 respectively, ε denotes an error term. A negative sign of the estimated coefficient β indicates absolute ('beta') convergence, meaning that countries at lower initial income level grow faster;

sigma-convergence:

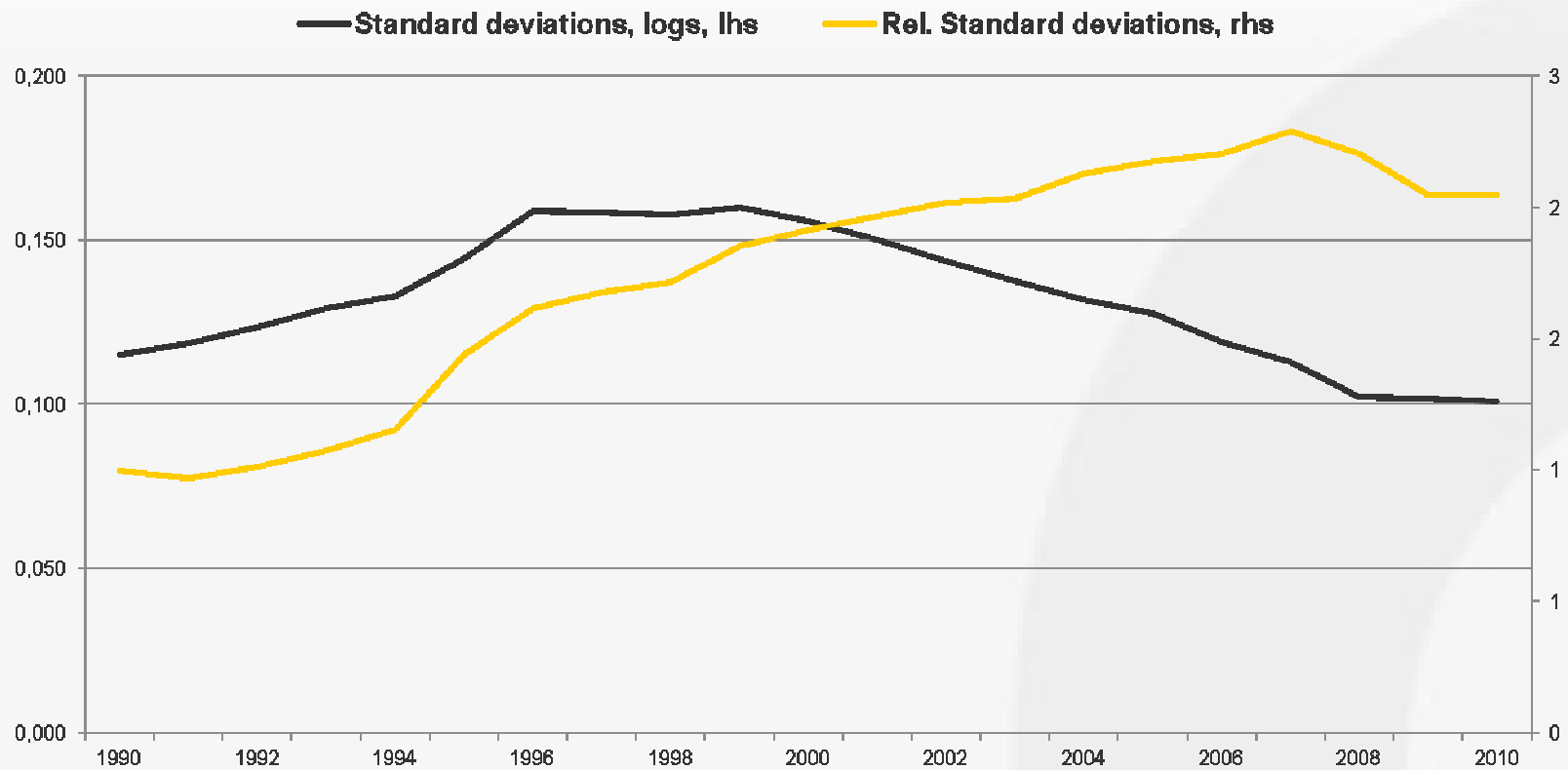
sigma-convergence measures the tendency of per capita incomes across a group of countries to become more homogenous (for example in terms of declining standard deviations) over time.

Beta-convergence in the EU, 1995-2011



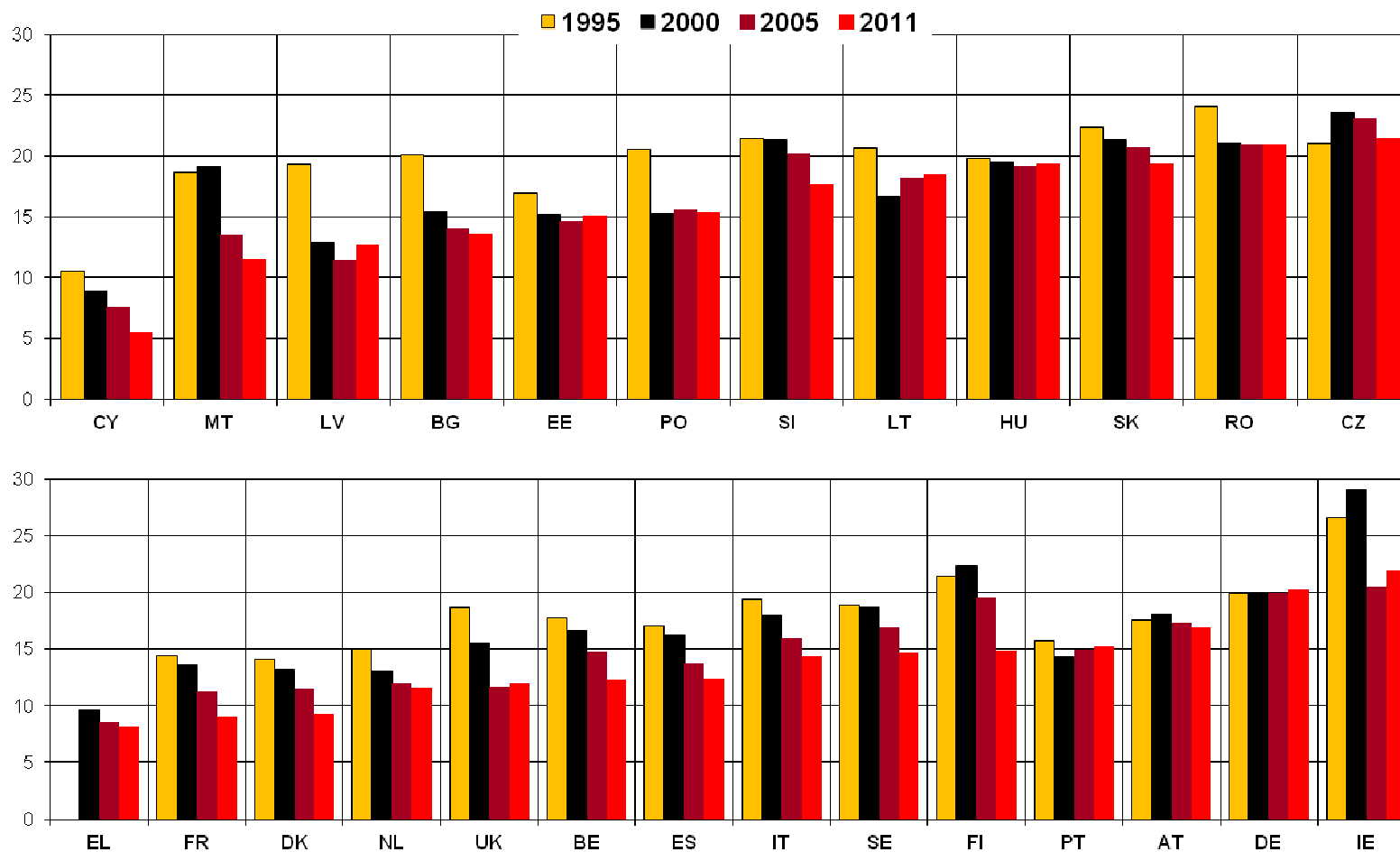
Sigma-convergence of NMS, 1990-2010

**Standard deviations of NMS
GDP per capita levels, at current PPPs (sigma-convergence)**



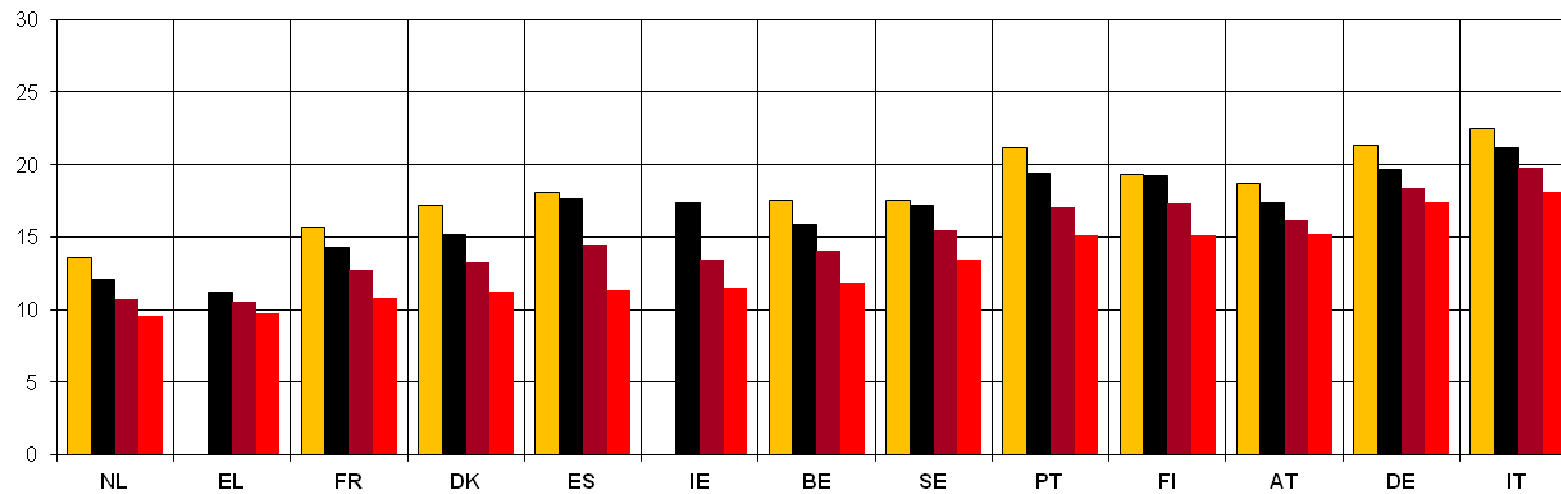
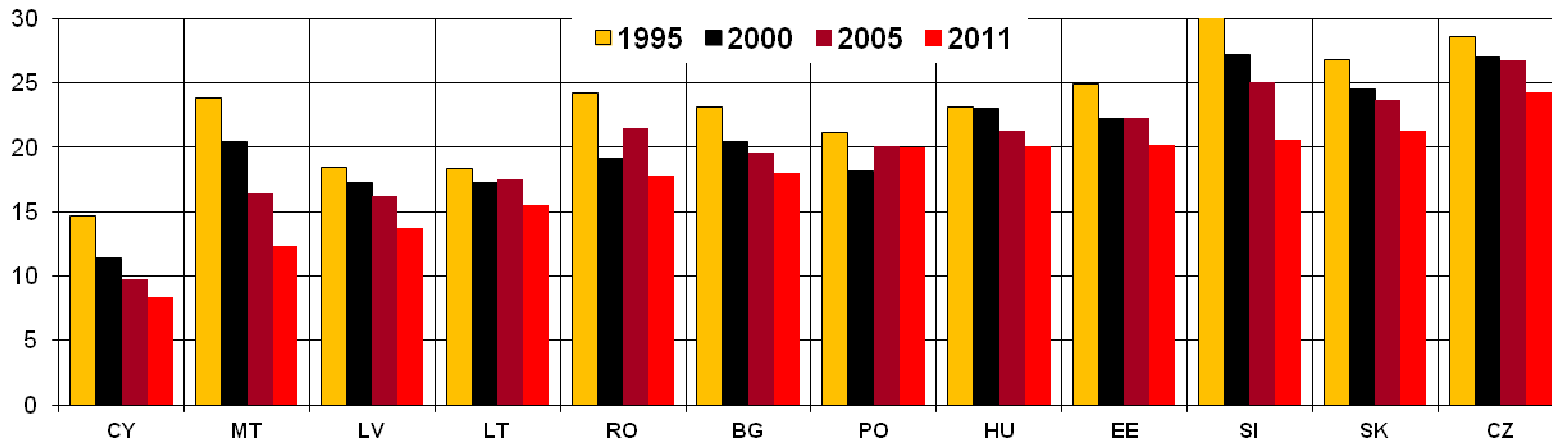
Restructuring and crisis effects

Manufacturing value added, in % of GDP more than 20% in RO and CZ (as DE, IR)



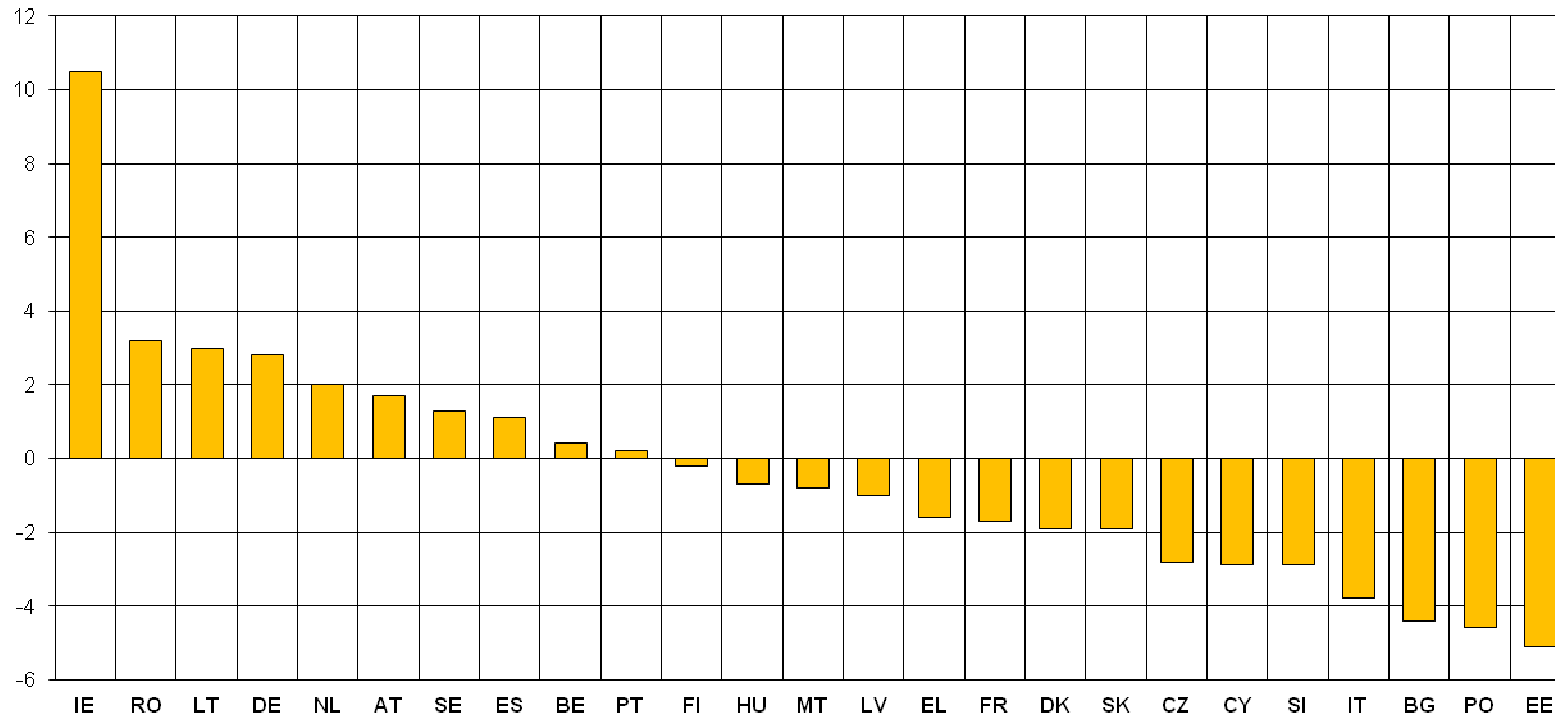
Source: own calculations based on WIIW Database and Eurostat.

Manufacturing employment, in % of total more than 20% in PO, HU, EE, SI, SK, CZ (no OMS)



Source: own calculations based on WIIW Database and Eurostat.

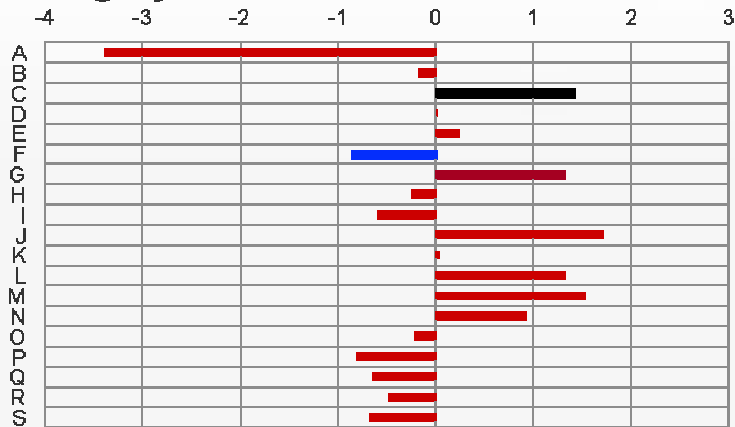
Differences in manufacturing industry shares: GVA vs employment shares, year 2011, in pp
 (positive values associated with higher productivity/less labour)



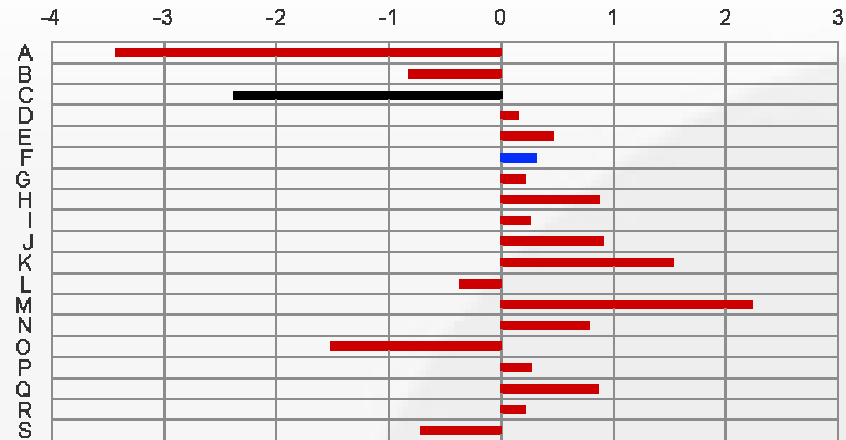
Source: own calculations based on WIIW Database and Eurostat.

Patterns of structural change – changing shares in GDP, in pp: Manufacturing (C) vs construction (F) divergence

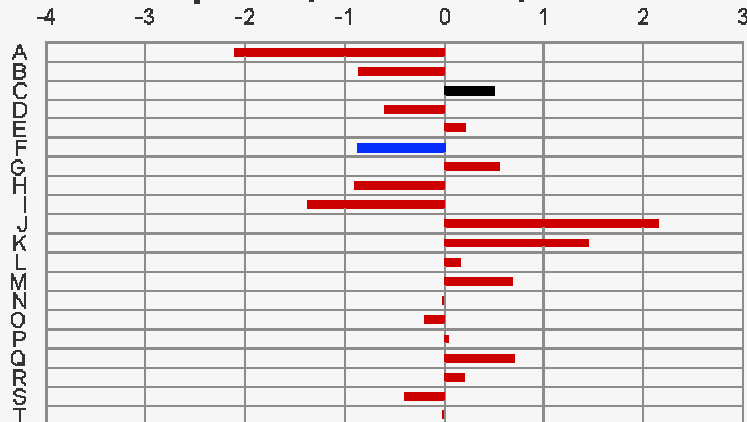
Hungary, 2011-1995, N2



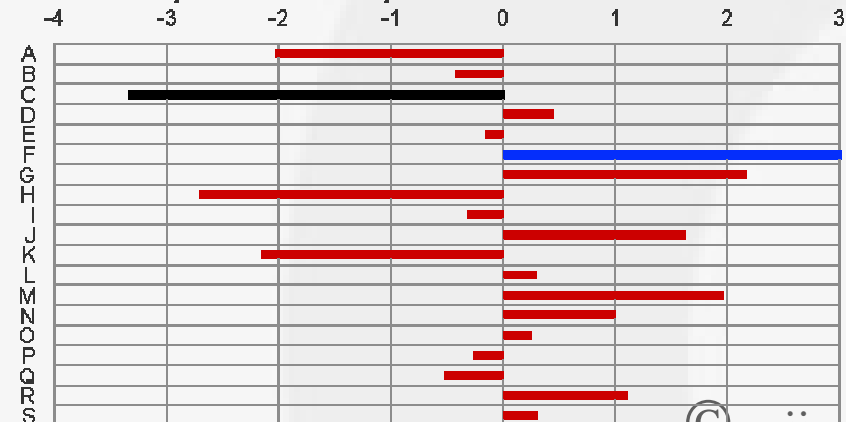
Poland, 2011-1995, N2



Czech Republic, 2011-1995, N2

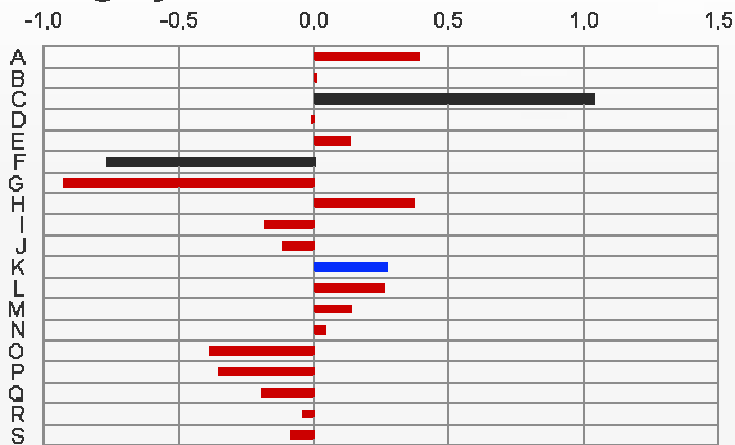


Slovakia, 2011-1995, N2

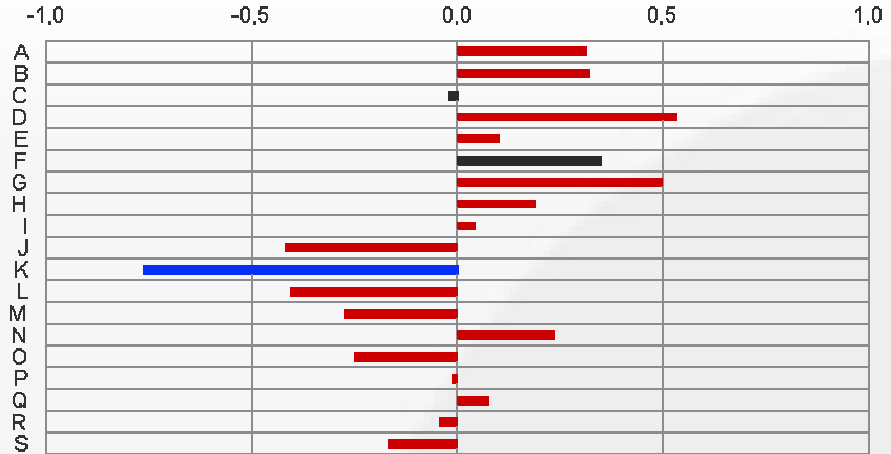


Patterns of structural change – changing shares in GDP, in pp: Manufacturing (C) vs construction (F) and finance (K)

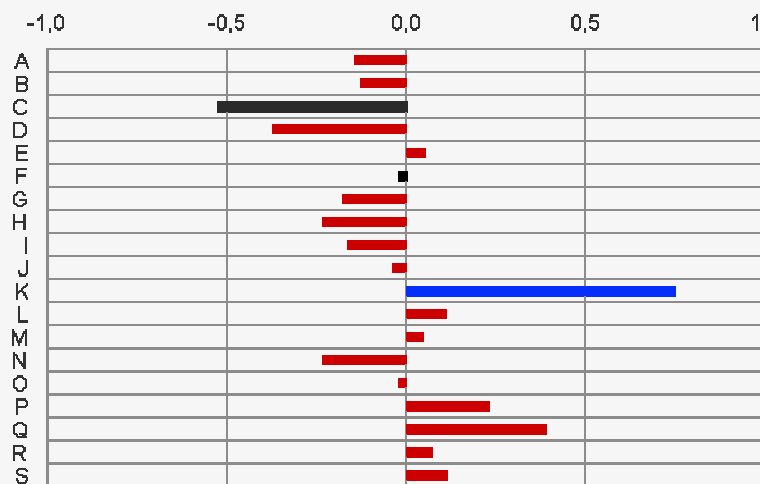
Hungary, 2011-2008, N2



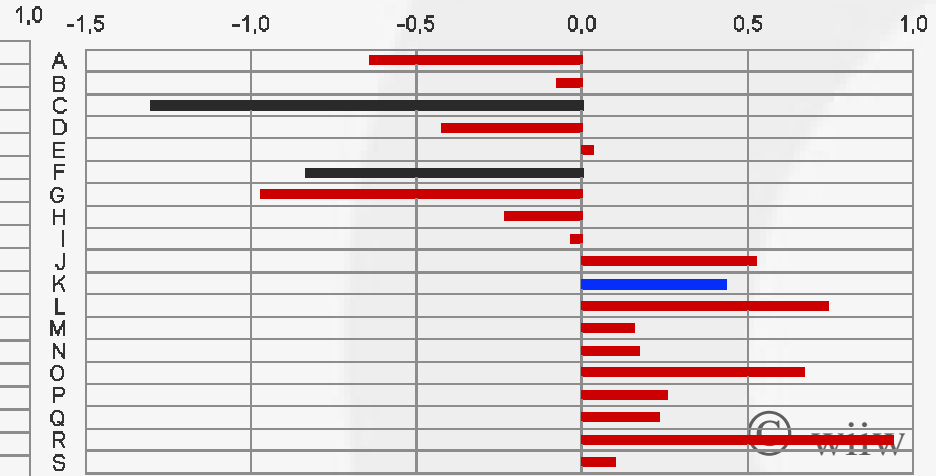
Poland, 2011-2008, N2



Czech Republic, 2011-2008, N2

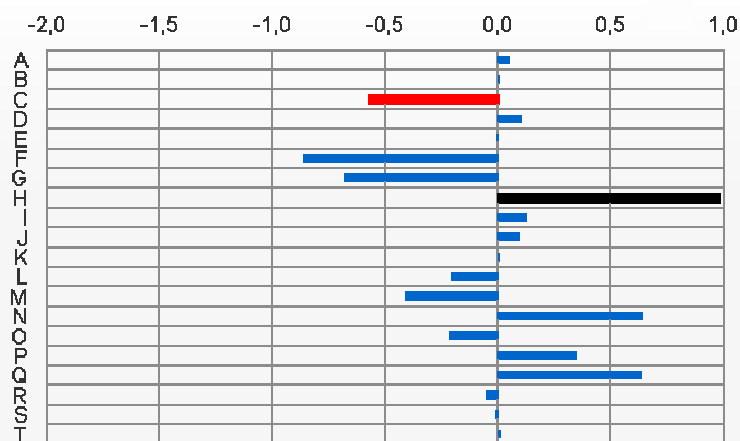


Slovakia, 2011-2008, N2

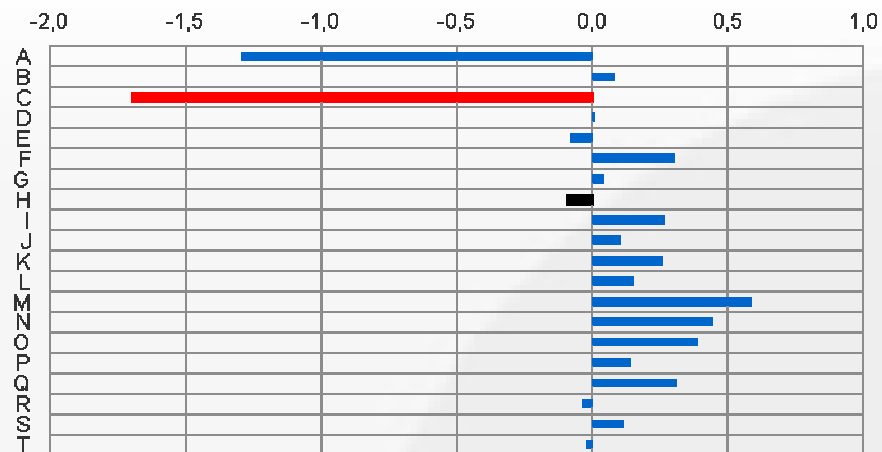


Patterns of structural change – changing employment shares, in pp: Manufacturing (C) vs Services

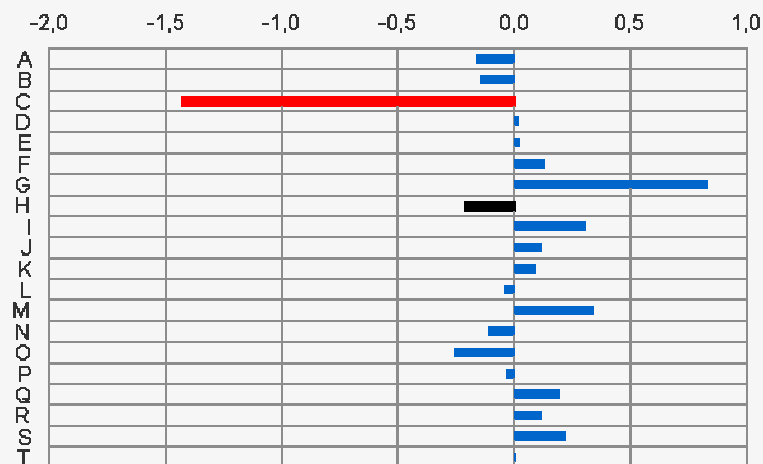
Hungary, 2011-2008, N2



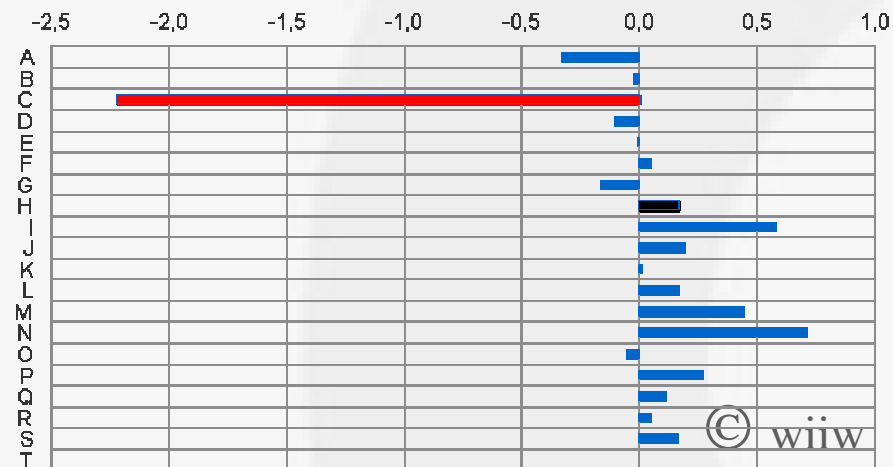
Poland, 2011-2008, N2



Czech Republic, 2011-2008, N2



Slovakia, 2011-2008, N2



N2 (Nace rev. 2) classification of industries

- A Agriculture, forestry and fishing
- B Mining and quarrying
- C Manufacturing
- D Electricity, gas, steam and air cond.supply
- E Water supply, sewerage, waste manag.,etc
- F Construction
- G Wholesale, retail trade, repair of motor veh.
- H Transportation and storage
- I Accommodation and food service activities
- J Information and communication
- K Financial and insurance activities
- L Real estate activities
- M Professional, scientific and techn.activities

Recent convergence slowdown and growth prospects: what is in the cards for CESEE's future ?

- Previous convergence model was based on:
 - belief in the power of institutional convergence (Washington Consensus and the takeover of EU 'acquis communautaire')
 - capital (FDI) inflows induced modernisation and restructuring
 - democracy agenda

- Challenges after the (post-2008) crisis:
 - backlash in political stability and eroding reform support
 - build-up (and burst) of longer-term structural imbalances
 - evidence of weaknesses of EU-level governance structures
 - questions of sustainability of EU integration and enlargement strategies

Recent convergence slowdown and growth prospects: what is in the cards for CESEE's future ?

- A new/adjusted growth strategy/convergence model ?
 - Less (foreign) credit financing
 - FDI directed to the tradable sector
 - Instruments of industrial policy, re-industrialization

- German-CEE supply chain cluster: can it be copied by SEE ?*
 - The role of history and geography (AT, CZ, HU, PL, SK)
 - Who can play German role in SEE ?
 - What about Eastern Neighbourhood ?
 - What are the implications ?

* See IMF Multi-Country Report, no. 13/263, August 2013