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

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Fostering Cohesion in Central and Eastern Europe

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Post-crisis convergence slowdown

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

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GDP growth convergence, index 1995=100, differences to EU-27 average, in percentage points
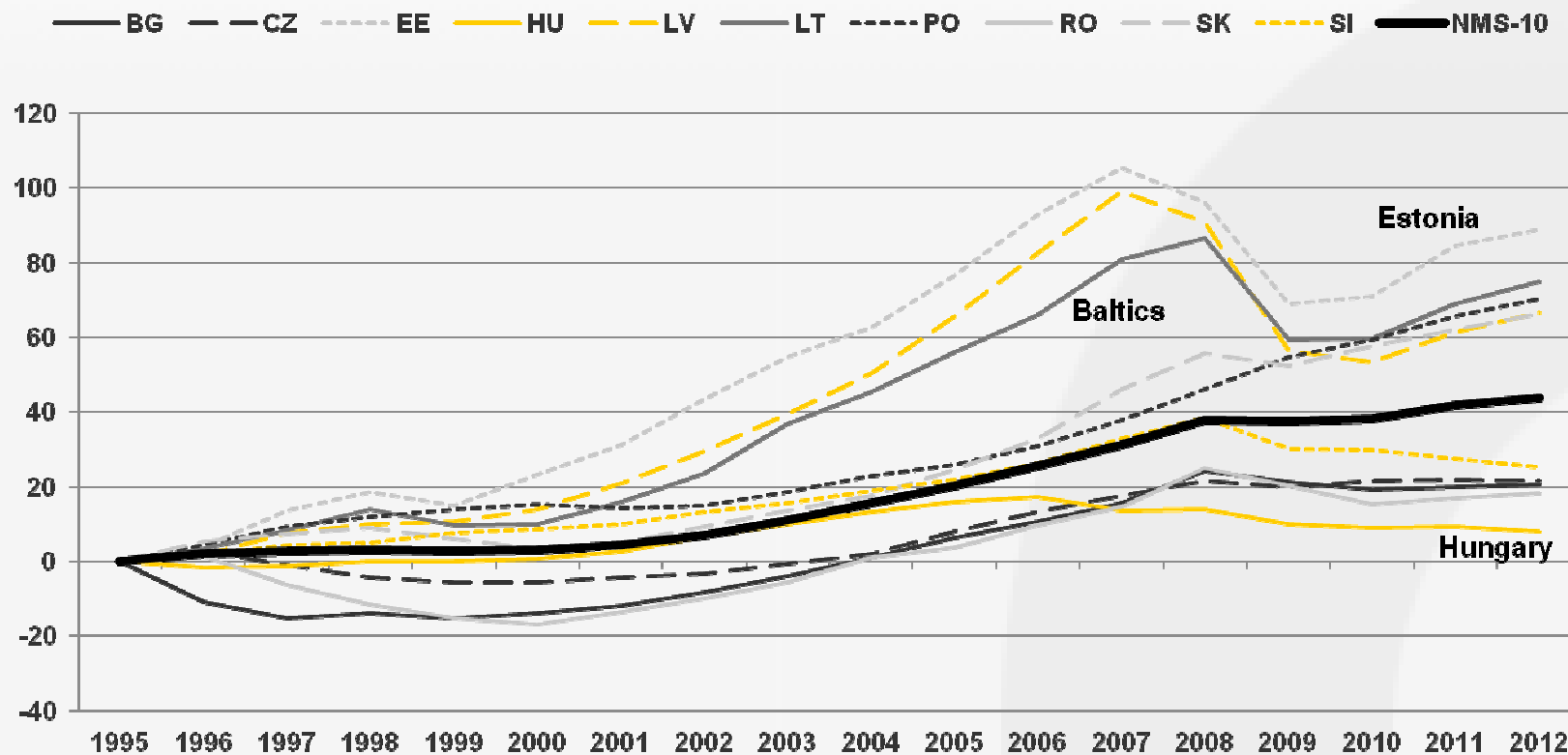
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Income convergence during transition and EU accession
NMS real per capita GDP, EU-28 average = 100

Legend: BU, HR, CZ, EE, HU, LV, LT, PL, RO, SK, SI
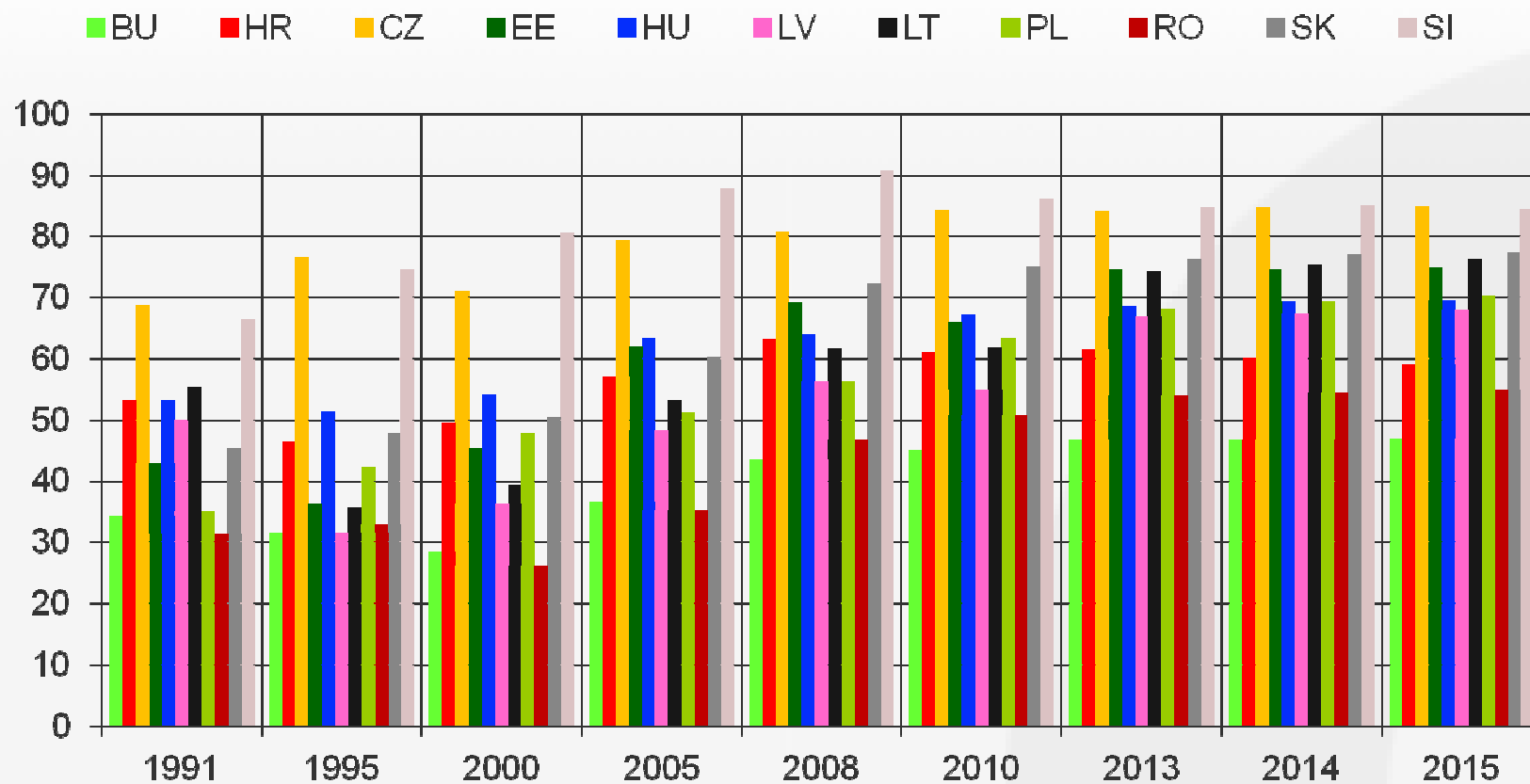
Source: wiiw estimates and forecasts.

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

Legend: MK, ME, RS, TR, AL, BiH, XK, KZ, RU, UA, NMS-11
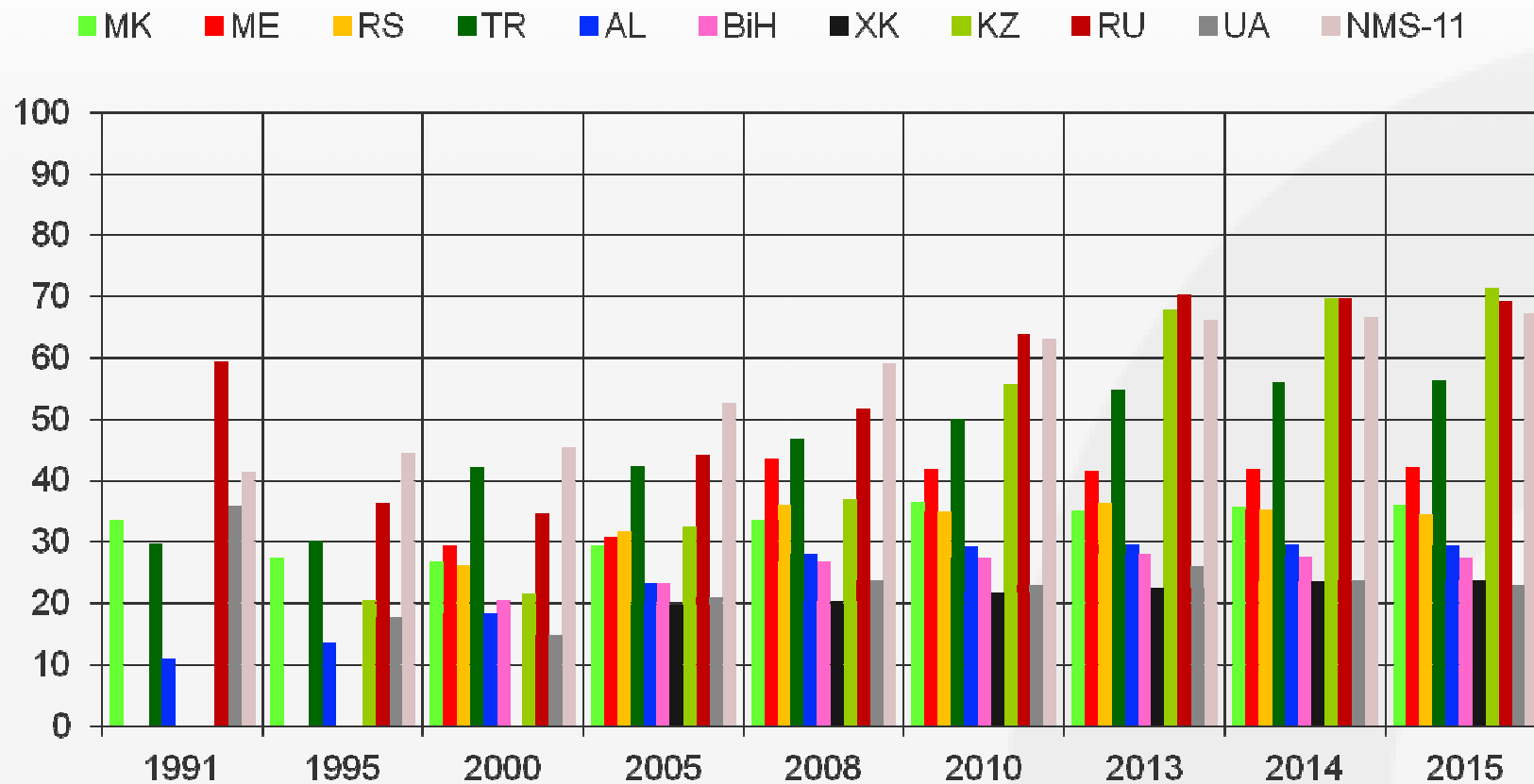
Source: wiiw estimates and forecasts.

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Concepts of convergence (selected)

β – convergence:

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

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

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

$y = -0,351x + 1,6161$
$R^2 = 0,6705$
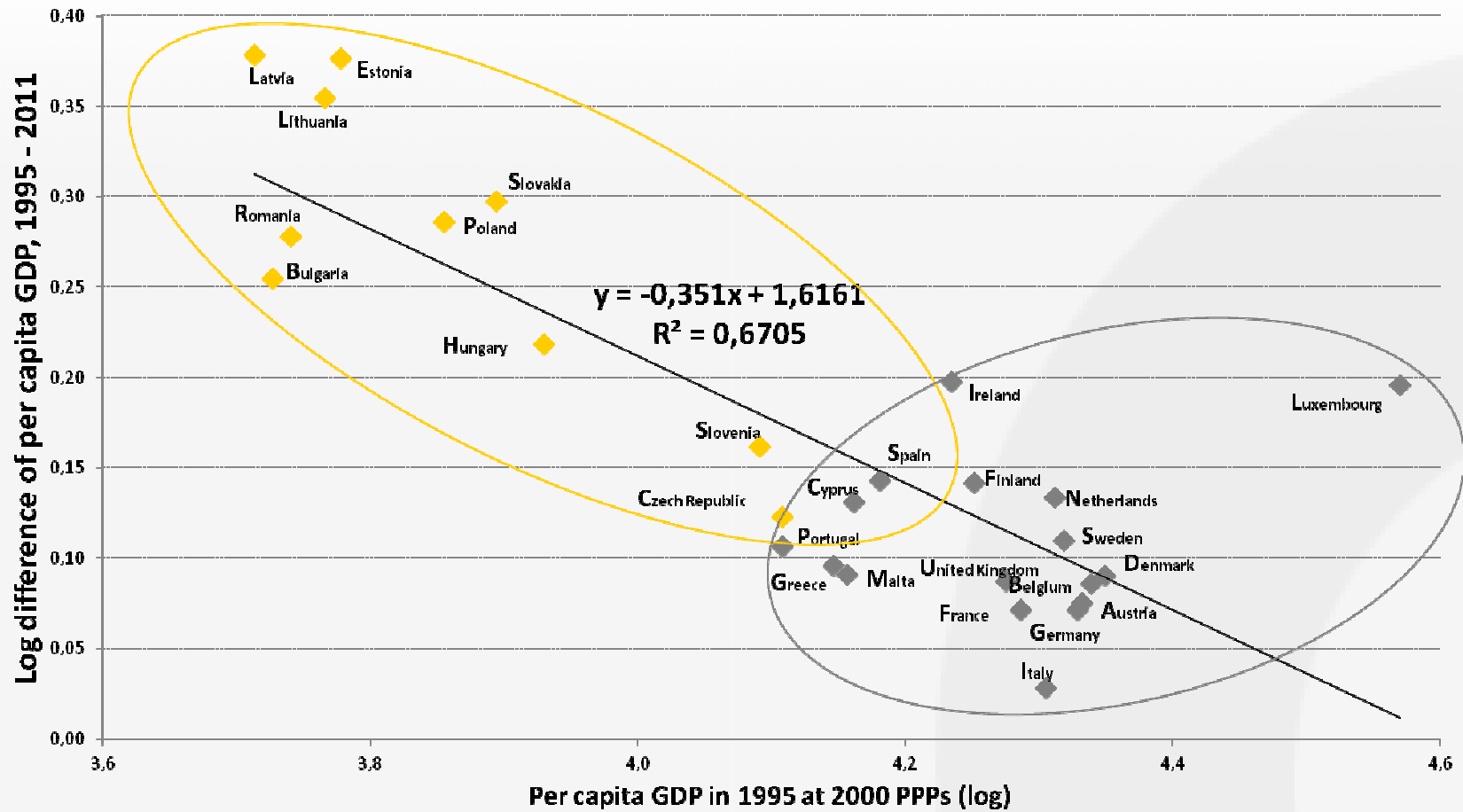
Sigma-convergence of NMS, 1990-2010

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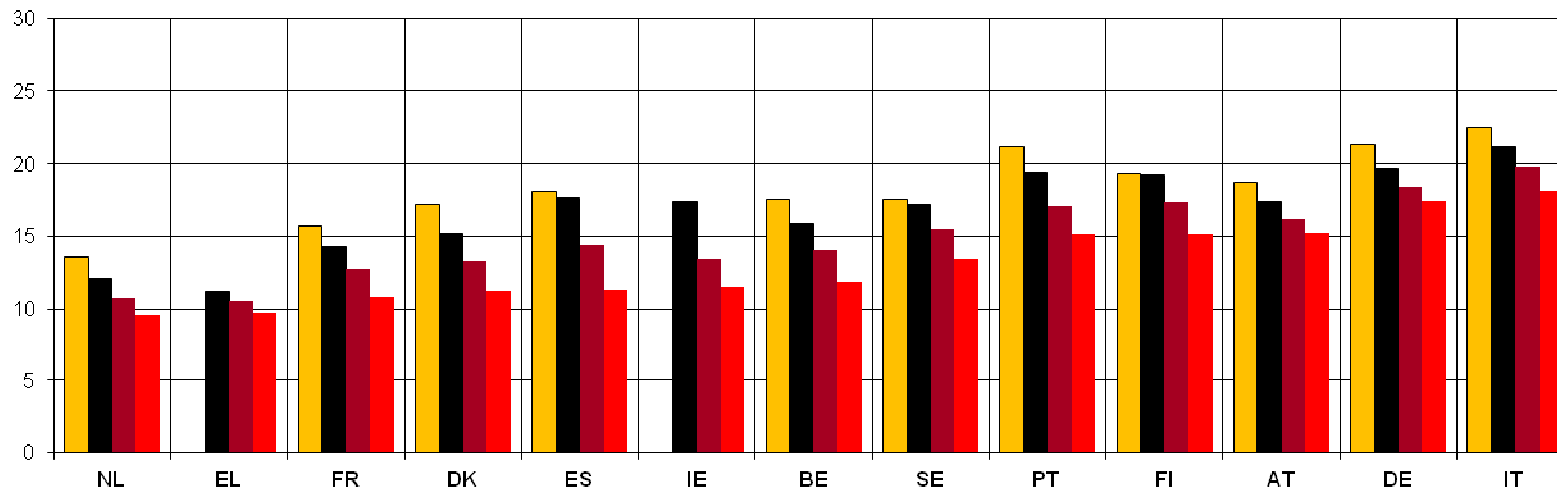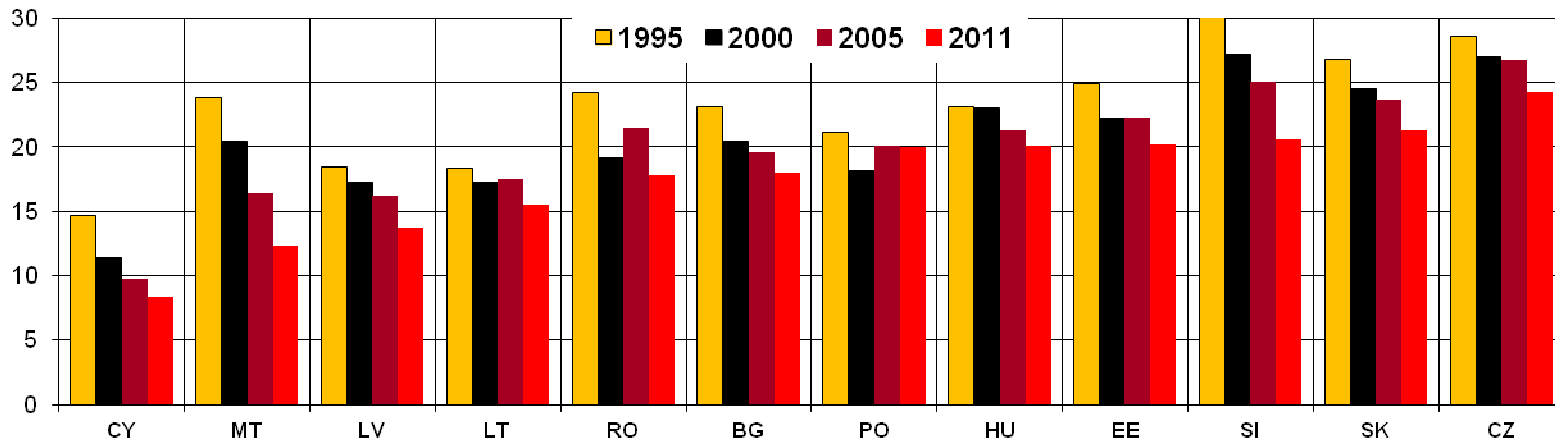GDP per capita levels, at current PPPs (sigma-convergence)**
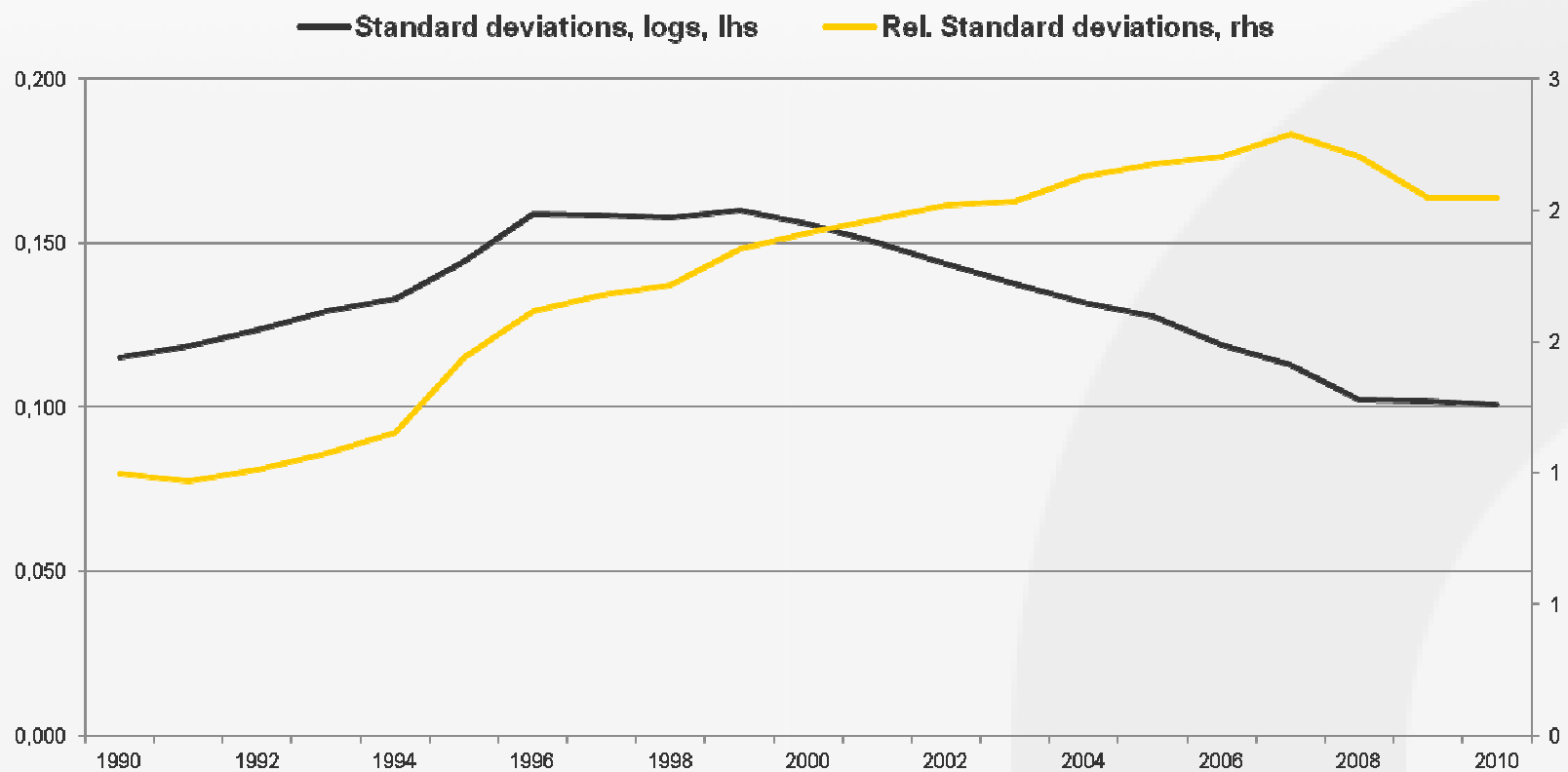
Restructuring and crisis effects

Manufacturing value added, in % of GDP
# more than 20% in RO and CZ (as DE, IR)
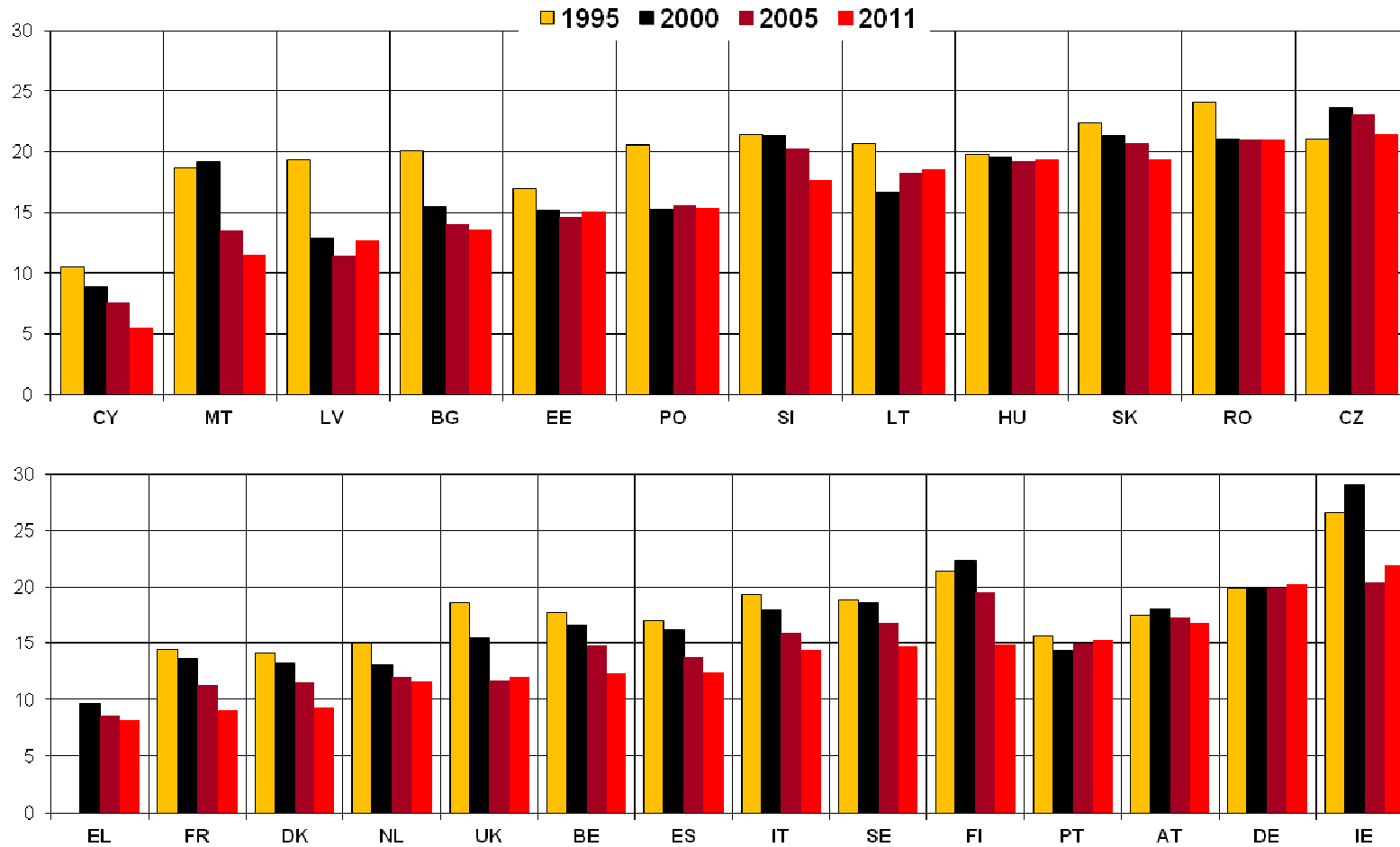
Source: own calculations based on WIIW Database and Eurostat.

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.

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Differences in manufacturing industry shares: GVA vs employment
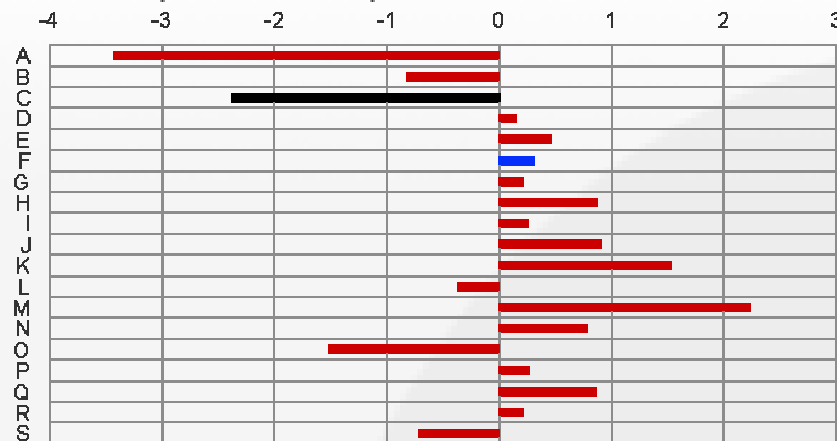shares, year 2011, in pp
(positive values associated with higher productivity/less labour
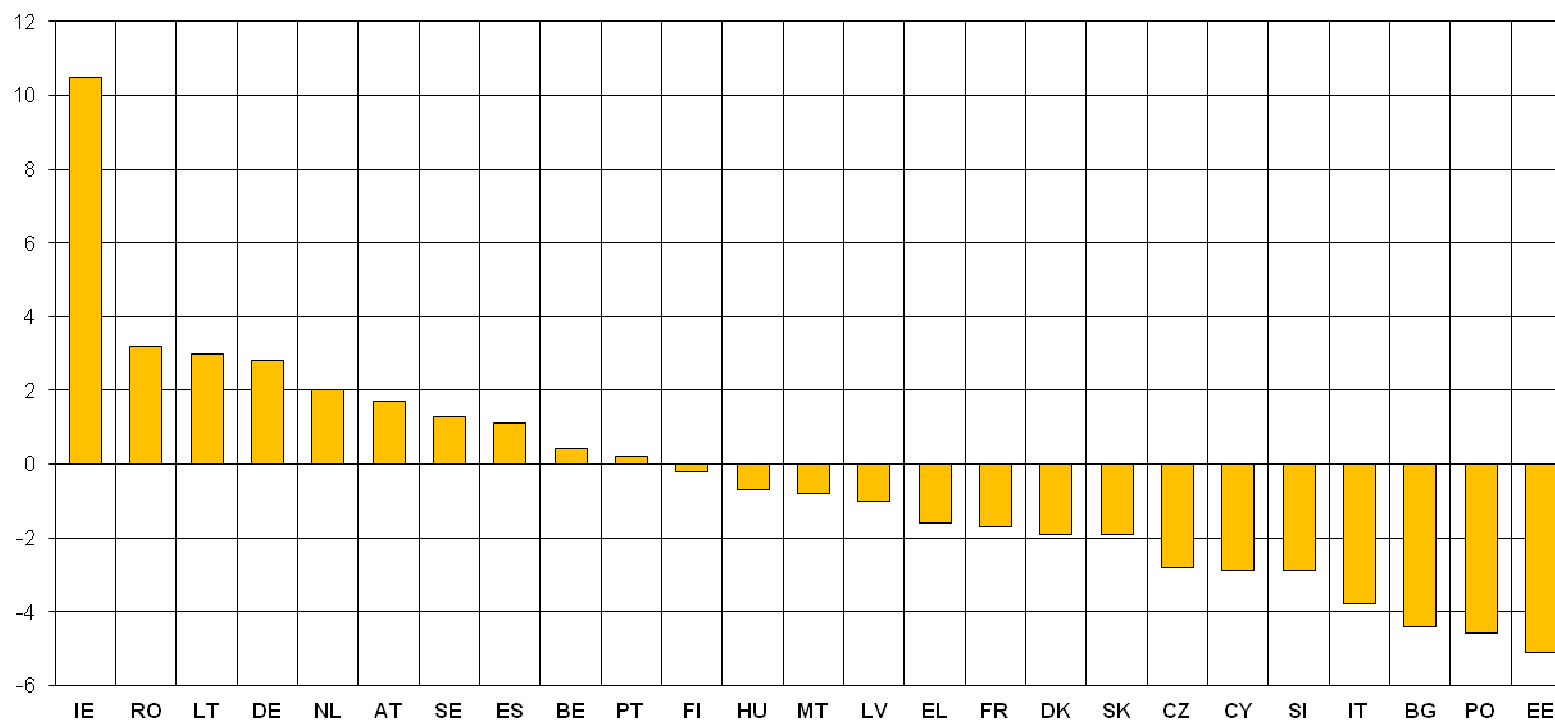
Source: own calculations based on WIIW Database and Eurostat.

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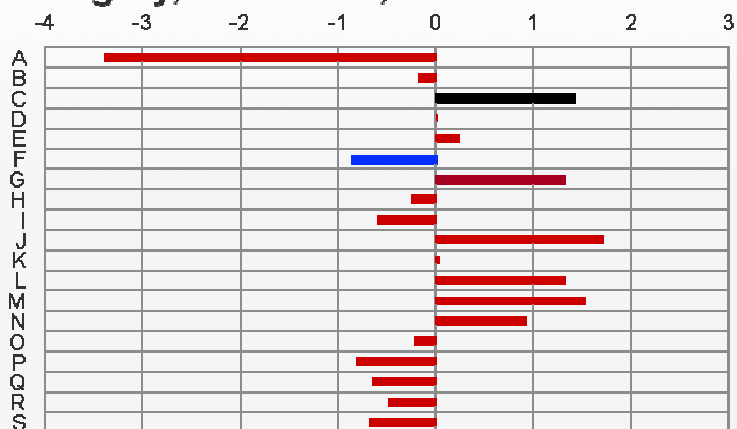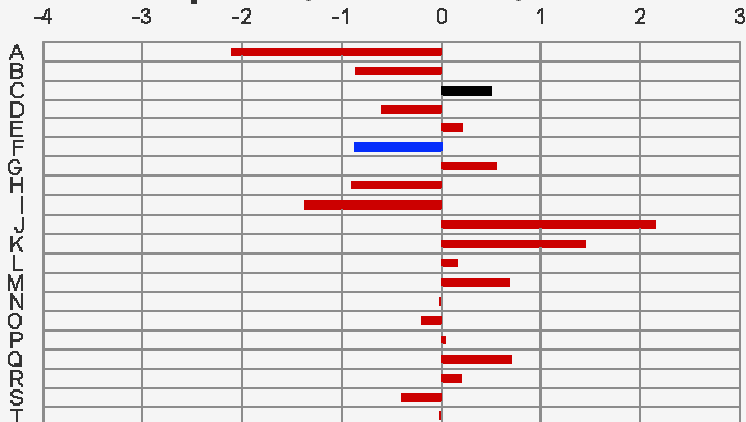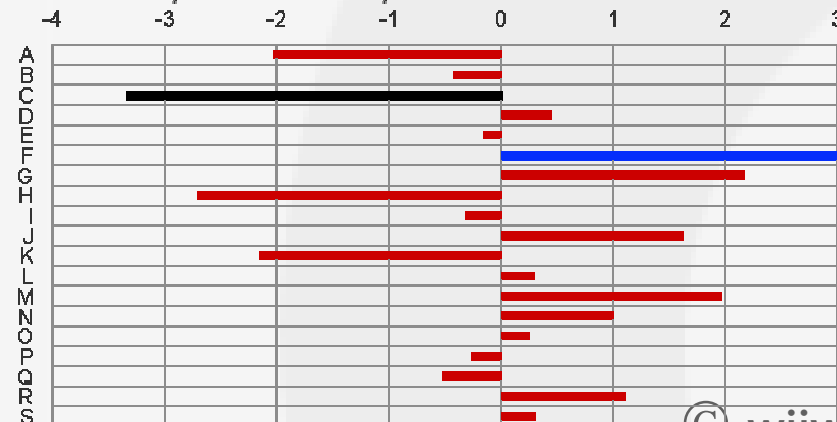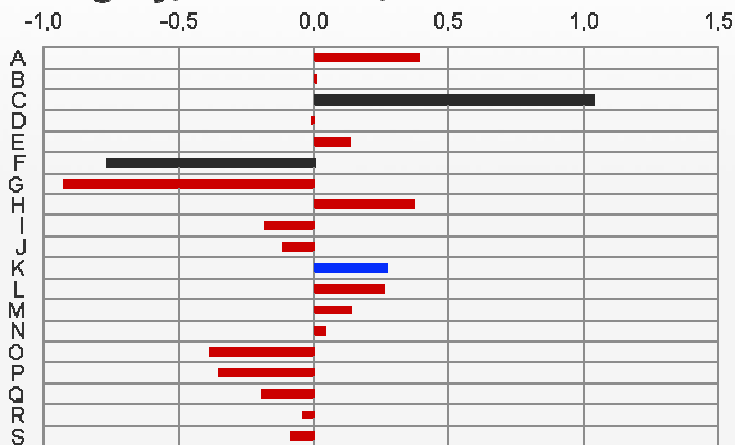
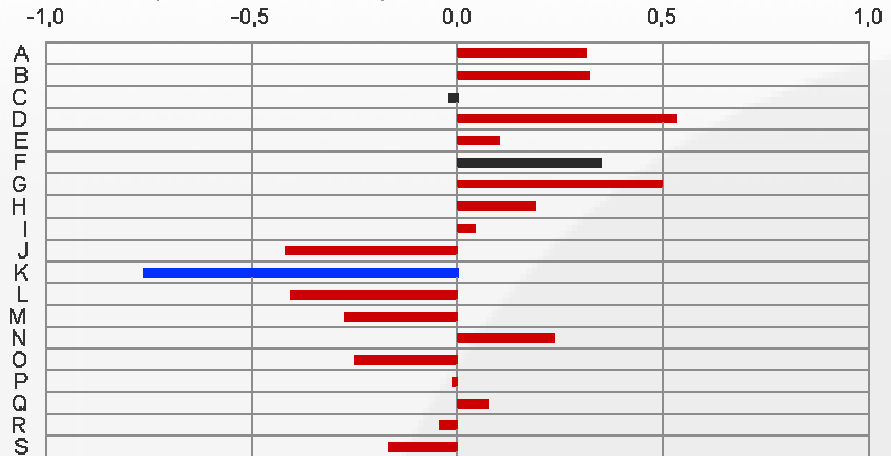# Patterns of structural change – changing shares in GDP, in pp: Manufacturing (C) vs construction (F) and finance (K)

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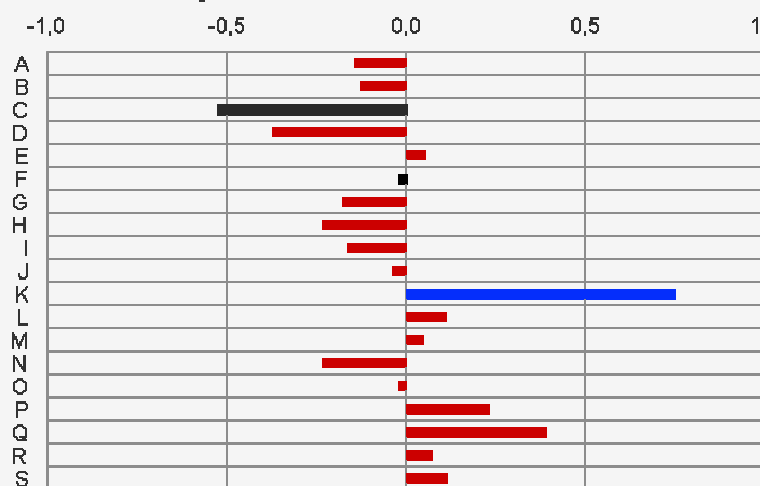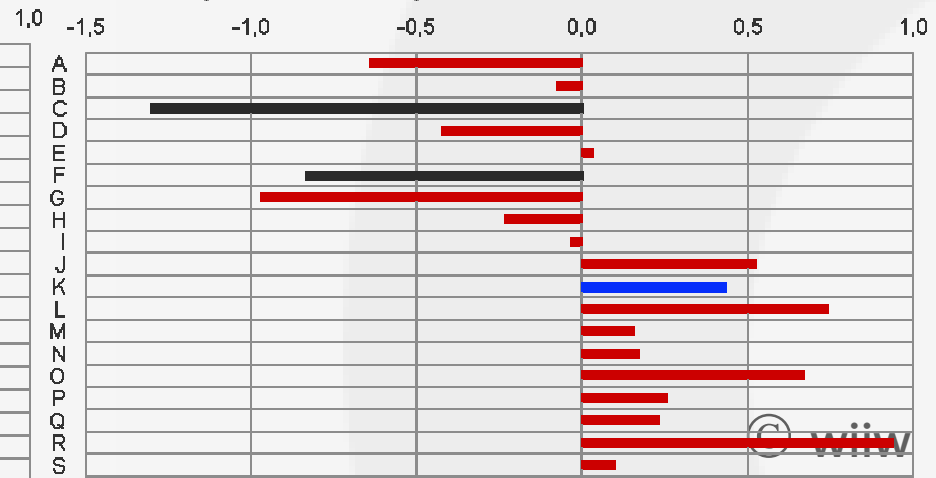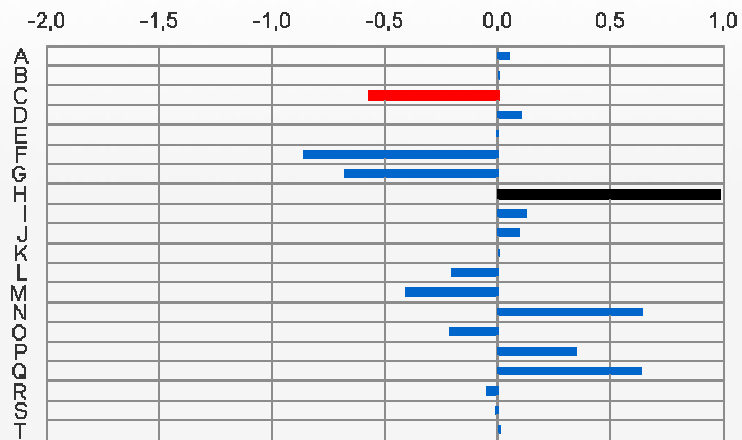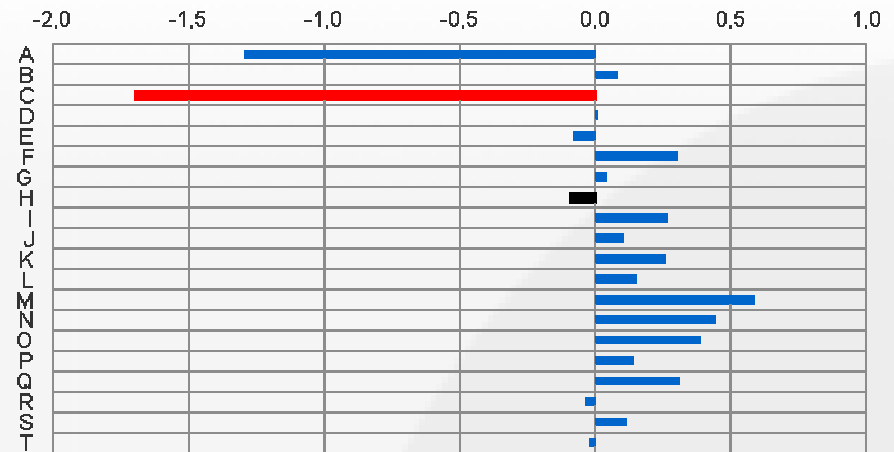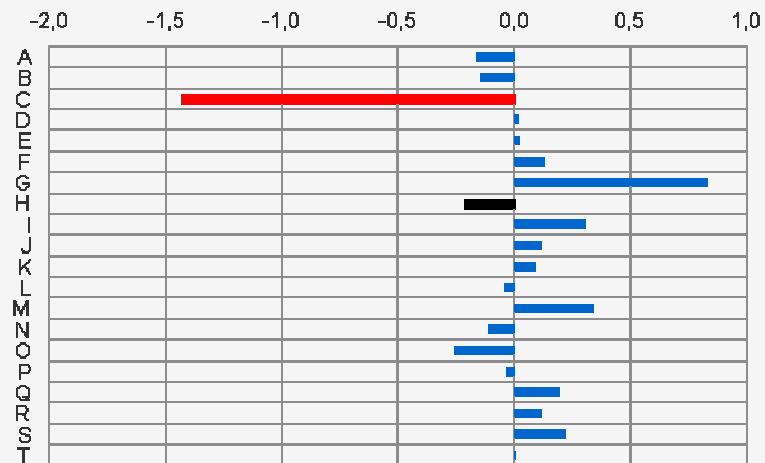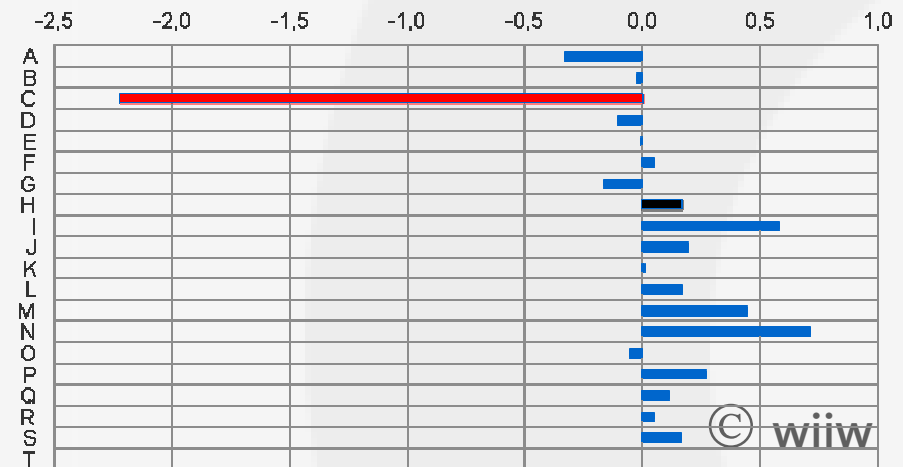

Hungary, 2011-2008, N2
Poland, 2011-2008, N2
Czech Republic, 2011-2008, N2
Slovakia, 2011-2008, N2

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

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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

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