

TERRITORIAL DISPARITIES AND COHESION: Cohesion policy in the trap of measuring

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Focus on the Territorial Dimension

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Why disparities and cohesion?

- The old dilemma of regional policy:
 - Equalisation – equal opportunities
 - Efficient territorial structure – COMPETITIVENESS
 - What is acceptable for politicians?
- Failures of the EU regional policy
- Increasing importance is devoted by politicians to territorial cohesion (Lisbon Treaty, TA 2020 etc.)
- **BUT THE CONCEPT OF COHESION IS INTERPRETED IN DIFFERENT WAYS**

MIXING CONCEPTS

- Sentences like:

„Many large countries ... also have wide differences in regional GDP per head and have turned to EU Cohesion Policy to learn how to reduce them.”

Fifth report on economic, social and territorial cohesion, p. XII.

MIXING CONCEPTS

- Definitions like:

territorial cohesion is „...a situation whereby people and firms are not unduly handicapped by spatial differences in access to basic services, basic infrastructure and knowledge”

Molle, W. 2007, p. 84.

MIXING CONCEPTS

- Concepts (aims) connected to cohesion:
 - Disparities – territorial differences
 - Accessibility – equal access to infrastructure and know-how
 - Polycentrism – a balanced urban system
 - Trusteeship – prudent management of heritages
 - Convergence – decreasing differences

ESPON INTERCO indicators

32 top indicators in 6 territorial objectives:

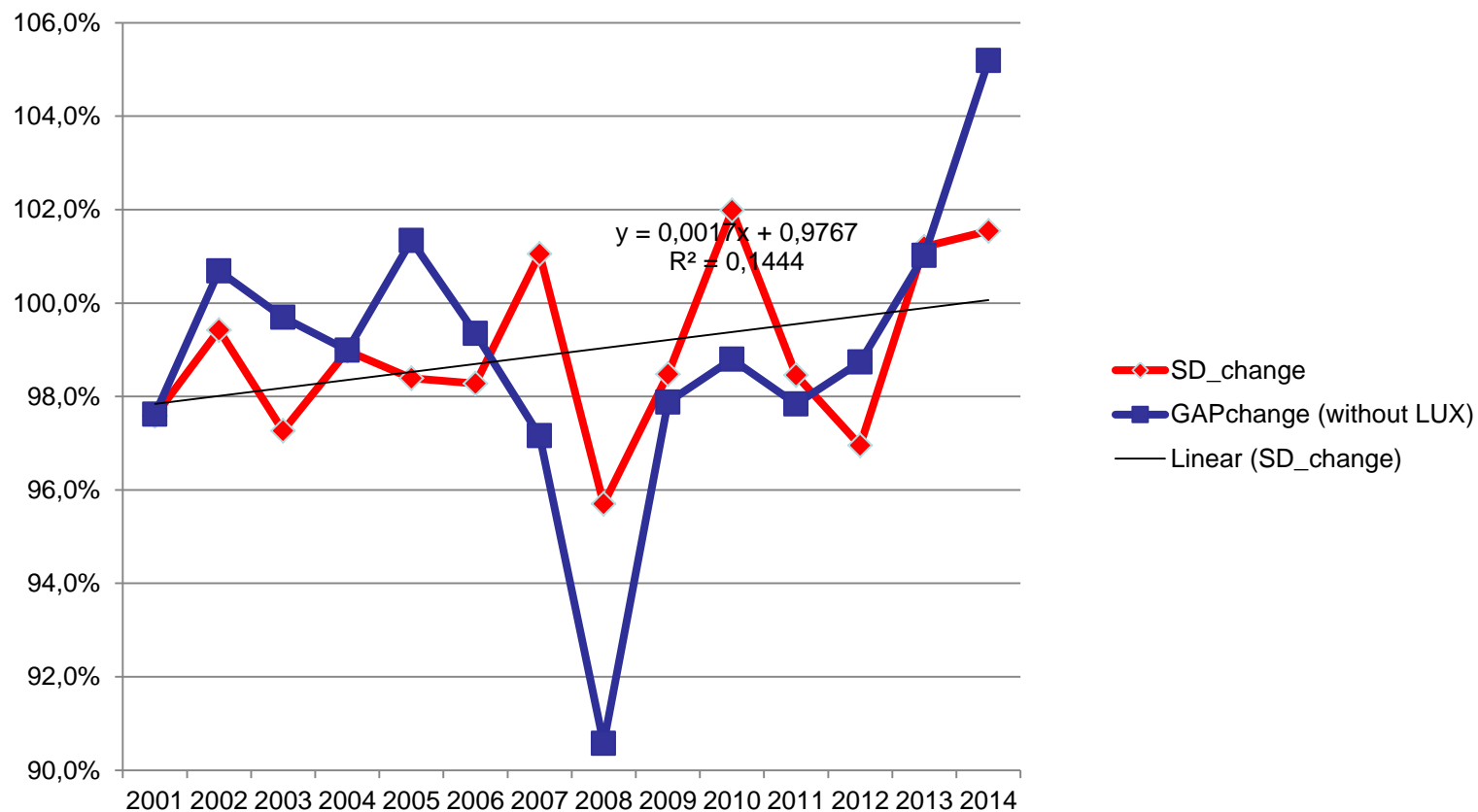
- Strong local economies ensuring global competitiveness
- Innovative territories
- Fair access to services, markets and jobs
- Inclusion and quality of life
- Attractive regions of high ecological values and strong territorial capital
- Integrated polycentric territorial development

Source: Science in Support of European Territorial Development and Cohesion, Second ESPON 2013 Scientific Report, December 2013, EU – RDF, Luxembourg, p.32.

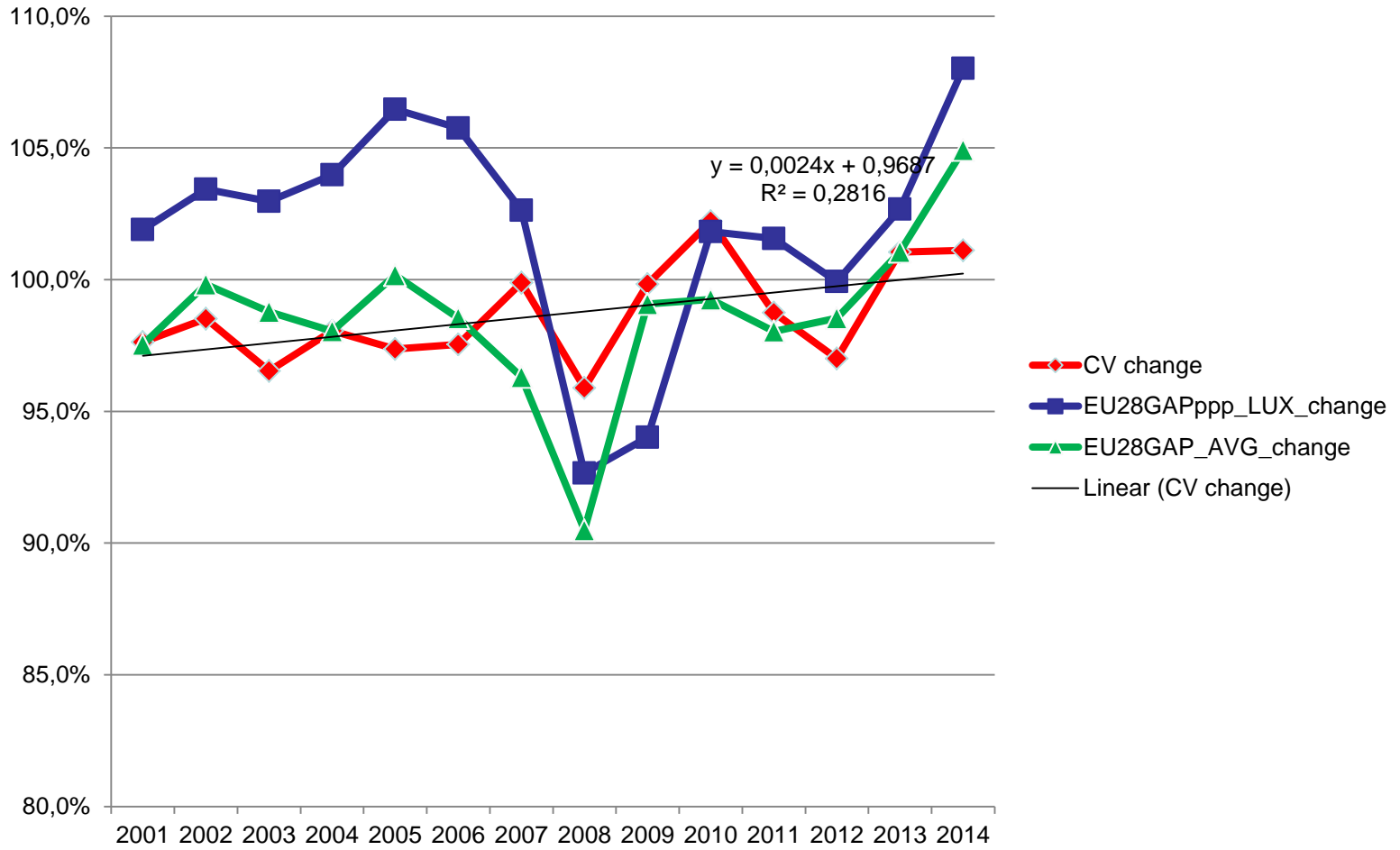
Most frequent measures of cohesion

- GDP/capita
- Indicators and various system /groups of volume or supply level indicators to reflect „inequalities” or „disparities”
- Changes of these indicators to reflect convergence
 - σ -convergence
 - β -convergence

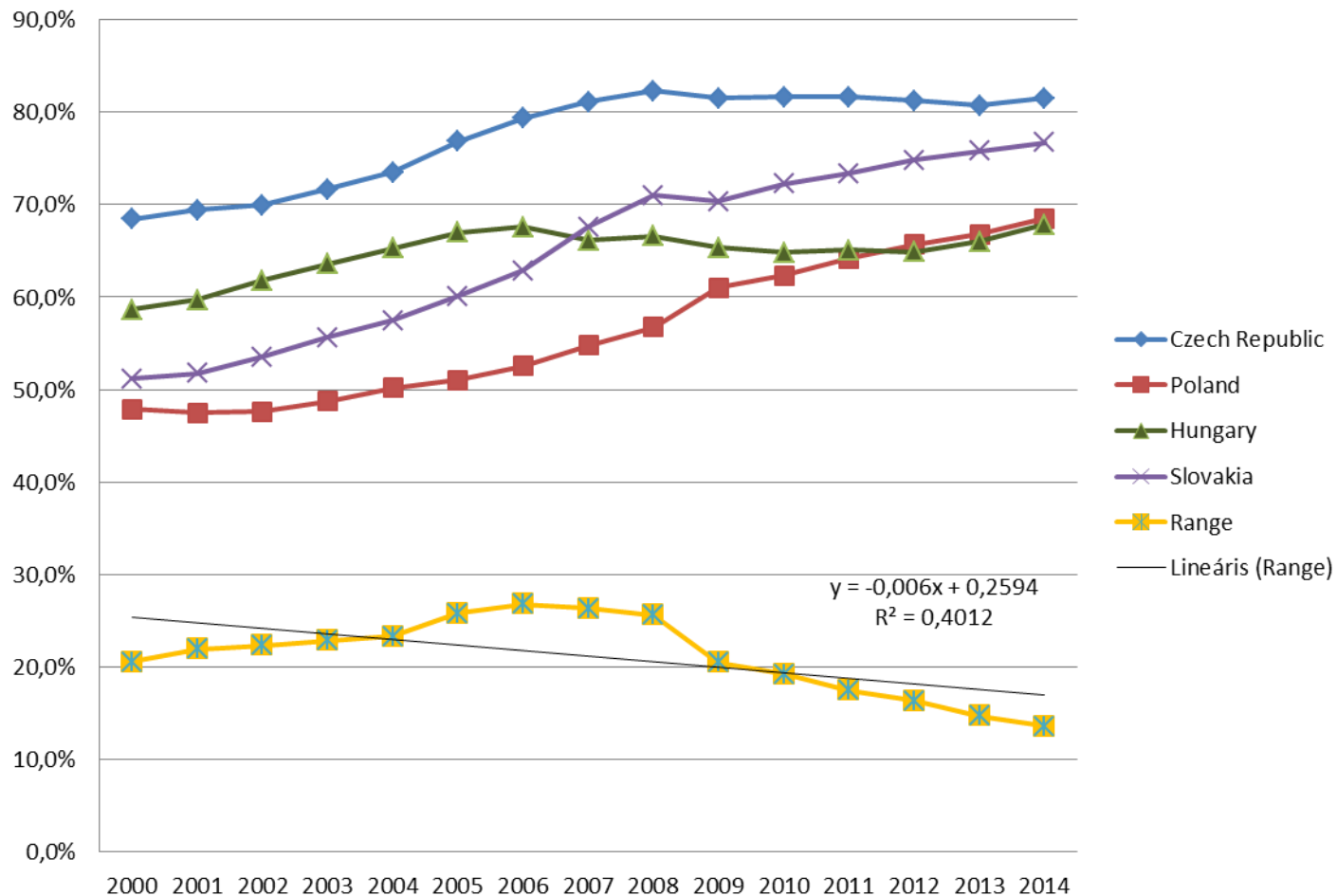
σ - convergence of the EU28 countries based on GDP/capita in relation to EU28 average



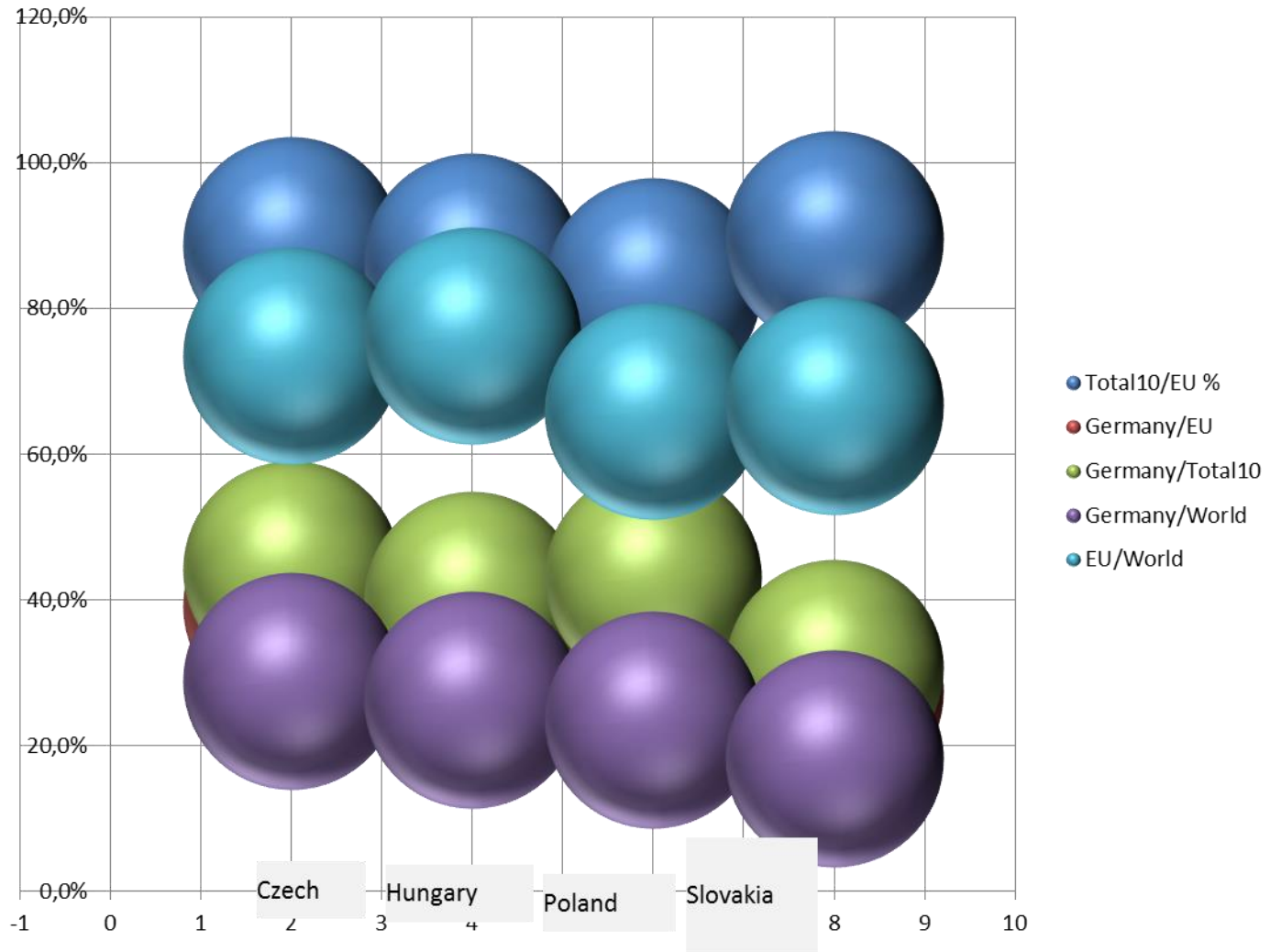
σ -convergence of EU28 countries
based on coefficient of variance and gap of GDP/capita PPP



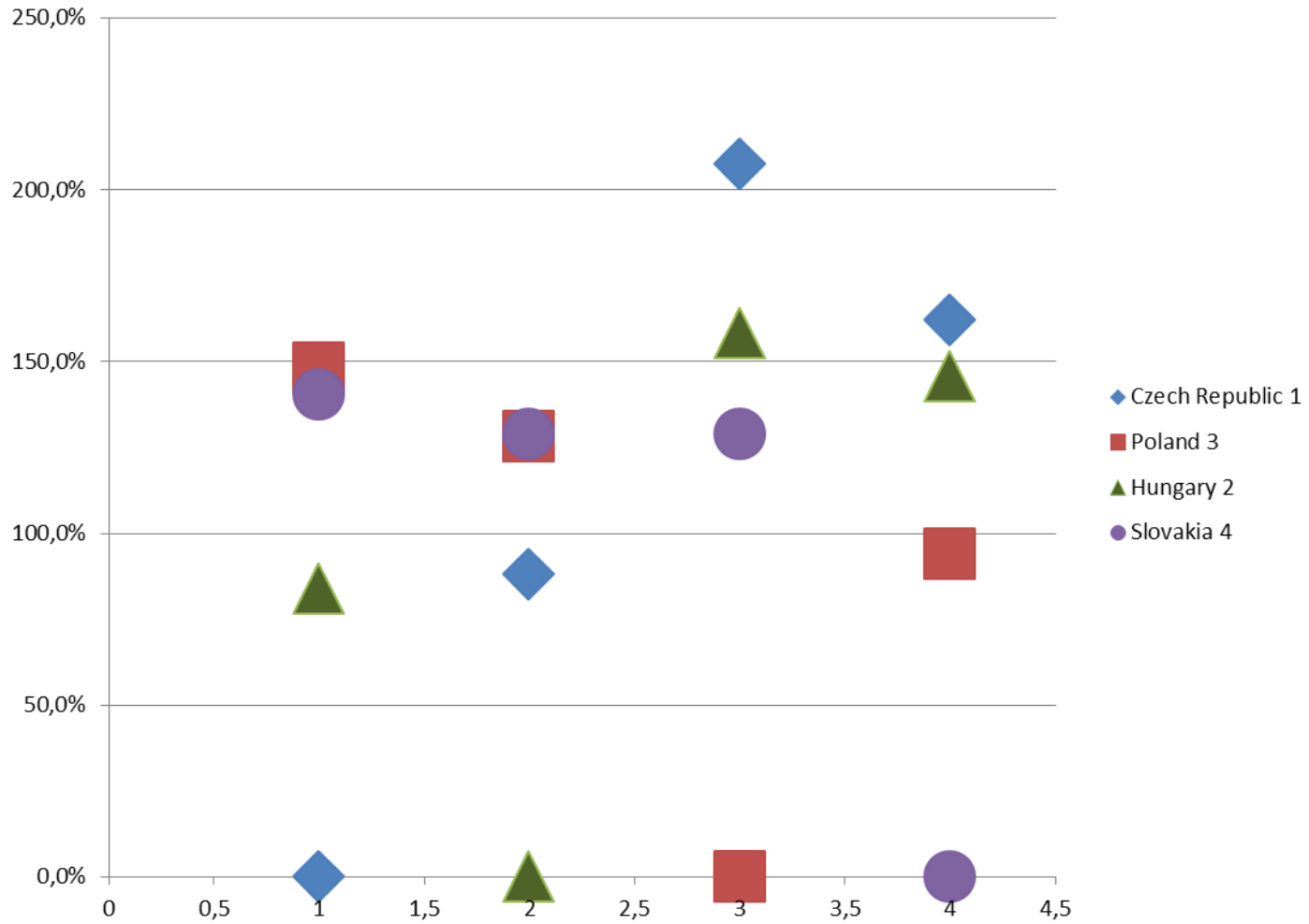
GDP/capita of V4 countries in relation to EU28



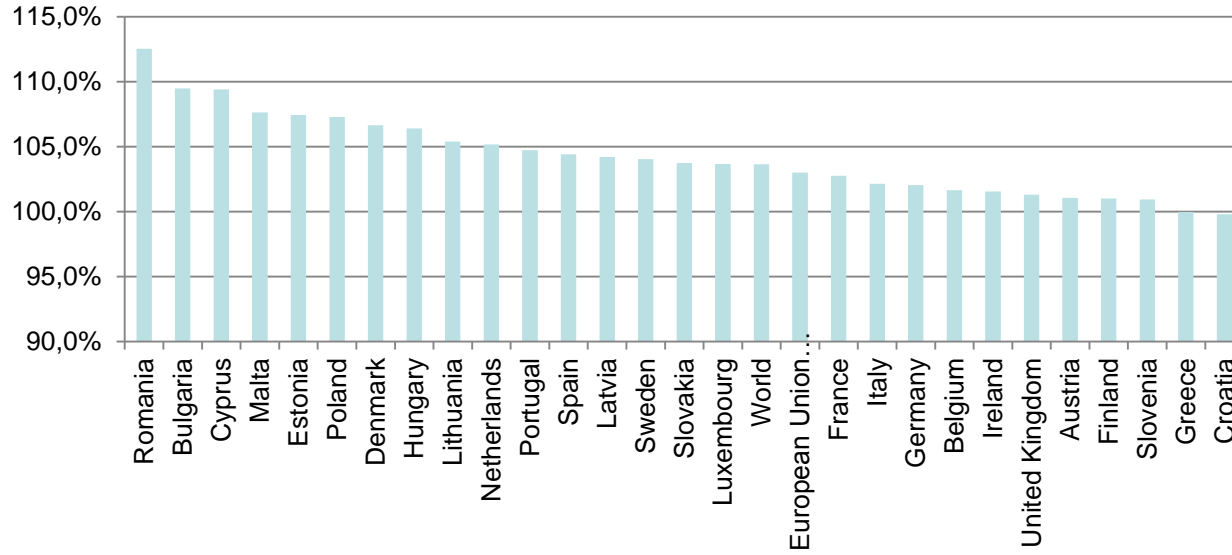
Foreign trade relatedness of V4 countries, 2014



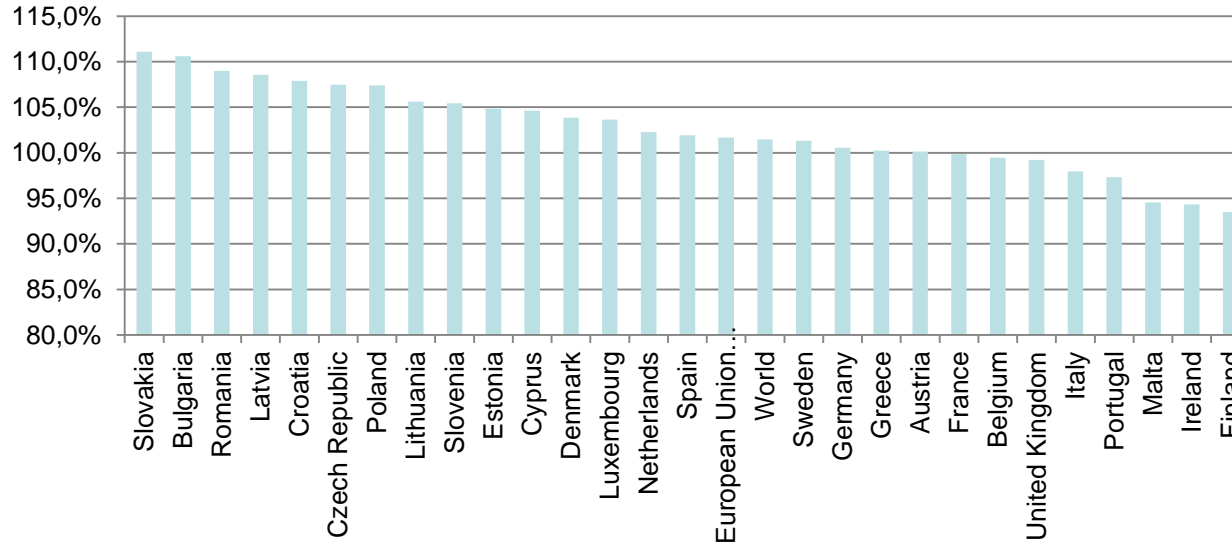
Trade interrelatedness LQ of V4 countries, 2014



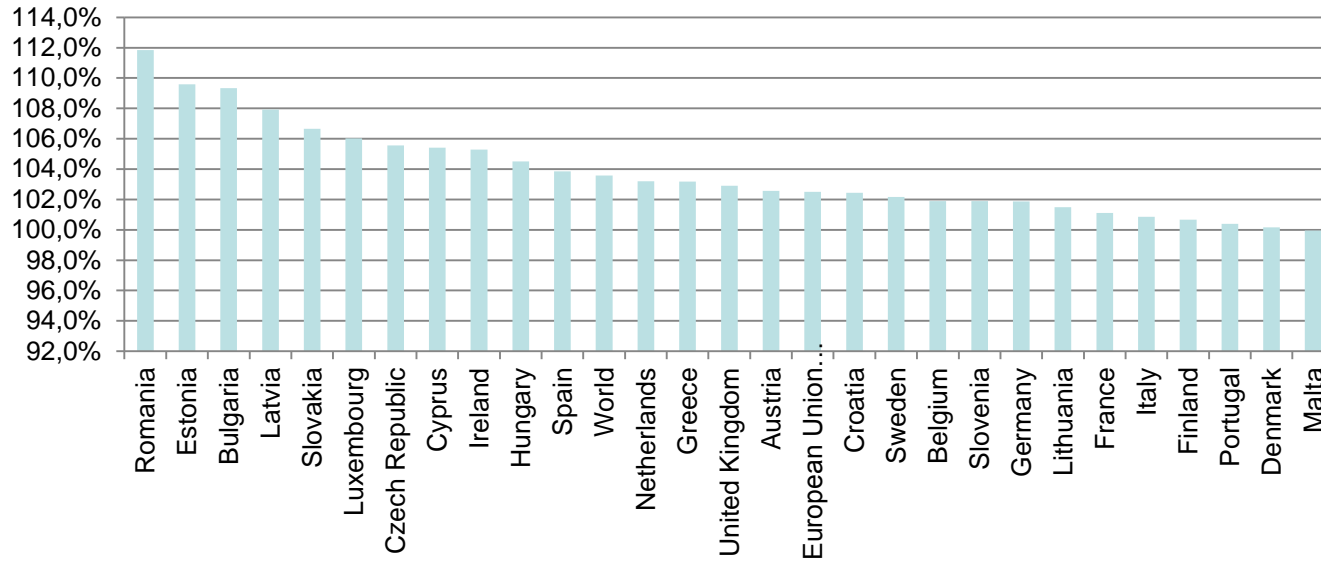
Average changes of the EU relatednes of Czech Republic (2001-2014)



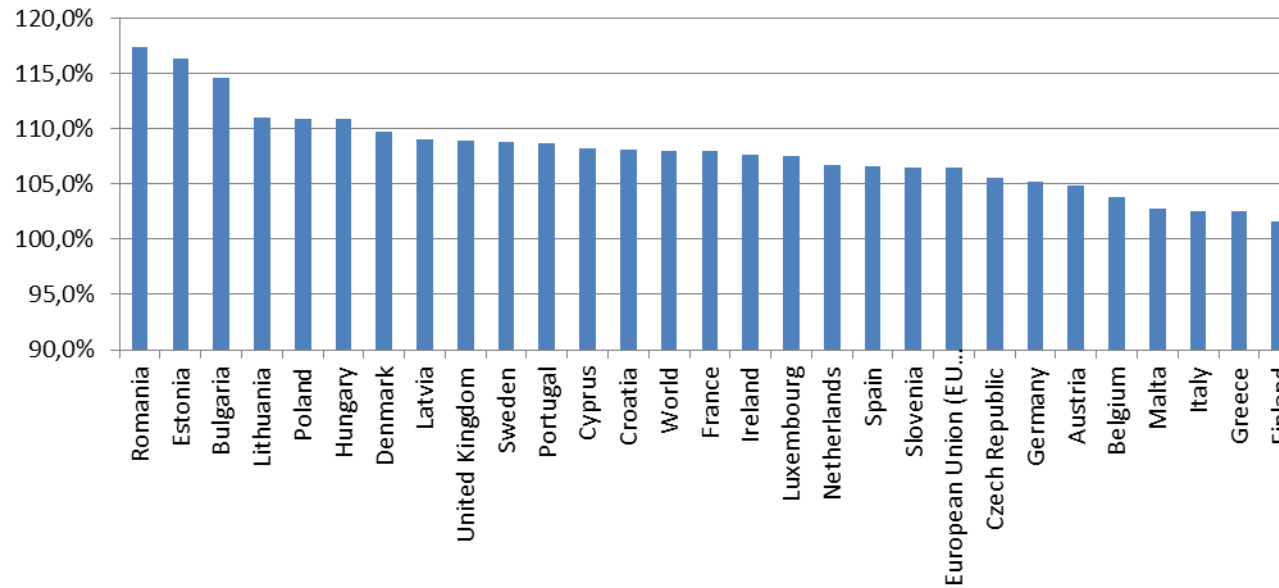
Average changes of the EU relatednes of Hungary (2001-2014)



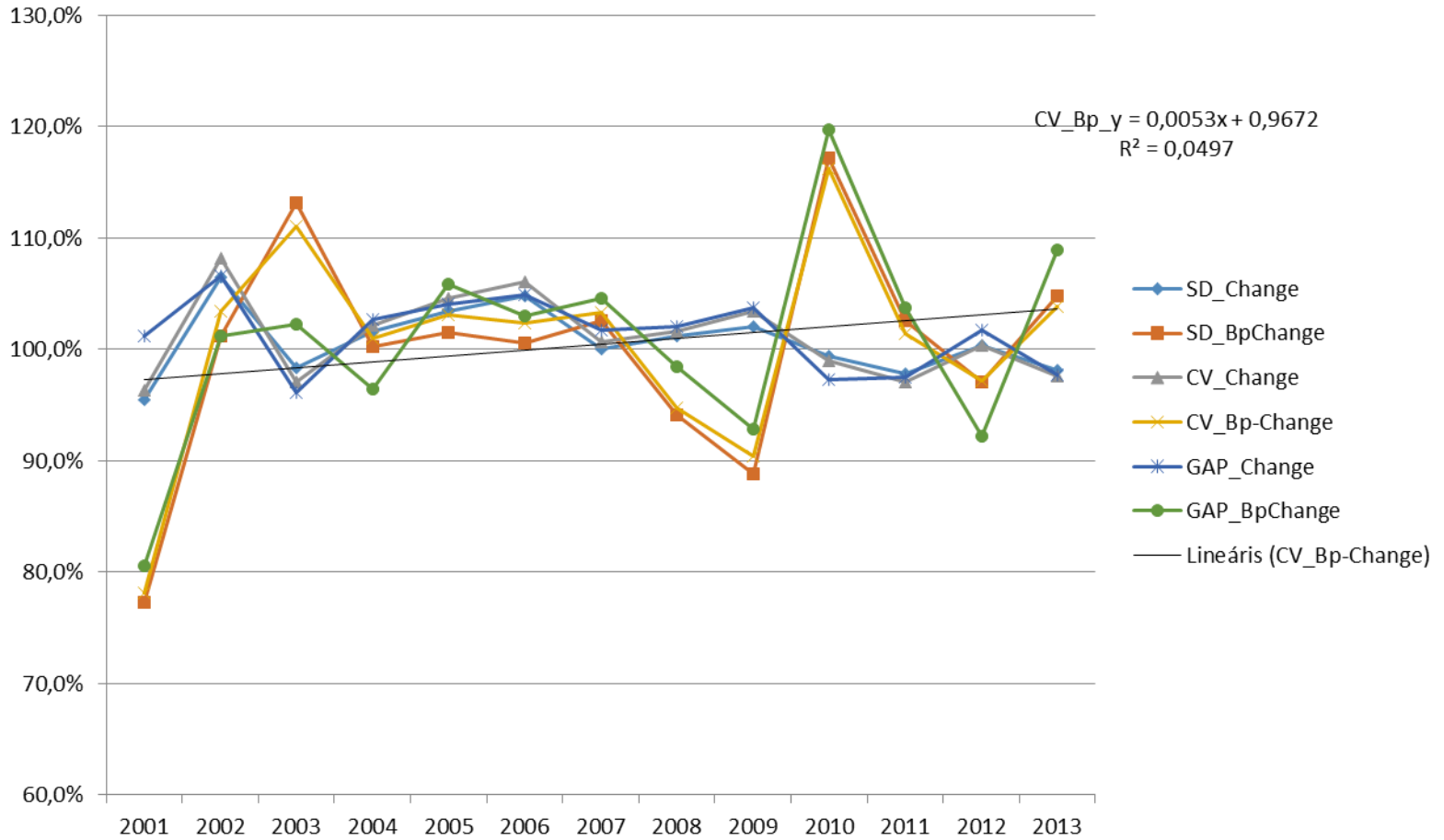
Average changes of the EU relatednes of Poland (2001-2014)



Average changes of the EU relatednes of Slovakia (2001-2014)



Convergence of Hungarian counties based on GDP/capita relation to national average



Correlation coefficients of GDP/capita growth rates of Hungarian counties

	Budapest	Pest	Fejér	Komárom-Esztergom	Veszprém	Győr-Ménfőcsanak-Sopron	Vas	Zala	Baranya	Somogy	Tolna	Borsod-Abaúj-Zemplén	Héves	Nógrád	Hajdú-Bihar	Jász-Nagykun-Szolnok	Szabolcs-Szatmár-Bereg	Bács-Kiskun	Békés	Csongrád	National average	
	112,8%	112,9%	110,7%	114,1%	110,8%	111,6%	111,0%	111,7%	111,0%	111,5%	111,8%	112,2%	112,0%	110,0%	112,0%	112,1%	111,7%	112,4%	110,8%	111,2%	112,2%	
Budapest	1																					
Pest	0,8344	1																				
Fejér	0,3194	0,3841	1																			
Komárom-Esztergom	0,6885	0,878	0,5242	1																		
Veszprém	0,693	0,8718	0,6378	0,9007	1																	
Győr-Ménfőcsanak-Sopron	0,4156	0,5389	0,6951	0,4948	0,6768	1																
Vas	0,3187	0,3184	0,6022	0,4004	0,4337	0,6303	1															
Zala	0,7417	0,7647	0,3578	0,8293	0,7864	0,4102	0,5373	1														
Baranya	0,8951	0,884	0,5042	0,8976	0,8704	0,4905	0,4657	0,8648	1													
Somogy	0,8253	0,8814	0,4415	0,9006	0,8779	0,5594	0,4308	0,921	0,9234	1												
Tolna	0,7867	0,6861	0,193	0,4391	0,507	0,1503	-0,0918	0,524	0,8287	0,6303	1											
Borsod-Abaúj-Zemplén	0,778	0,8389	0,6428	0,9206	0,8403	0,4699	0,4141	0,7156	0,9178	0,8227	0,5271	1										
Héves	0,7928	0,9154	0,4166	0,8665	0,8816	0,5029	0,2648	0,7063	0,9054	0,8823	0,6307	0,8475	1									
Nógrád	0,8443	0,7455	0,3805	0,7804	0,7539	0,4573	0,4554	0,817	0,8875	0,9078	0,5656	0,7903	0,8297	1								
Hajdú-Bihar	0,8399	0,8518	0,3559	0,8848	0,8099	0,452	0,3592	0,8537	0,8994	0,9553	0,6019	0,8257	0,891	0,946	1							
Jász-Nagykun-Szolnok	0,7865	0,8358	0,2883	0,5545	0,5454	0,2286	0,2533	0,5563	0,7619	0,7005	0,6908	0,6522	0,7955	0,8274	0,7794	1						
Szabolcs-Szatmár-Bereg	0,791	0,8673	0,3885	0,9194	0,8943	0,4102	0,3387	0,8701	0,9327	0,938	0,5845	0,8444	0,9281	0,9013	0,9508	0,7549	1					
Bács-Kiskun	0,8005	0,7119	0,5991	0,7058	0,734	0,452	0,4219	0,7012	0,848	0,8289	0,7201	0,8308	0,7985	0,8713	0,797	0,8318	0,7822	1				
Békés	0,7418	0,7986	0,6814	0,8389	0,9024	0,5289	0,3335	0,7132	0,876	0,8632	0,6731	0,8898	0,8931	0,8222	0,8266	0,7477	0,8762	0,9224	1			
Csongrád	0,8268	0,7492	0,4925	0,8582	0,8028	0,3195	0,3226	0,8337	0,9299	0,8981	0,6487	0,8919	0,8202	0,9043	0,9007	0,7631	0,9219	0,8737	0,8974	1		

Correlation coefficients between the growth rates of industrial production in Hungarian counties

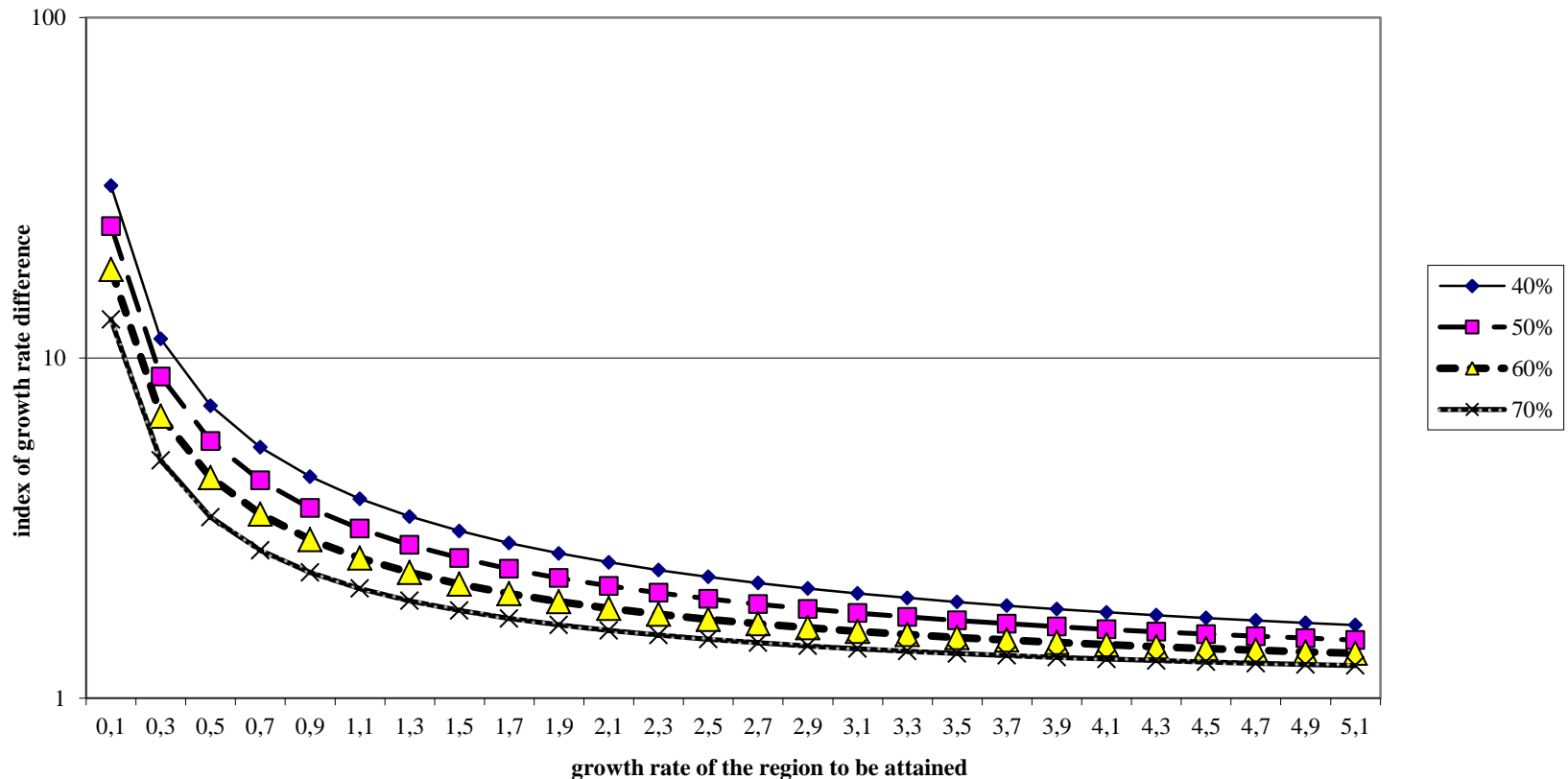
	Budapest	Pest	Fejér	Komárom-Esztergom	Veszprém	Győr-Ménfőcsanak-Sopron	Vas	Zala	Banász	Somogy	Tolna	Borsod-Abaúj-Zemplén	Heves	Nógrád	Hajdú-Bihar	Miskolc-Nagykanizsa-Szolnok	Szabolcs-Szatmár-Bereg	Bács-Kiskun	Békés	Csongrád	National average	
Budapest	102,0																					103,4
Pest	0,73013	1																				
Fejér	0,38641	0,12312	1																			
Komárom-Esztergom	0,457	0,67523	0,18631	1																		
Veszprém	0,54752	0,58131	0,49527	0,29572	1																	
Győr-Ménfőcsanak-Sopron	0,73416	0,55574	0,66405	0,16454	0,69046	1																
Vas	0,70693	0,52979	0,28825	0,06483	0,58712	0,85597	1															
Zala	0,60355	0,43248	-0,1103	0,25988	0,28571	0,17014	0,17403	1														
Banász	0,43918	0,42241	0,41352	0,10335	0,47693	0,78443	0,75286	-0,0334	1													
Somogy	0,67513	0,51271	-0,0738	0,19138	0,263	0,30366	0,32793	0,85305	0,08423	1												
Tolna	0,07449	-0,1666	0,44024	-0,3574	0,22604	0,24298	0,10445	-0,012	0,2631	-0,0637	1											
Borsod-Abaúj-Zemplén	0,61019	0,43943	0,70319	0,51155	0,62429	0,62652	0,42404	0,11878	0,28445	0,0879	0,16151	1										
Heves	0,4967	0,3681	0,60793	0,45003	0,56862	0,40055	0,15507	0,15040	0,04359	0,17016	0,39047	0,6975	1									
Nógrád	0,85804	0,75235	0,33808	0,41652	0,52217	0,7207	0,58415	0,64517	0,48516	0,7055	0,10141	0,49639	0,49196	1								
Hajdú-Bihar	0,48972	0,33741	0,29062	0,21613	0,61408	0,49814	0,40087	0,58793	0,3124	0,27136	0,03157	0,35251	0,23104	0,54573	1							
Miskolc-Nagykanizsa-Szolnok	0,43002	0,23257	0,62399	0,38172	0,30191	0,28445	0,08737	-0,0322	0,10339	0,14003	0,05894	0,4651	0,415	0,15322	-0,0648	1						
Szabolcs-Szatmár-Bereg	0,52597	0,26335	0,48239	0,18397	0,57825	0,56427	0,52336	0,39116	0,27587	0,24538	0,3745	0,49077	0,57739	0,46594	0,63843	0,03653	1					
Bács-Kiskun	0,04077	-0,1059	0,05575	-0,2929	0,28786	0,30364	0,41219	-0,1726	0,41736	-0,1012	0,51651	0,10288	0,23291	0,03742	-0,0112	-0,2619	0,3021	1				
Békés	0,70321	0,55619	0,43019	0,22201	0,7141	0,8848	0,86961	0,36058	0,74074	0,35843	0,26500	0,56298	0,3615	0,73182	0,65623	-0,0302	0,7353	0,4657	1			
Csongrád	0,70757	0,44141	0,78308	0,37183	0,54282	0,71484	0,43067	0,21677	0,33047	0,27679	0,3787	0,73526	0,71325	0,55882	0,31199	0,50671	0,58631	0,18153	0,56194	1		

Difference between GDP/capita and industrial production growth correlation

	Budapest	Pest	Fejér	Komárom-Esztergom	Veszprém	Győr-Ménfőcsanak-Sopron	Vas	Zala	Banász	Somogy	Tolna	Borsod-Abaúj-Zemplén	Heves	Nógrád	Hajdú-Bihar	Miskolc-Nagykanizsa-Szolnok	Szabolcs-Szatmár-Bereg	Bács-Kiskun	Békés	Csongrád	National average	
GDP/capita growth	112,8%	112,9%	110,7%	114,1%	110,8%	111,6%	111,0%	111,7%	111,0%	111,5%	111,8%	112,2%	112,0%	110,0%	112,0%	112,1%	111,7%	112,4%	110,8%	111,2%	112,2%	
Industrial growth	102,0%	103,2%	99,1%	108,8%	107,6%	104,0%	107,8%	100,1%	98,1%	102,1%	101,4%	104,4%	107,1%	98,9%	101,3%	108,1%	101,5%	108,8%	99,2%	100,8%	103,4%	
Budapest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pest	0,10427	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fejér	-0,087	0,26093	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Komárom-Esztergom	0,23148	0,20278	0,35789	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Veszprém	0,14544	0,29045	0,14449	0,60498	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Győr-Ménfőcsanak-Sopron	-0,3186	-0,0189	0,03108	0,33022	-0,0137	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vas	-0,3883	-0,2113	0,31396	0,33561	-0,1535	-0,2257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zala	0,13816	0,33224	0,48813	0,56948	0,50071	0,24009	0,38329	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Banász	0,45593	0,46159	0,09099	0,79425	0,39342	-0,294	-0,2669	0,89819	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Somogy	0,15014	0,36874	0,51533	0,70922	0,61489	0,25577	0,10292	0,06793	0,83913	0	0	0	0	0	0	0	0	0	0	0	0	0
Tolna	0,71223	0,83263	-0,2472	0,79645	0,281	-0,0624	-0,1962	0,536	0,36562	0,70299	0	0	0	0	0	0	0	0	0	0	0	0
Borsod-Abaúj-Zemplén	0,16786	0,39942	-0,0604	0,40902	0,216	-0,1567	-0,0099	0,59679	0,63334	0,73482	0,34559	0	0	0	0	0	0	0	0	0	0	0
Heves	0,32407	0,54661	-0,1914	0,41651	0,31298	0,10231	0,10071	0,54676	0,86178	0,71213	0,24027	0,14967	0	0	0	0	0	0	0	0	0	0
Nógrád	-0,0138	-0,0068	0,04242	0,36387	0,23173	-0,2634	-0,1287	0,17185	0,40234	0,20232	0,46416	0,20391	0,33774	0	0	0	0	0	0	0	0	0
Hajdú-Bihar	0,35021	0,5144	0,06524	0,69883	0,16585	-0,0482	-0,0417	0,26582	0,58704	0,68393	0,57031	0,47321	0,64993	0,40022	0	0	0	0	0	0	0	0
Miskolc-Nagykanizsa-Szolnok	0,35553	0,40325	-0,3357	0,19277	0,24354	-0,0558	0,16594	0,58846	0,65853	0,56044	0,63162	0,18713	0,38048	0,6742	0,84413	0	0	0	0	0	0	0
Szabolcs-Szatmár-Bereg	0,26502	0,60395	-0,0698	0,73539	0,31609	-0,154	-0,1848	0,47892	0,65705	0,60259	0,21001	0,35364	0,35068	0,43537	0,51233	0,71836	0	0	0	0	0	0
Bács-Kiskun	0,75969	0,61784	0,54335	0,93812	0,46833	0,14837	0,00974	0,87379	0,43062	0,93017	0,20355	0,72793	0,59619	0,83391	0,80826	1,09308	0,48014	0	0	0	0	0
Békés	0,03882	0,2424	0,2512	0,61685	0,18835	-0,3559	-0,5261	0,34361	0,12826	0,50478	0,40796	0,3271	0,51161	0,09039	0,17034	0,77789	0,14092	0,45672	0	0	0	0
Csongrád	0,11921	0,30775	-0,2908	0,48634	0,26002	-0,3953	-0,1081	0,61688	0,59947	0,60929	0,26998	0,15663	0,10694	0,34551	0,58871	0,16337	0,33962	0,69213	0,33543	0	0	0

Closing the gap?

NECESSARY DIFFERENCE OF GROWTH RATES TO REACH EQUAL LEVELS IN 30 YEARS FROM VARIOUS STARTING GAPS



BUT WHAT IS THE ORIGINAL MEANING OF COHESION?

- „Cohesion is the bonds of trust between members of a small group.
....Cohesion is inversely proportional to the number of men in the group. Cohesion is a property of groups who share face-to-face relationships. ...”
- Cohesion is a function of continuity, of personal relationships built on trust and common experiences.
- *Stability + Stress + Success = Cohesion*
(S + S + S = C) (Wong, 1985).

BUT WHAT IS THE ORIGINAL MEANING OF COHESION?

- Dimensions of cohesion:
 - Cohesion in physics and chemistry
 - Technological cohesion
 - Economic cohesion
 - Social cohesion
 - Territorial cohesion

Generating factors of cohesion

- Identity
- Interest
- Culture
- Tolerance, openness
- Contacts (frequency)
- Synergies + multiplier impacts
- Distance (in various spaces
 - usually the smaller the better)
- Economics of efforts (smaller for and higher against + low costs to sustain in relation to separation)
- Elasticity
- Advantages of belonging to/ being a member of

Counteracting factors of cohesion

- Conflicts
- Competition
- Distance (large)
- Rare contacts
- Economy –high costs of efforts to establish or sustain
- Rigidity
- Intolerance
- Individualism
- Disadvantages of belonging to / being a member
- Closed hierarchies (against external cohesion)

There are four types of cohesion

(Stewart, 1991):

- *Horizontal Cohesion* is the trust shared between peers. It is the bonds of confidence within a single unit
- *Vertical Cohesion* is the bonding between subordinates and leaders.
- *Organizational Cohesion* is the relationship of the soldier to his larger military organization. It binds small groups to a higher purpose.
- *Societal Cohesion* is the relationship between an army and the society it serves.

The advantages of cohesive units

- • *Cohesive units fight better.*
- • *Cohesive units suffer fewer battle casualties.*
- • *Cohesive units suffer fewer non-battle casualties.*
- • *Cohesive units train to higher standards.*
- • *Cohesive units do not disintegrate under stress.*
- • *Cohesive units require less administrative support.*
- • *Cohesive units provide a higher quality of life.*

(Improving Unit Cohesion, p.6.)

Steps to create cohesion

- ***Forming***. Initial development of roles and billets. Testing and assessing of new personalities.
- ***Storming***. Competition for positions and informal authority. Cohesion cannot exist until this stage, which is marked by considerable emotional tension, has been completed.
- ***Norming***. Development of group norms and cohesion. Development of group pressure to enforce conformity.
- ***Performing***. Productive task activity.
- (Improving Unit Cohesion, p.12-13.)

Measuring cohesion

- Measuring **stability**, the prerequisite for cohesion.
 - Unit stability can be captured by generating a **familiarity index**, an average of the time each man in the unit has shared with his comrades.
- **Leader Stability Index** for a unit represents the average number of months that each leader has served in his particular billet.

What are we speaking about?

- OUR APPROACH TO POLICY DEPENDS ON OUR PRIORITY
- Clear distinction between regional policy
 - for integrated territorial units (container space approach)
 - for spatial interaction (functional, relative space approach)
- and cohesion policy
 - between closely interrelated , interdependent territorial units
 - for developing common identity and responsibility

SOME CONCLUSIONS

- Methodological opportunities for measuring territorial cohesion:
 - More qualitative research
 - More primary research – special surveys
 - Developing conditions for regional input-output analysis
 - Indirect statistical indicators reflecting interrelatedness (migration, commuting, transport etc.)

SOME CONCLUSIONS

- Territorial disparities are important influencing factors of territorial cohesion, but it is a much more complex phenomenon and process
- Cohesion policy in the frame of regional policy should be more oriented to
 - increasing tolerance
 - Increasing familiarity
 - Increasing mutual interest and responsibility
 - Increasing interdependence
 - Increasing readiness for co-operation
 - Increasing stability of communities

Thanks for your attention.

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