

# **The economic position and possibilities of Central-Eastern European regions in the advanced producer service company networks**

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# Questions

- Possibilities and power positions of East-Central European regions in APS networks (APS firms choosing cities as venues, however with a regional servicing area)
- Relation of APS locational strategies and GDP, MNE locational strategies
- Study based on management consultancies and accountancy companies – role of different APS networks, special focus on accountancy networks
- Division lines in the macro-region, East-West, North-South divisions

# Approach

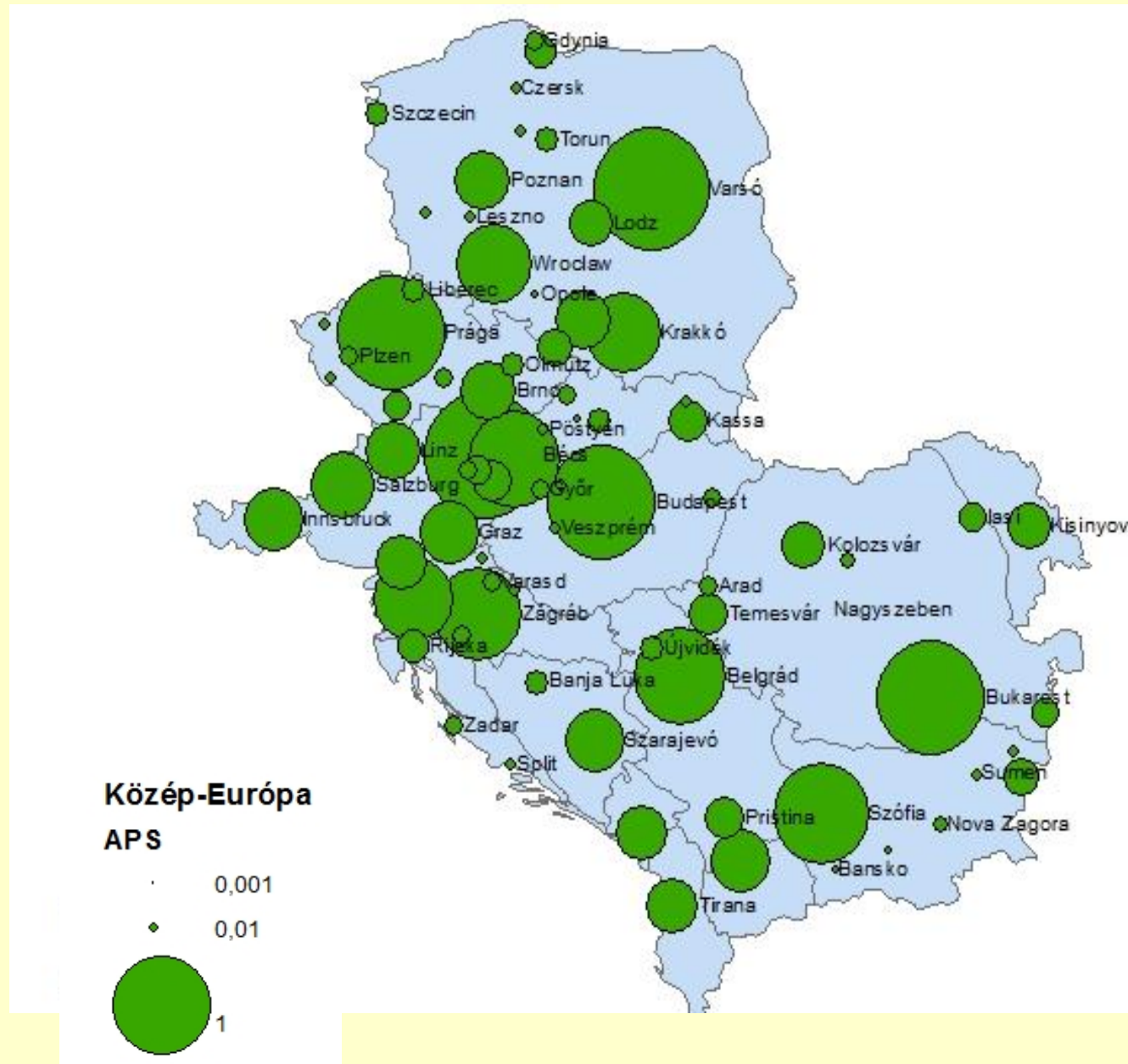
- Globalized world economy – international flow of factors, activity of MNEs
- High value added goods, top technological solutions, primary role of services
- Transfers of technology, capital and knowledge takes place within MNE networks increasingly
- Reduction of economic distances: reduction of transport and communication costs, information communication network, mobile communication
- Outsourcing of strategic services – establishment of APS network

# Approach

- APS network already signal economic development, integration to global networks, processes
- Examination area: Visegrad countries, Romania, Bulgaria
- All below 75% of EU average in GDP/ capita, except for capital regions
- Gap is reducing based on GDP/ capita between East Central European countries and Western European ones in 2001 – 2015 – slowdown in 2008 and 2011
- 3 development hubs (7th CR): less developed: HU, PL, RO, BG, moderately developed countries: CZ, SK

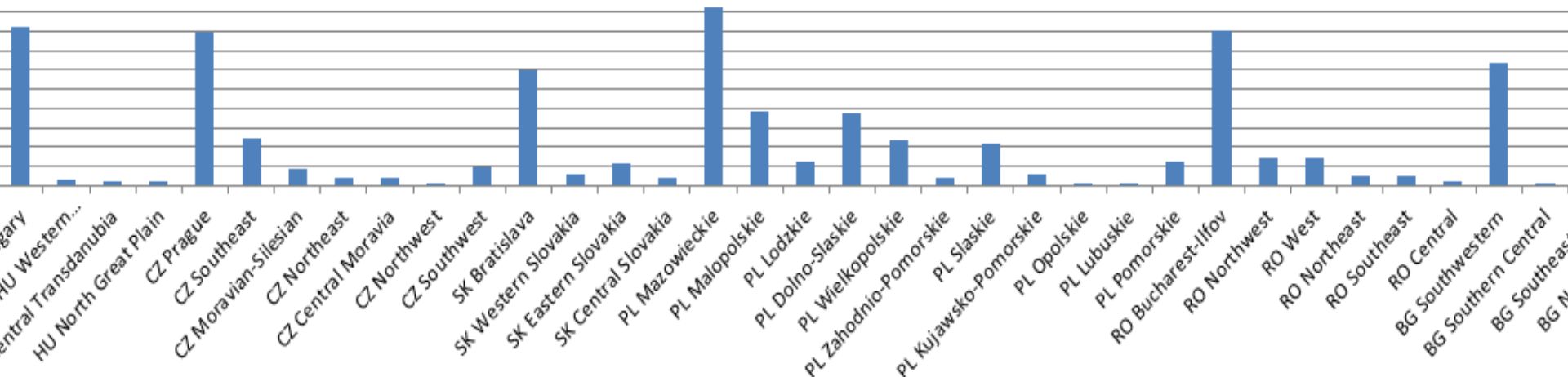
NUTS 2	city	Population	APS presence
HU Central Hungary	Budapest	1,757,700	41
HU Western Transdanubia	Győr	129,300	2
HU Central Transdanubia	Komárom, Veszprém	79,600	2
HU North Great Plain	Debrecen	203,500	1
CZ Prague	Prague	1,267,400	40
CZ Southeast	Brno, Jihlava	427,700	13
CZ Moravian-Silesian	Ostrava	292,600	5
CZ Northeast	Liberec	103,200	3
CZ Central Moravia	Olomouc	100,100	3
CZ Northwest	Karlovy Vary	49,300	1
CZ Southwest	Plzen, Ceske Budejovice, Domazlice	274,400	6
SK Bratislava	Bratislava	422,900	30
SK Western Slovakia	Pozsavka Bystrica, Prievidza, Piestany	115,200	3
SK Eastern Slovakia	Kosice, Presov	329,100	6
SK Central Slovakia	Besztercebánya	78,700	2
PL Mazowieckie	Warsaw	1,744,300	50
PL Malopolskie	Kraków	761,000	17
PL Lodzkie	Lódz	700,900	6
PL Dolno-Slaskie	Wroclaw	635,700	18
PL Wielkopolskie	Poznan, Leszno	606,800	14
PL Zahodnio-Pomorskie	Szczecin	405,600	3
PL Slaskie	Katowice	299,900	7
PL Kujawsko-Pomorskie	Torun, Bydgoszcz	558,200	3
PL Opolskie	Opole	118,900	1
PL Lubuskie	Zielona Gora	138,700	1
PL Pomorskie	Gdansk, Czersk, Gdynia	462,200	7
RO Bucharest-Ilfov	Bucharest	1,883,400	41
RO Northwest	Cluj Napoca	324,500	7
RO West	Timisoara, Arad	478,200	8
RO Northeast	Iasi	290,400	3
RO Southeast	Constanta	283,800	3
RO Central	Sibiu, Targu Mures	147,200	2
BG Southwestern	Sofia, Bansko	1,240,400	30
BG Southern Central	Plovdiv	341,600	1
BG Southeast	Novi Z	21,400	1

# APS index of cities in Central Europe

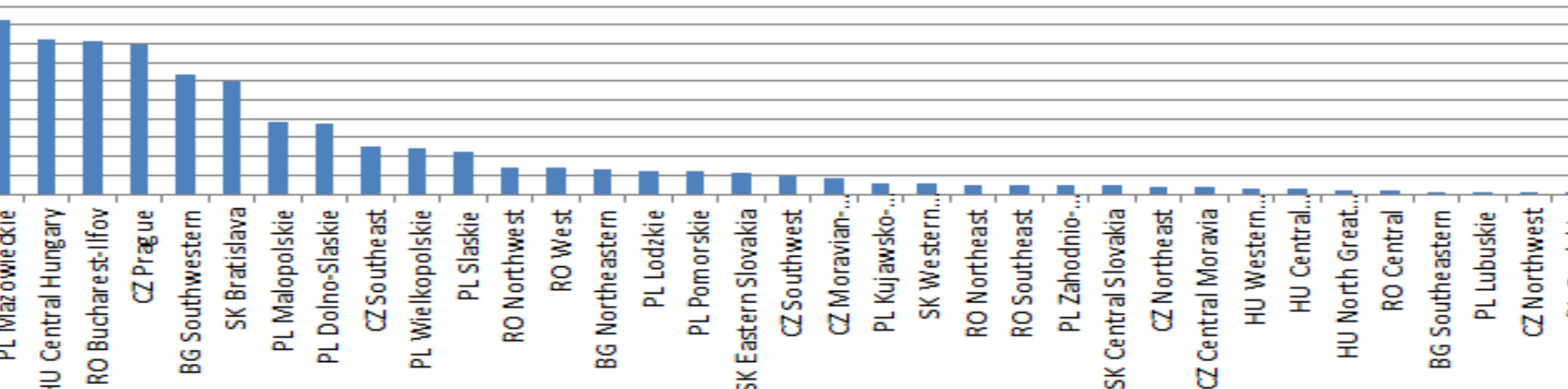


	<b>NUTS 2 regions with at least 5 APS hosting city</b>	<b>NUTS 2 regions with 2 APS hosting city</b>	<b>NUTS 2 regions with 1 APS hosting city (only accountancy network)</b>	<b>NUTS 2 regions with no APS hosting city</b>
<b>Hungary</b>	Central Hungary	Western-Transdanubia	Central-Transdanubia, North-Great-Plain	Northern Hungary, South-Great-Plain, South Transdanubia
<b>Czech Republic</b>	Prague, Southeast, Moravian-Silesian	Southwest, Northwest, Northeast, Central Moravia		Central Bohemia
<b>Slovakia</b>	Bratislava, Eastern Slovakia	Central Slovakia	Western Slovakia	-
<b>Poland</b>	Mazowieckie, Lodzkie, Malopolskie, Slaskie, Dolnoslaskie, Wielkopolskie, Pomorskie	Kujawsko-Pomorskie, Zachodnio-Pomorskie	Lubuskie, Opolskie	Lubelskie, Podkarpackie, Swietokrzyskie, Podlaskie, Warminsko-Mazurskie
<b>Romania</b>	Bucharest-Ilfov, Northwest, West	Northeast, Southeast	Central	South-Muntenia, Southwest Oltenia
<b>Bulgaria</b>	Southwestern, Northeastern		Southern Central, Southeastern	Northwestern, Northern Central

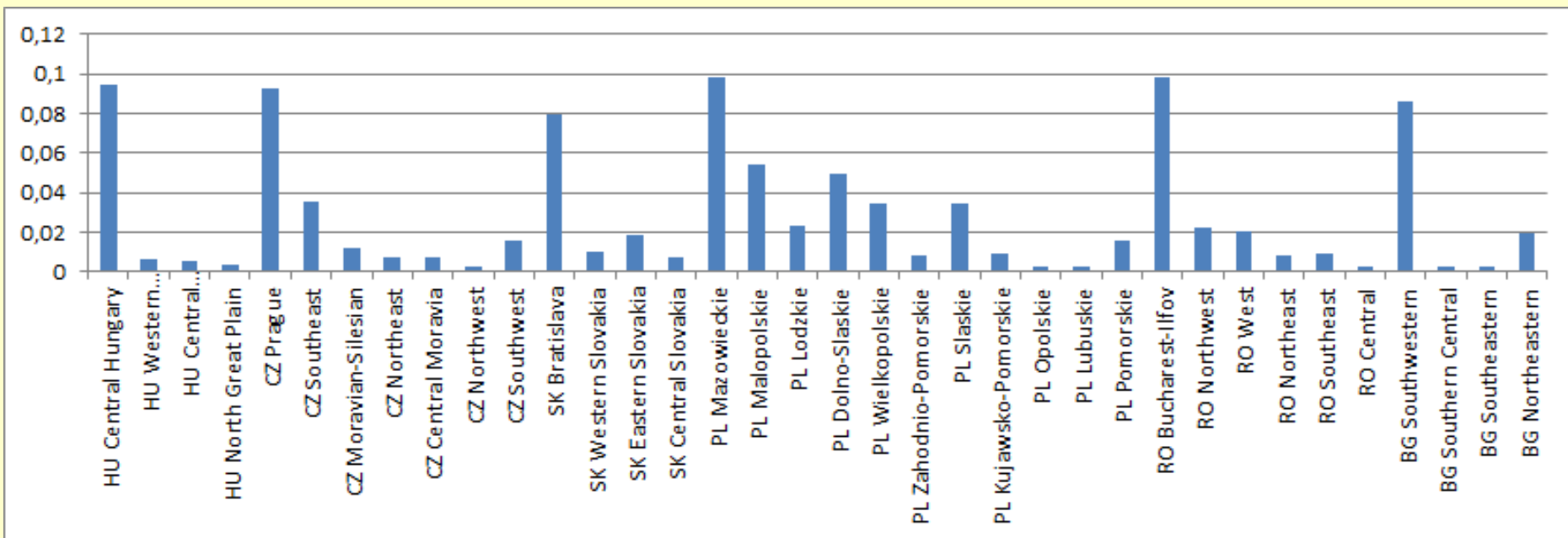
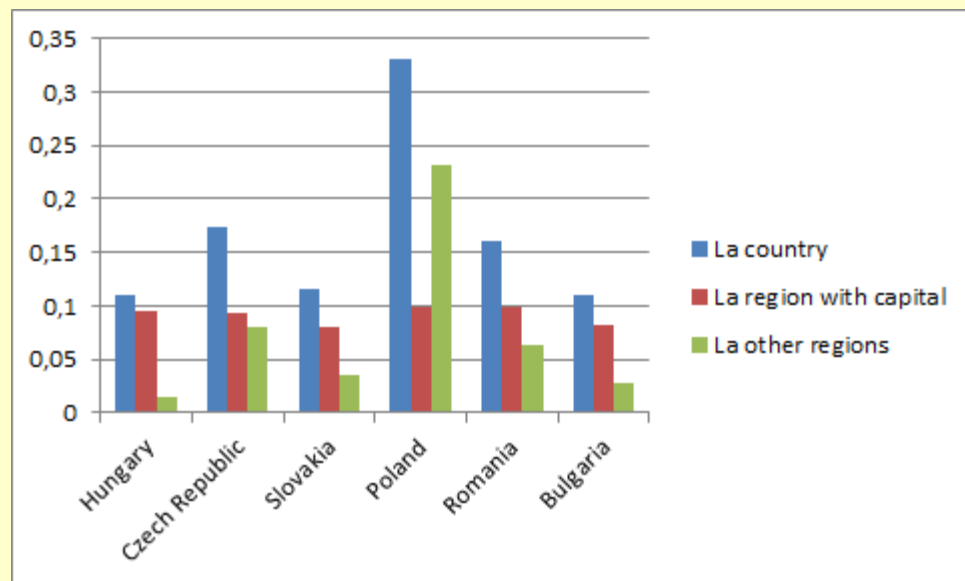
## APS index



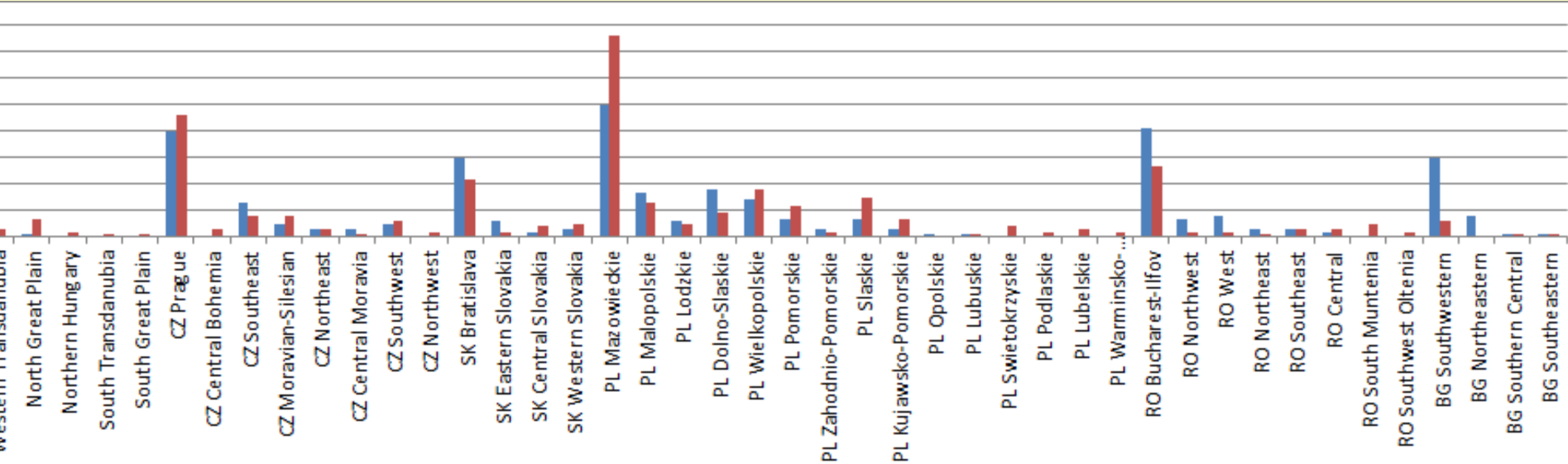
## APS

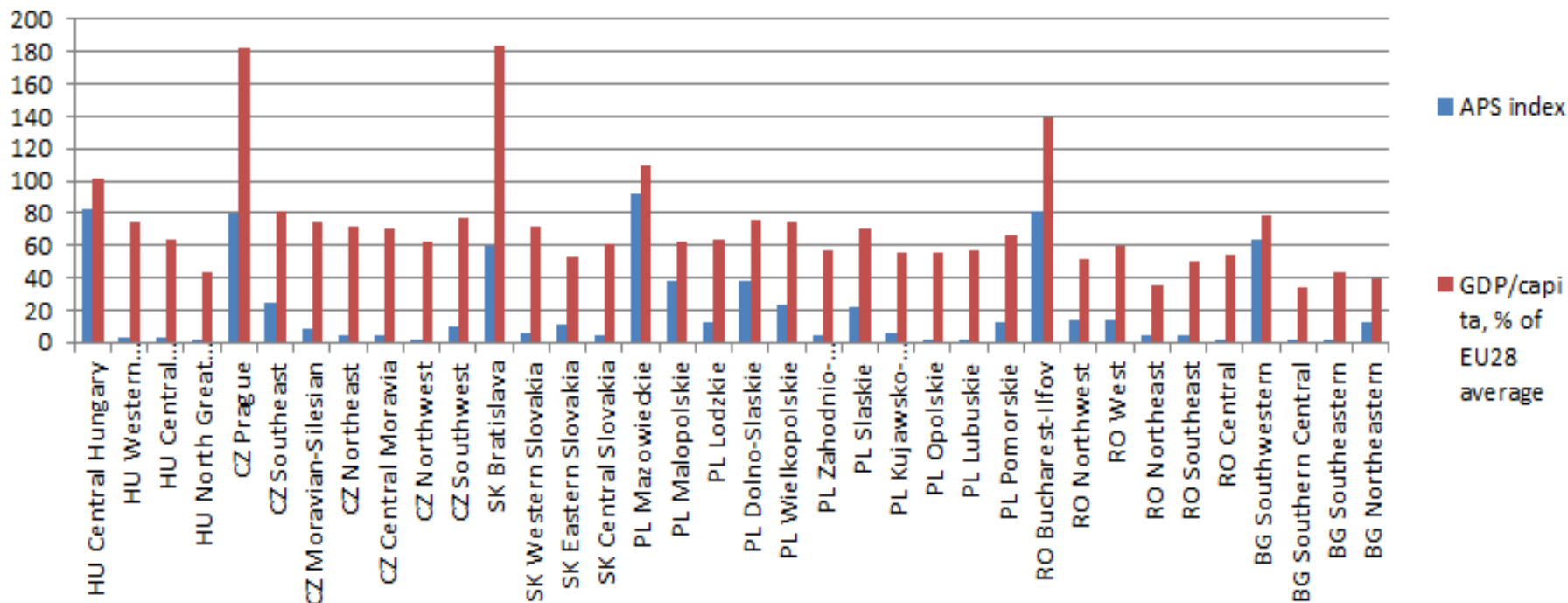


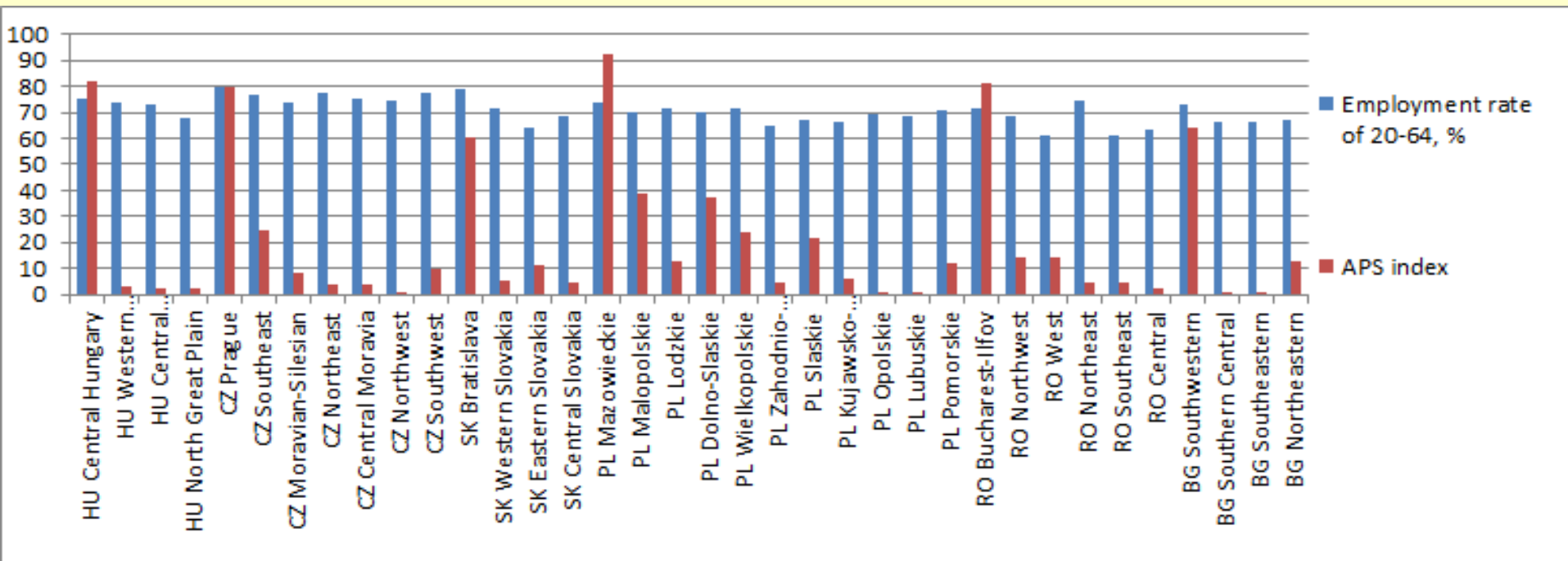




# APS and MNE presence in the regions



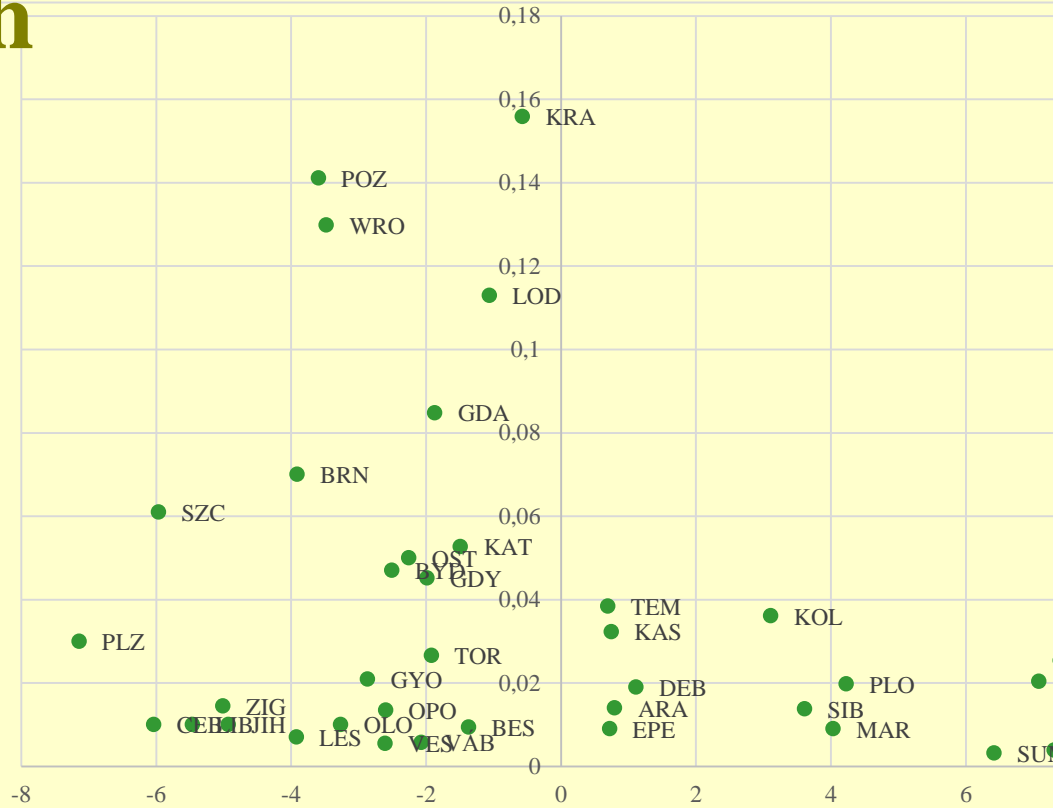
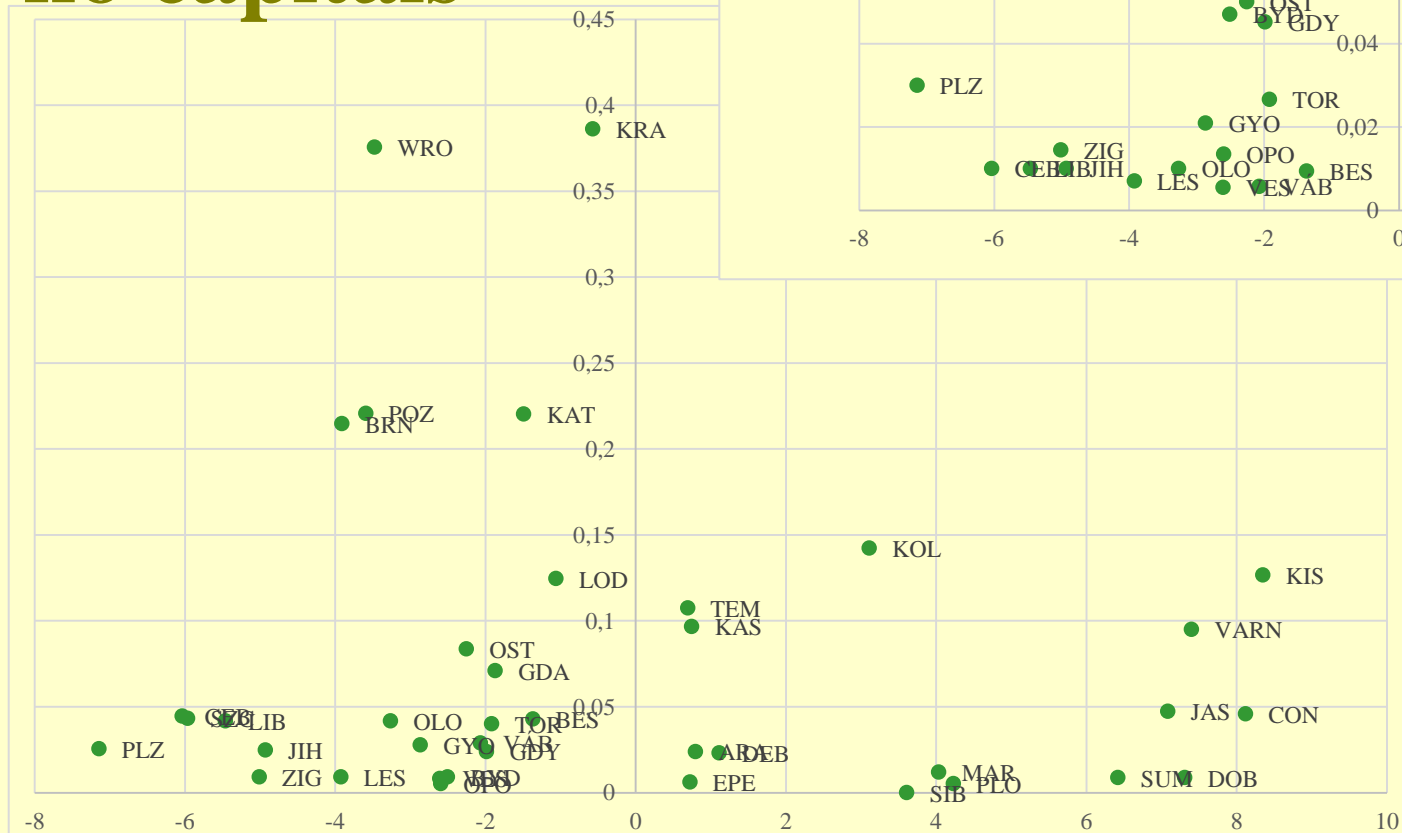




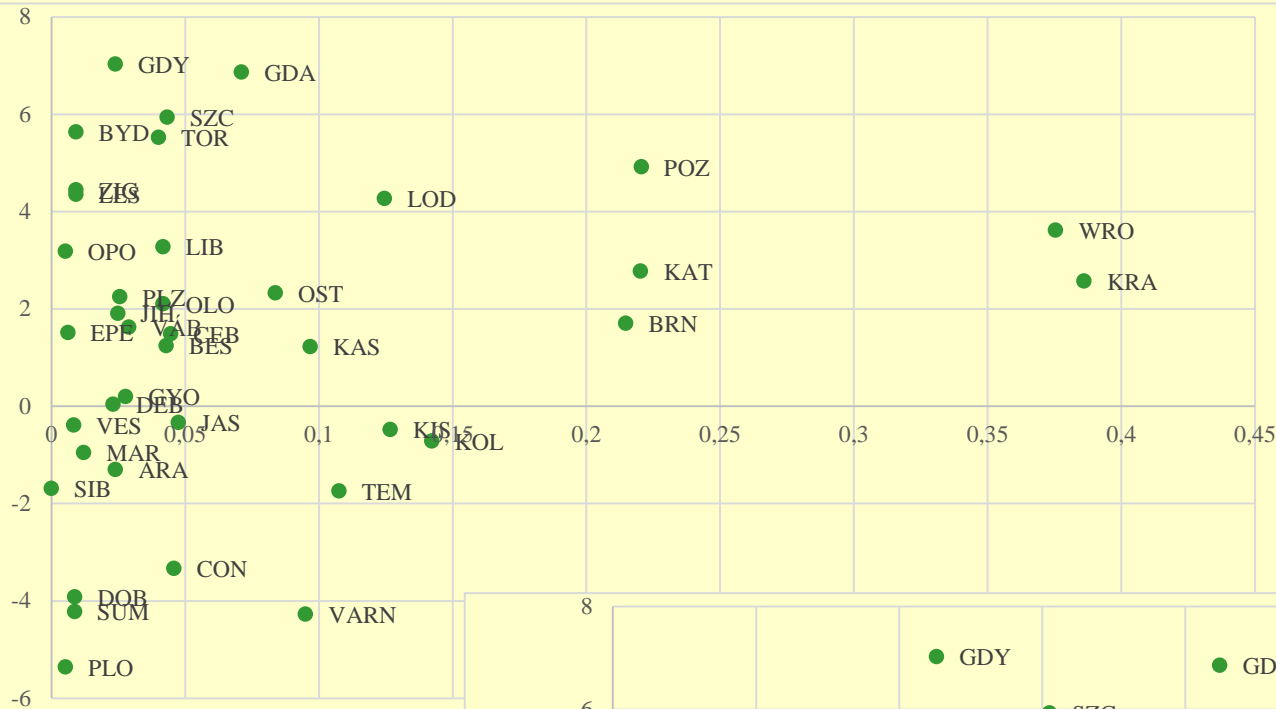
Value	Regions with at least 5 APS networks	Regions with at 2-4 APS networks	Regions with 1 APS networks
1	Central Hungary (Budapest)	-	-
0,89	Prague, Bratislava, Mazowickie (Warsaw), Bucharest-Ilfov, BG Southwestern (Sofia)	-	-
0,78	BG Northeastern (Varna), Malopolskie (Kraków), Lodzkie (Łódź), Dolno-Slaskie (Wrocław), Wielkopolskie (Poznan), Pomorskie (Gdansk),	RO Southeast (Constanca), Zahodnio-Pomorskie (Szczecin)	-
0,67	CZ Southeast (Brno), Moravian-Silesian (Ostrava), Eastern Slovakia (Kassa), Slaskie (Katowice), RO West (Timisoara),	-	<u>HU North Great Plain (Debrecen), BG Southern Central (Plovdiv)</u>
0,56	RO Northwest (Cluj Napoca)	Western Transdanubia (Győr), CZ Northeast (Liberec), CZ Southwest (Plzen), Kujawsko-Pomorskie (Torun), RO Northeast (Iasi) Central Moravia (Olomouc)	<u>Opolskie (Opole)</u> Kujawsko-Pomorskie (Bydgoszcz), PL Pomorskie (Gdynia), <u>RO Central (Sibiu)</u> , RO West (Arad)
0,44	-	CZ Southeast (Jihlava)	Eastern Slovakia (Presov), <u>Lubuskie (Zielona Gora)</u> , BG Northeastern (Sumen), <u>RO Central (Targu Mures)</u>
0,33	-	CZ Southwest (Ceske Budejovice), Central Slovakia (Besztercebánya)	<u>HU Central Transdanubia (Komárom), HU Central Transdanubia (Veszprém), CZ Northwest (Karlovy Vary), Western Slovakia (Piestany)</u> , BG Northeastern (Dobrich)
0,22	-	-	<u>Western Slovakia (Pozsavka Bystrica), BG Southeastern (Nova Zagora)</u>
0,11	-	-	CZ Southwest (Domazlice), <u>Western Slovakia (Prievidza)</u> , Pomorskie (Czersk), Wielkopolskie (Leszno), BG Southwestern (Bansko)
0	-	-	

# North-South GDP no capitals

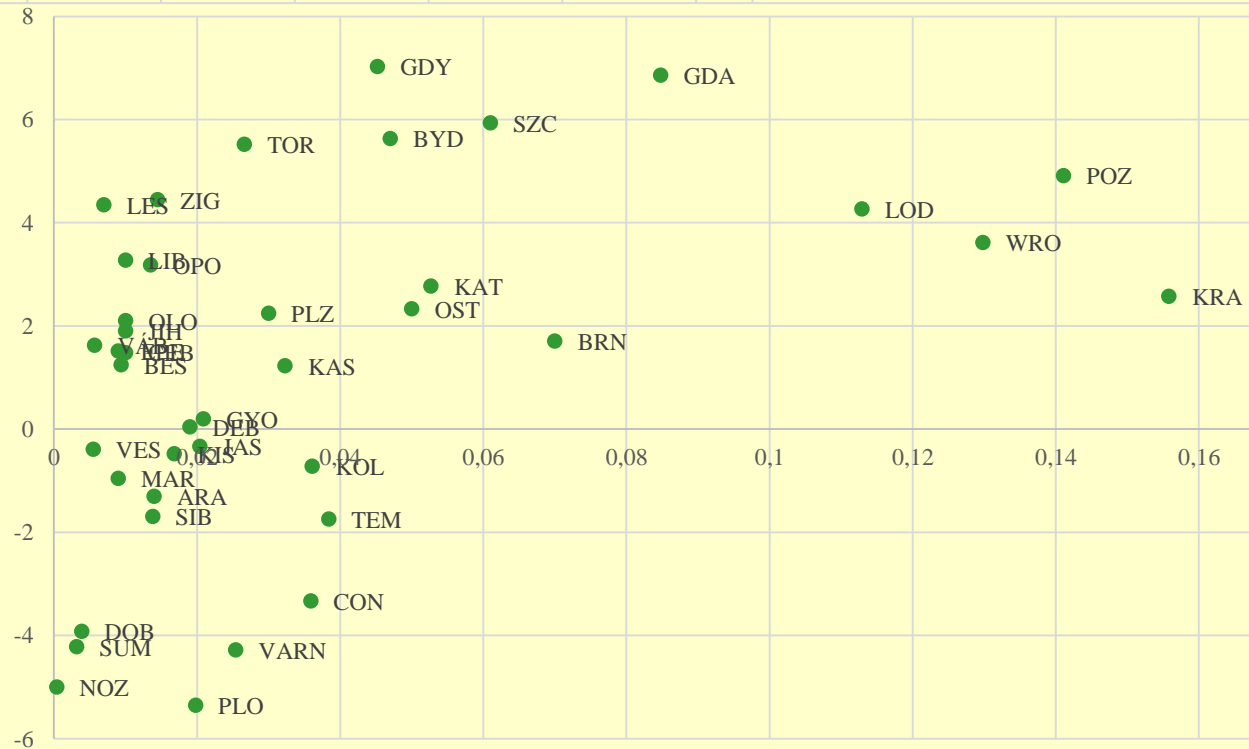
# North-South APS no capitals



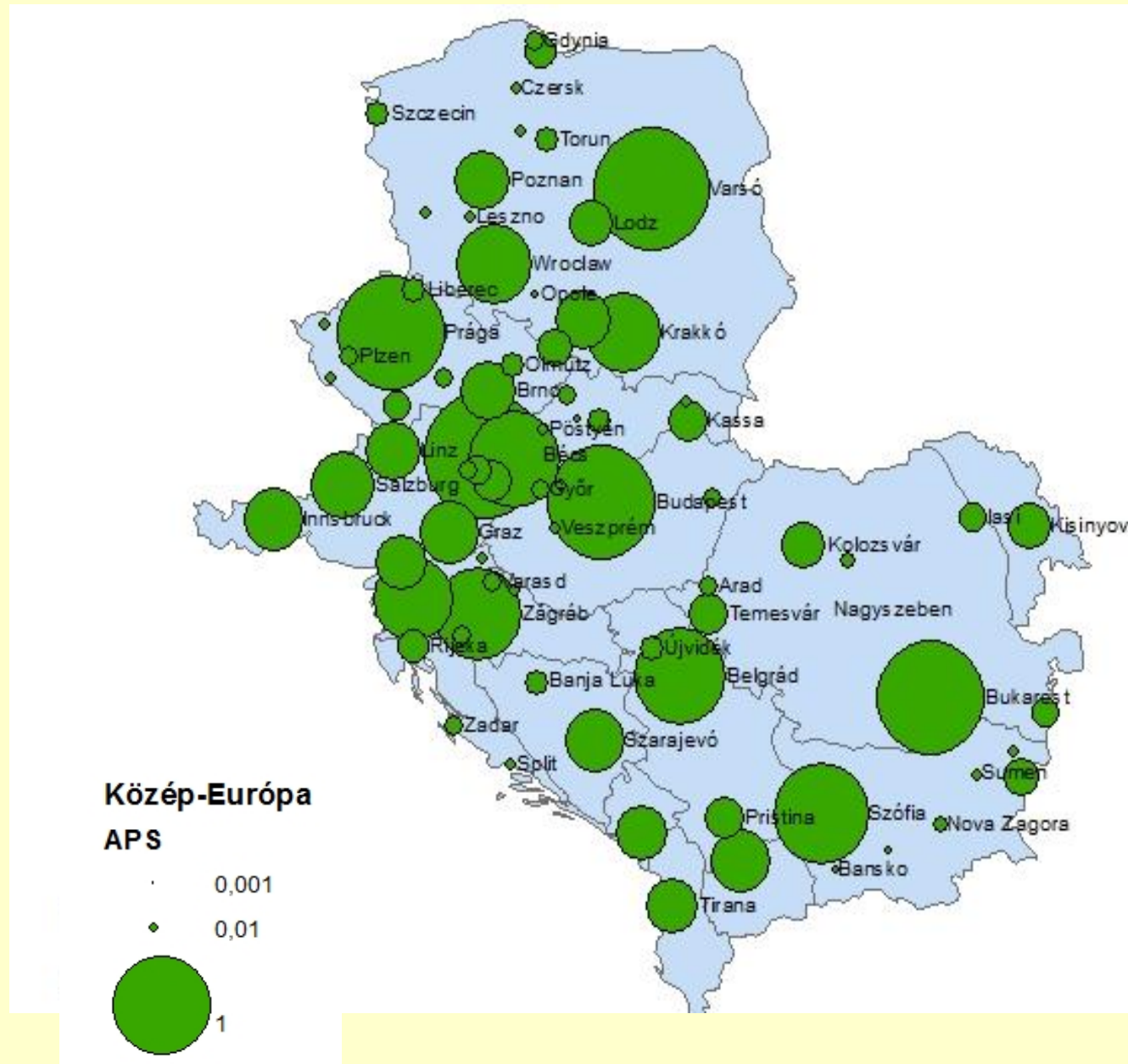
# East-West APS no capitals



# East-West GDP no capitals



# APS index of cities in Central Europe





Thank you for your attention!

# APS impact on the city

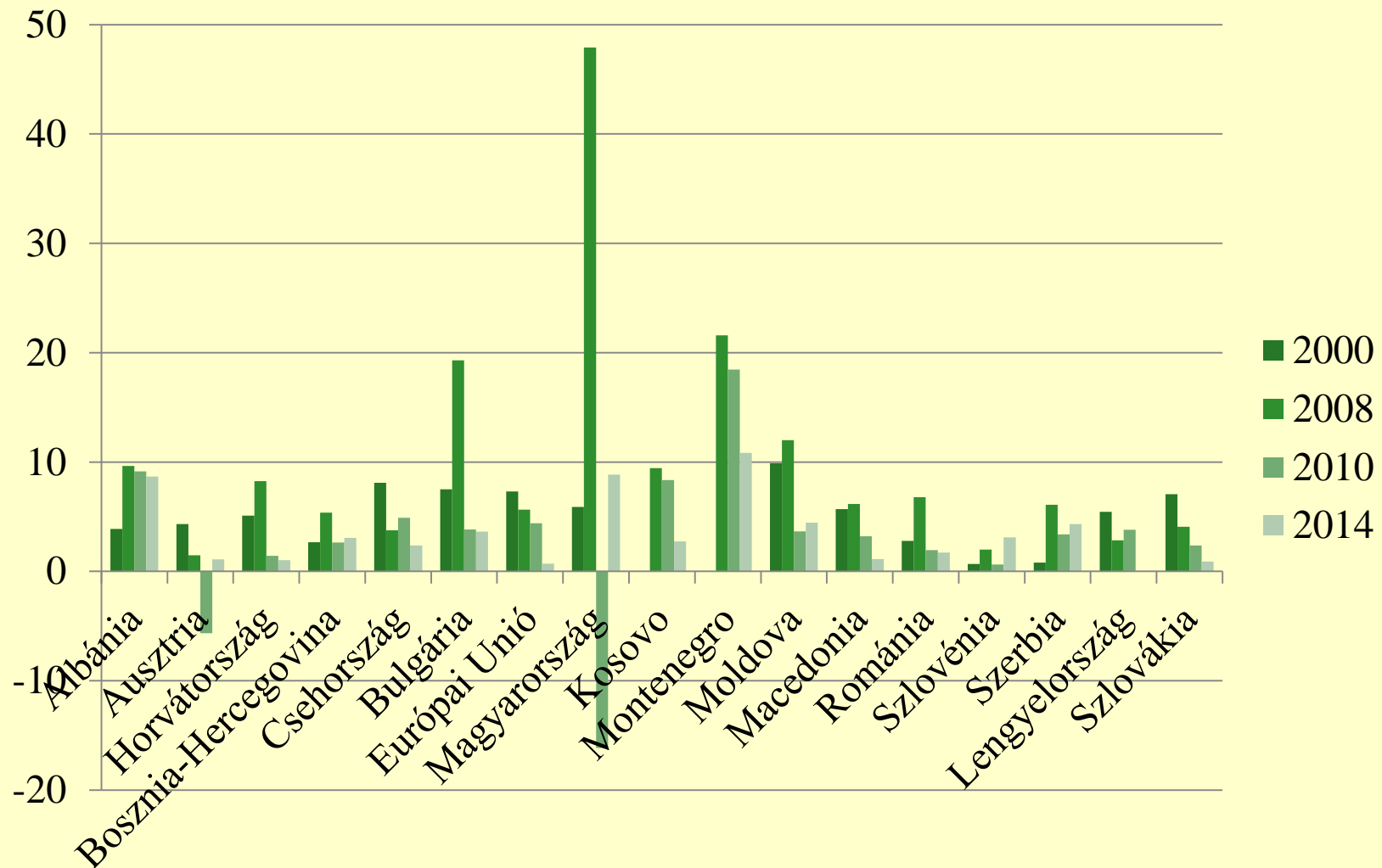
The relation of the APS and the city is multiple:

- the location decision of the APS, that is the presence of the service company
- the service value of a city identifies the size of the nodal point in the network,
- the quantity of flows measure the number of interactions among city-pairs among offices of a certain APS. The measurement of network relations points out the ratio of all APS business interactions in the macro region appearing in a city and provide empirical evidence

# Clusters of APS ranking

Clusters	Cities
<b>1. cluster: 1. level global city</b>	Warsaw
<b>2. cluster: 2. level global city</b>	Prague, Budapest, Bucharest
<b>3. cluster: 3. level global city</b>	Sofia, Bratislava
<b>4. cluster: potential global cities</b>	Kraków, Wrocław
<b>5. cluster: world economic integration</b>	Katowice, Poznan, Brno
<b>6. cluster: world economic connectedness</b>	Debrecen, Ostrava, Liberec, Plzen, Kosice, Łódź, Gdansk, Szczecin, Torun, Opole, Bydgoszcz, Cluj Napoca, Timisoara, Iasi, Konstanca, Varna, Plovdiv, Split, Győr, Olomouc, Zielona Gora, Gdynia, Sibiu, Arad, Targu Mures, Veszprém, Ceske Budejovice, Jihlava, Presov, Banska Bystrica, Leszno, Sumen, Dobrics, Komárom, Karlovy Vary, Domazlice, Pozsavka Bystrica, Prievidza, Piestany, Czersk, Bansko, Nova Zagora,

# FDI data of the macro-region's countries (net inflow, in % of GDP)



# Comparison APS - MNE concentration

country	number of cities with top445 MNE presence	number of cities with APS company presence	number of cities with top445 MNE and APS company presence
<b>Hungary</b>	27	5	5
<b>Czech Republic</b>	23	8	6
<b>Slovakia</b>	10	7	2
<b>Poland</b>	67	15	8
<b>Romania</b>	16	8	4
<b>Bulgaria</b>	4	7	2
<b>Moldova</b>	0	1	0
<b>Slovenia</b>	8	2	1
<b>Croatia</b>	2	7	1
<b>Bosnia- Hercegovina</b>	3	2	2
<b>Serbia</b>	3	2	2
<b>Kosovo</b>	0	1	0
<b>Montenegro</b>	0	1	0
<b>Macedonia</b>	1	1	1