

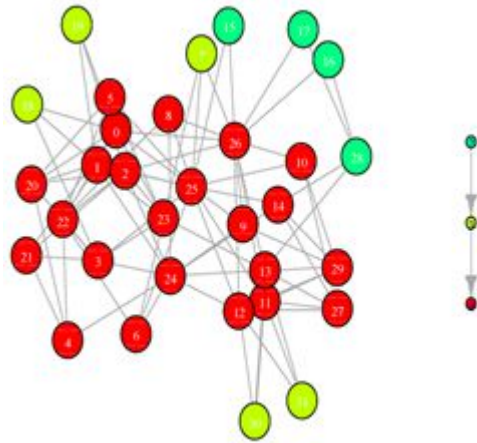
# 7. EU Cohesion policy

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# 1. What is cohesion?

The word “cohesion” appeared in European publications in the 17<sup>th</sup> century related to research in Physics and Chemistry. It is of Latin origin.

**The force by which the molecules of a substance are held together.**



In the 20<sup>th</sup> century the concept “social cohesion” emerged - a force that unites (keeps together) the social groups in society, regardless of ethnic, racial or gender differences.

**Cohesion can be viewed from an objective aspect as the state of the system – to what extent its constituent parts are united and are mutually attracted, if they have common goals and unified behavior. From the subjective aspect, cohesion indicates to what extent the parts of the system feel as part of the group.**

*See: The Canadian Journal of Sociology, Vol. 28, No. 1, Special Issue on Social Cohesion in Canada (Winter, 2003), pp. 5-17.*

## 2. Three types of cohesion in the EU

*Article 3*  
(ex Article 2 TEU)

CONSOLIDATED VERSION OF  
THE TREATY ON EUROPEAN UNION

3. The Union shall establish an internal market. It shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment. It shall promote scientific and technological advance.

It shall combat social exclusion and discrimination, and shall promote social justice and protection, equality between women and men, solidarity between generations and protection of the rights of the child.

It shall promote economic, social and territorial cohesion, and solidarity among Member States.

It shall respect its rich cultural and linguistic diversity, and shall ensure that Europe's cultural heritage is safeguarded and enhanced.

### 3. How to measure cohesion?

The most synthesized indicator is GDP per capita. The more similar the results of different member states are, the stronger the cohesion is, and vice versa, **the greater the deviations are from the average (Mean Absolute Deviation), the weaker the cohesion is.**

$$\text{MAD} = \frac{1}{n} \sum_{i=1}^n [x_i - \mu]$$

*where:  $n = 28$  (the number of EU member states),  $x_i$  is the GDP per capita in the member state  $i$ , while  $\mu$  is the mean size of GDP per capita in the EU.*

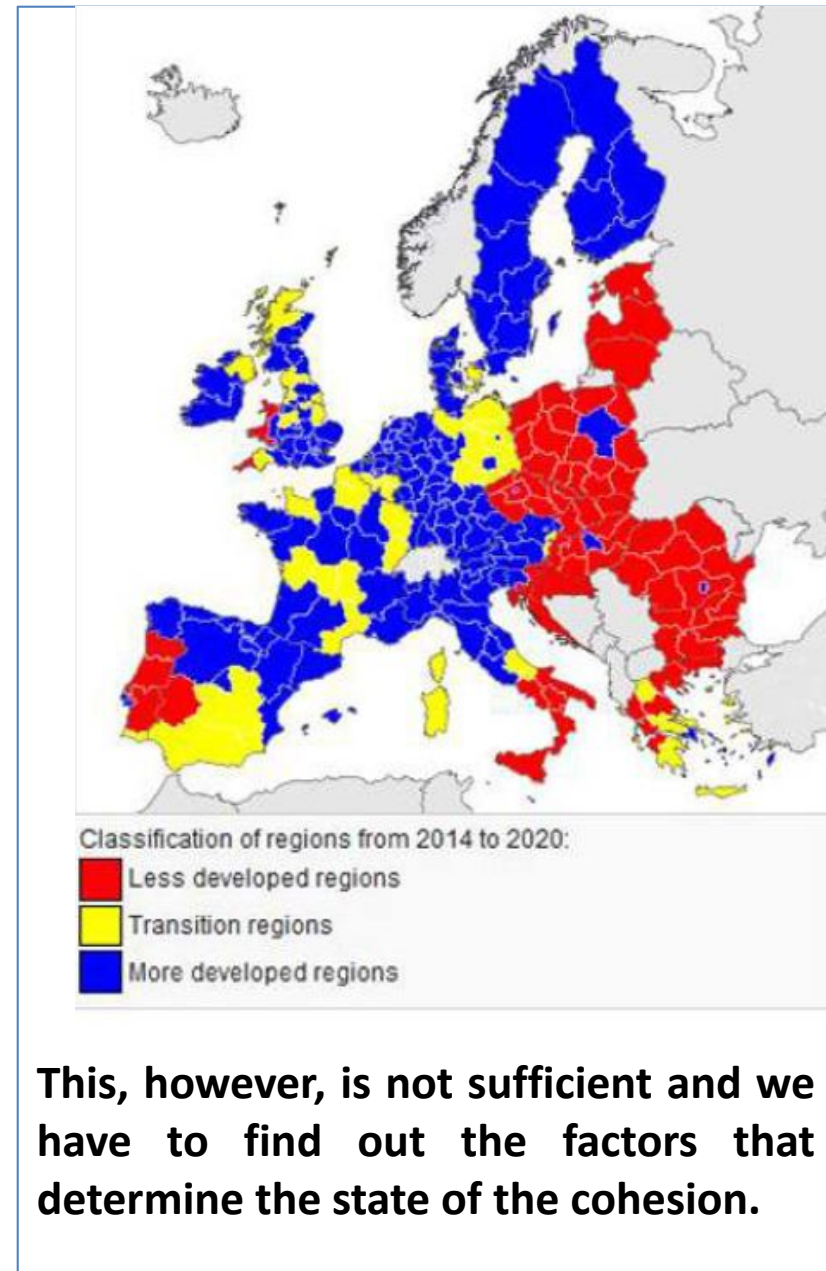
The results are shown in a table in the next slide.

In order to see the dynamics, the MAD for two years are compared: 2003 and 2013

**The conclusion based on the data in the table is that the Mean Absolute Deviation of the GDP per capita of the EU member states, both in 2003 and in 2013 was substantial (about 34% in 2003, and 29 in 2013).**

Yet, there is a trend of a decrease in MAD which indicates a process of increasing cohesion among the EU member states!

	2003			2013		
	$X_i$	$X_i - \mu$	$[X_i - \mu]$	$X_i$	$X_i - \mu$	$[X_i - \mu]$
$\mu$ (EU)	100	0	0	100	0	0
Belgium	123	23	23	119	19	19
Bulgaria	33	-67	67	45	-55	55
Czech R.	77	-23	23	82	-18	18
Denmark	124	24	24	124	24	24
Germany	116	16	16	122	22	22
Estonia	52	-48	48	73	-27	27
Ireland	141	41	41	130	30	30
Greece	93	-7	7	73	-27	27
Spain	100	0	0	94	-6	6
France	111	11	11	107	7	7
Croatia	56	-44	44	61	-39	39
Italy	112	12	12	99	-1	1
Cyprus	94	-6	6	89	-11	11
Latvia	45	-55	55	64	-36	36
Lithuania	48	-52	52	73	-27	27
Luxembourg	240	140	140	258	158	158
Hungary	62	-38	38	66	-34	34
Malta	82	-18	18	86	-14	14
Netherlands	133	33	33	131	31	31
Austria	127	27	27	128	28	28
Poland	48	-52	52	67	-33	33
Portugal	78	-22	22	78	-22	22
Romania	31	-69	69	54	-46	46
Slovenia	83	-17	17	82	-18	18
Slovakia	55	-45	45	75	-25	25
Finland	114	14	14	113	13	13
Sweden	127	27	27	127	27	27
UK	123	23	23	109	9	9
<b>MAD</b>			<b>34,07</b>			<b>28,82</b>



## 4. Factors determining economic cohesion

- ✓ **Structure of the economy (structure of GDP or value added);**
- ✓ **Structure of individual sectors of the economy, e.g. the service sector or manufacturing industry;**
- ✓ **Structure of exports (export specialization).**

**We have to understand whether the differences in GDP structure decline or grow.**

To do this, we introduce again mean values, this time for industry sectors (NACE Rev.2), grouped as follows:

**1 - A - AGRICULTURE, FORESTRY AND FISHING**

**2 - B - MINING AND QUARRYING ; C – MANUFACTURING; D - ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY ; E - WATER SUPPLY, SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES**

**3 - F - CONSTRUCTION**

**4 - G - WHOLESALE AND RETAIL TRADE, REPAIR OF MOTOR VEHICLES AND MOTORCYCLES ; H - TRANSPORTATION AND STORAGE ; I - ACCOMMODATION AND FOOD SERVICE ACTIVITIES ; J - INFORMATION AND COMMUNICATION ; R - ARTS, ENTERTAINMENT AND RECREATION ; S - OTHER SERVICE ACTIVITIES; T - ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS- AND SERVICES-PRODUCING ACTIVITIES OF HOUSEHOLDS FOR OWN USE**

**5 - K - FINANCIAL AND INSURANCE ACTIVITIES**

**6 - L - REAL ESTATE ACTIVITIES**

**7 - M - PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES ; N - ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES**

**8 - O - PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY ; P – EDUCATION; Q - HUMAN HEALTH AND SOCIAL WORK ACTIVITIES**

**Deviations exceeding +20% of the mean value are marked in blue, decline under -20% is marked in red.**



	1		2		3		4		5		6		7		8	
	2003	2013	2003	2013	2003	2013	2003	2013	2003	2013	2003	2013	2003	2013	2003	2013
EU	2,0	1,7	20,3	19,1	6,2	5,7	28,1	27,0	5,3	5,5	10,0	11,2	9,7	10,4	18,4	19,4
Belgium	1,1	0,8	19,9	15,6	5,0	5,7	26,6	26,0	5,9	6,5	9,3	8,9	11,4	13,2	20,8	23,3
Bulgaria	10,4	4,9	23,2	25,2	4,8	5,6	27,8	27,4	4,2	7,2	11,5	9,7	3,9	5,6	14,2	14,4
Czech R.	2,7	2,4	29,3	31,8	6,7	6,0	29,8	26,2	3,3	4,4	6,0	7,1	6,5	6,8	15,7	15,3
Denmark	1,9	1,3	19,6	16,9	5,3	4,6	28,1	27,3	5,4	6,5	10,0	10,8	6,6	8,9	23,1	23,7
Germany	0,9	0,8	24,5	25,5	4,5	4,7	24,6	22,9	4,9	4,1	11,6	12,2	11,1	11,4	17,9	18,4
Estonia	4,0	3,6	22,3	21,5	6,5	7,6	32,6	30,4	3,8	3,2	11,1	11,0	6,4	8,0	13,3	14,7
Ireland	2,4	1,9	27,3	26,3	7,9	1,7	24,1	26,6	9,4	10,1	7,6	6,9	6,5	8,7	14,8	17,8
Greece	5,5	3,7	12,6	14,6	6,6	1,8	38,0	32,2	4,3	4,8	11,5	16,7	3,8	4,6	17,7	21,6
Spain	3,8	2,6	19,0	17,5	12,1	7,8	31,8	33,7	4,8	3,9	6,2	8,4	6,4	7,8	15,9	18,3
France	2,2	1,8	16,2	12,8	5,2	6,0	27,3	25,8	4,3	5,0	12,0	13,3	11,4	12,4	21,4	22,9
Croatia	5,2	4,4	21,6	21,0	7,0	5,3	30,8	28,2	5,7	6,7	9,1	11,1	5,5	7,5	15,1	15,8
Italy	2,5	2,1	20,8	18,3	5,8	5,6	29,0	28,6	4,9	5,5	12,0	14,3	8,8	8,8	16,2	16,8
Cypruss	3,3	2,7	11,9	8,7	10,2	4,0	32,6	33,1	5,9	10,2	9,7	11,6	5,7	7,6	20,7	22,1
Latvia	4,1	4,9	17,6	18,7	6,3	6,4	38,9	36,0	3,5	3,7	7,7	9,9	5,4	7,0	16,5	13,4
Lithuania	5,0	3,8	24,2	24,5	7,0	6,5	35,7	38,2	1,7	2,4	6,2	5,5	4,7	5,6	15,5	13,5
Luxembourg	0,6	0,3	11,7	5,9	7,0	6,3	25,4	25,8	23,2	25,4	9,9	9,6	8,0	10,9	14,2	15,8
Hungary	4,6	4,8	25,2	26,0	5,5	4,1	25,2	25,6	4,1	4,9	8,2	8,6	7,5	8,4	19,7	17,6
Malta	2,4	1,7	19,6	12,8	5,0	4,1	34,2	37,4	5,7	8,1	6,4	5,7	8,3	10,8	18,4	19,4
Netherlands	2,2	1,6	18,2	19,7	5,7	4,7	28,0	25,8	7,3	8,7	7,1	6,1	10,7	10,9	20,8	22,5
Austria	1,7	1,5	22,8	21,7	7,5	6,9	29,2	28,2	5,2	5,0	8,7	10,0	7,6	9,1	17,3	17,6
Poland	4,4	3,8	23,5	24,7	6,2	6,5	33,4	33,9	4,2	4,3	7,0	5,9	6,3	7,2	15,0	13,7
Portugal	3,1	2,4	19,0	18,9	7,7	4,3	29,1	31,8	6,2	5,8	8,0	10,2	5,7	6,5	21,2	20,1
Romania	13,0	6,4	27,8	34,3	6,8	9,2	26,1	19,7	2,1	2,5	7,5	9,0	3,4	7,0	13,3	11,9
Slovenia	2,5	2,9	28,2	25,7	6,2	5,7	26,0	27,7	4,5	4,1	7,6	7,5	8,4	9,0	16,6	17,4
Slovakia	4,5	3,0	28,7	26,7	6,2	7,6	28,5	30,6	3,8	4,1	7,8	6,8	5,6	7,7	14,9	13,5
Finland	3,1	2,8	26,5	18,7	6,0	6,8	26,1	25,5	2,4	2,5	10,7	13,1	5,9	8,4	19,3	22,2
Sweden	1,9	1,5	22,8	18,8	4,6	5,4	25,4	26,0	4,1	4,9	10,0	9,2	7,6	9,9	23,6	24,3
UK	0,9	0,6	17,6	14,3	6,7	6,1	30,1	28,5	6,8	7,8	8,6	10,9	11,5	12,5	17,8	19,3

## Conclusions:

1. *In 2013, Austria, France, Sweden and Denmark had a structure of the economy that was most similar to the EU average structure. Austria's structure of the economy was the closest to the EU's average. In the same 2013, the **greatest deviations from the EU average structure of the economy had Romania, Poland, Lithuania and Slovakia.***
2. *In 2003 France, Belgium and Italy had an economy that was closest to the structure of the EU economy. With greatest deviations, exceeding 20% of the mean sector indicators, were Romania, Ireland, Spain, Lithuania and Slovakia.*
3. *It is noteworthy that in 2013, the total sectorial deviations (102) increased considerably compared to the sectorial deviations (91) in 2003. This shows that **as a result of the financial crisis there was some decline in the EU economic cohesion.** Furthermore, in 2003 among the countries with greater deviations than the average for the EU structure of the economy featured both "old" and "new" member states, while **in 2013 all "deviated" member states were "new".***
4. ***The greatest deviations are in sector "Agriculture, forestry and fisheries".***
5. *The least deviations from the average values are observed in sector "Non-financial services" which in the table include wholesale and retail trade, transport, tourism, telecommunications and some other services of less significance.*



## 5. Factors determining social cohesion

Social cohesion is largely a function of economic cohesion as conditions for the reproduction and development of society depend heavily on the degree of economic development and the opportunity to generate corresponding income (GDP).

Social cohesion depends also on income distribution, both within the Union and within individual member states.

In order to measure social cohesion we can use relative indicators such as the **Gini Index**

In 2013, the Gini Index for the EU was 30.5. This indicates **that in the EU, we have relatively equal distribution of income as a mean value.** For comparison, in the U.S. the Gini Index is about 40% and in most of the developing economies it is above 50%.

With regard to the individual member states the situation is quite different. In 2013, the most equal distribution of income was in Slovakia (24.2), Slovenia (24.4), the Czech Republic (24.6), Sweden (24.9), Netherlands (25.1), Finland (25.4) and Belgium (25.9) . The most unequal distribution was in Bulgaria (35.4), Latvia (35.2), Lithuania (34.6), Greece (34.4) and Portugal (34.2).

**We can also use the index Percentage of total population of people at risk of poverty or social exclusion.**

At risk-of-poverty are persons with an equivalised disposable income below the risk-of-poverty threshold, which is set at 60% of the national median equivalised disposable income (after social transfers). Material deprivation covers indicators relating to economic strain and durables.

Severely materially deprived persons have living conditions severely constrained by a lack of resources, they experience at least 4 out of 9 following deprivations items: cannot afford i) to pay rent or utility bills, ii) keep home adequately warm, iii) face unexpected expenses, iv) eat meat, fish or a protein equivalent every second day, v) a week holiday away from home, vi) a car, vii) a washing machine, viii) a color TV, or ix) a telephone. People living in households with very low work intensity are those aged 0-59 living in households where the adults (aged 18-59) work 20% or less of their total work potential during the past year (EUROSTAT).

**Data are on the next slide:**

	2013	2005
Czech R.	14,6	19,6
Netherlands	15,9	16,7
Finland	16,0	17,2
Sweden	16,4	14,4
France	18,1	18,9
Austria	18,8	17,4
Denmark	18,9	17,2
Luxembourg	19,0	17,3
Slovakia	19,8	32,0
Germany	20,3	18,4
Slovenia	20,4	18,5
Belgium	20,8	22,6
Estonia	23,5	25,9
Malta	24,0	20,5
EU	24,5	25,7
UK	24,8	24,8
Poland	25,8	45,3
Spain	27,3	24,3
Portugal	27,5	26,1
Cypress	27,8	25,3
Italy	28,4	25,0
Ireland	29,5	25,0
Hungary	33,5	32,1
Latvia	35,1	46,3
Greece	35,7	29,4
Lithuania	36,8	41,0
Romania	40,4	45,9
Bulgaria	48,0	61,3

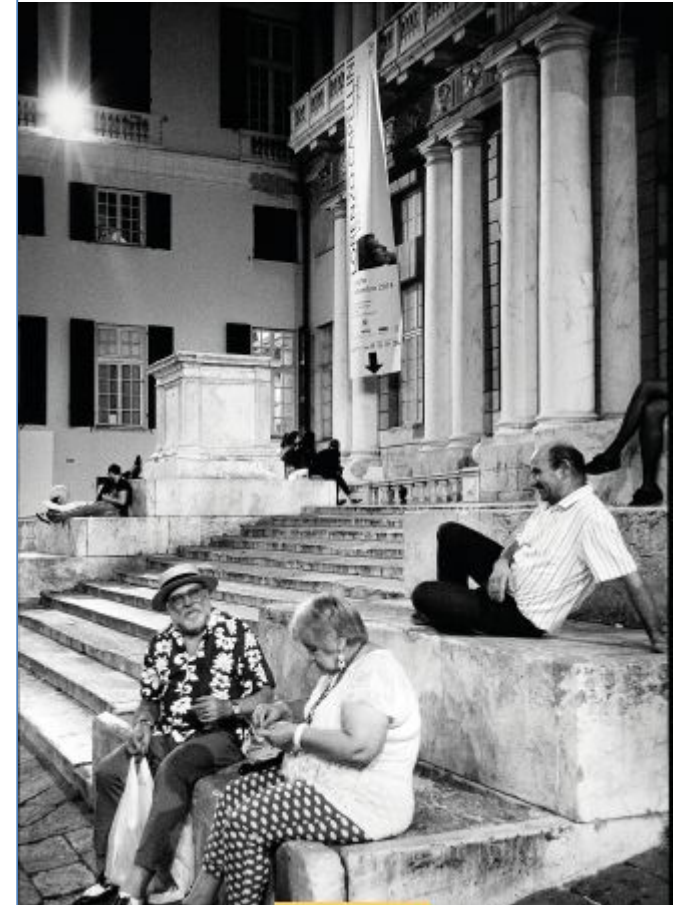
If we apply to the data in table 36, the formula for calculating the mean absolute deviation and transform the member states' values into indexes comparing them to the data for the EU, which we have accepted as equal to 100, them we have as follows:

$$MAD_{2005} = 32,01 \text{ и } MAD_{2013} = 26,95$$

***Conclusion: At inter-state level, as data show in the table, poverty is quite unevenly distributed within the EU.***

***It is mainly concentrated in the new member states.***

***There is a positive trend that the share of people exposed to risk of poverty or social exclusion is on the decline for the EU as a whole.***

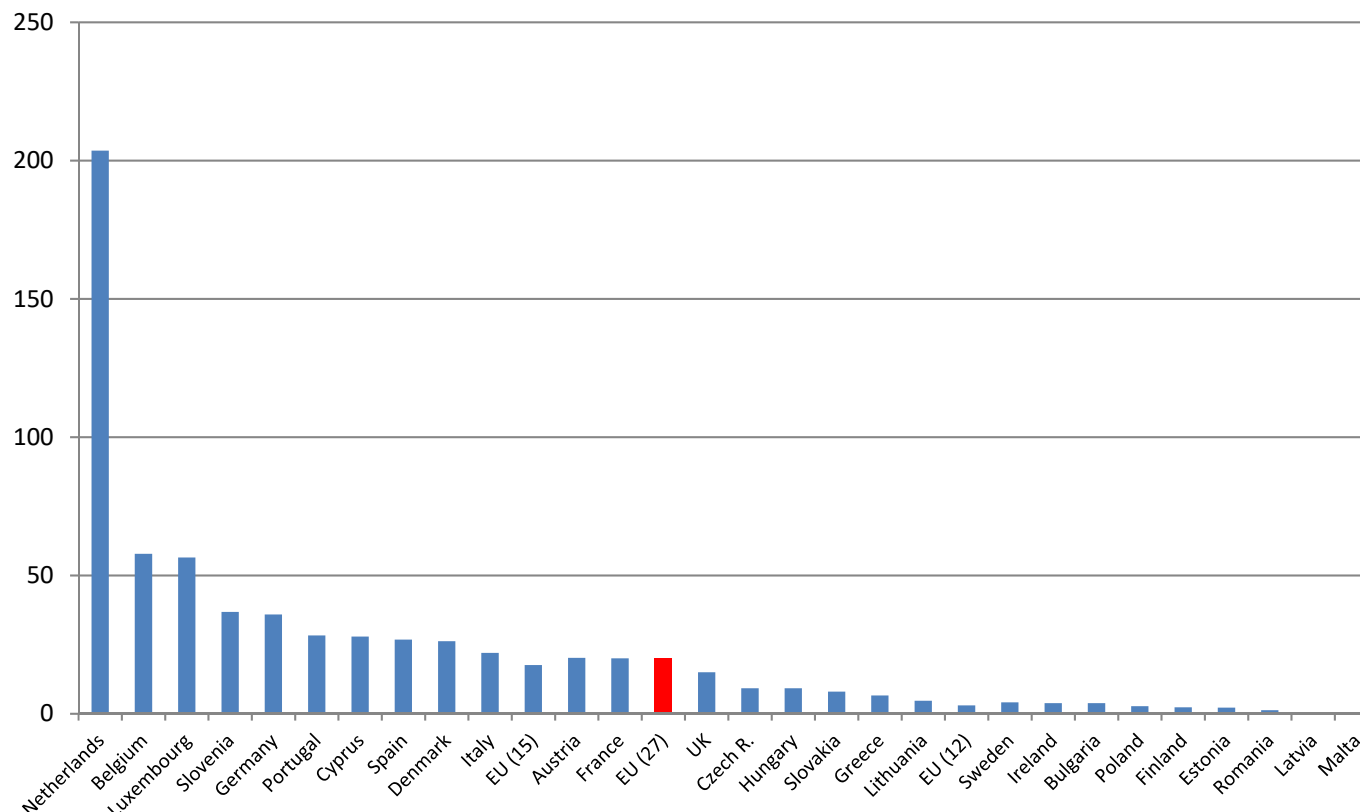


***But problems remain especially for older people.***

## 6. Factors determining territorial cohesion

### Some indicators:

- ✓ Motorization (number of cars per person);
- ✓ Density of motorway network (km per 1000 sq km per area, indicated on the graph below);
- ✓ Density of railway network; Length of railway tracks, allowing speed above 120 km/h.;
- ✓ Density of the gas transmission and distribution network;
- ✓ Connectivity of the systems for transmission of electricity and natural gas;
- ✓ High-speed Internet coverage, etc.

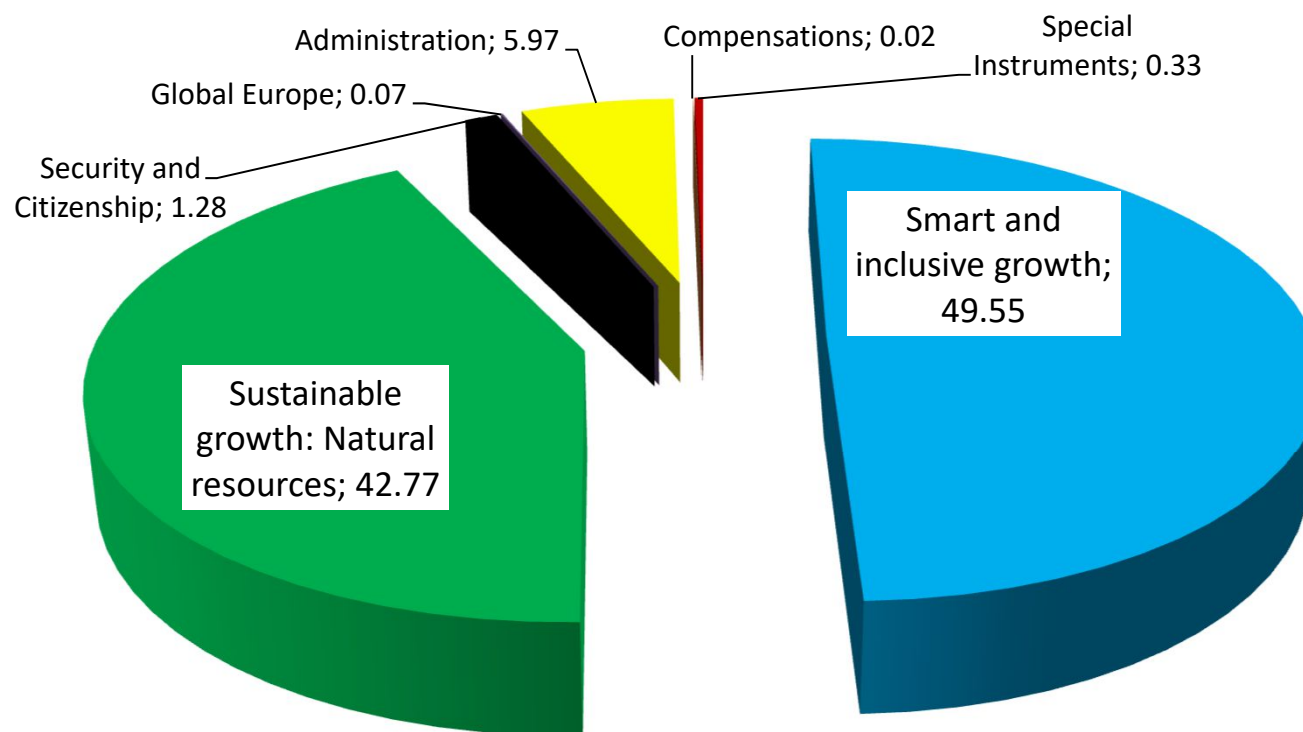


## 7. Why is cohesion so important for the EU?

Cohesion type	Impacts	Affected EU policies
Economic	Lower costs to comply with uniform standards and minimum safety requirements	Single market, Environment policy, Competition policy, Common agricultural policy, Common transport policy
	Greater convergence of the economic cycle	Eurozone
	Greater similarity in export specialization	Customs union, Common commercial policy, Development policy
	Better energy efficiency	Common energy policy, Climate change policy, Environment policy, Common foreign policy, Development policy
Social	Convergence of national social models and gradual establishment of a single EU social model	Social policy, Education policy, Health care policy, Budget policy, Eurozone
	Bridging the gap between Western and Eastern Europe	Common foreign policy, Common security and defense policy, Neighborhood policy, Development policy, Single area of freedom, security and justice
Territorial	Lower logistic and transport costs	Single market, Tourism, Customs union, Common commercial policy
	Lower costs for transmission of electricity and natural gas	Common energy policy, Climate change policy, Common foreign policy, Neighborhood policy
	Better internet and communications	Single market, Single information area, Education policy, Innovation policy
	Lower investment costs	Industrial policy, Single market, Budget policy, Eurozone, Innovation policy

## 8. How is EU Cohesion policy funded?

The Cohesion Policy measures are funded by the EU budget section “Smart and inclusive growth”. They amount to 80% of this section or to about 40% of the EU expenditures, which in 2016 are equal to € 140 billion.





# 2014 EU budget - net donors and net beneficiaries

## Donors

Member State	Net contribution	Population	Net contribution per capital
Netherlands	6357	16,656	382
Sweden	2603	9,416	276
Germany	17658	81,749	216
Denmark	996	5,561	179
Finland	842	5,375	157
Austria	1296	8,404	154
France	7488	65,050	115
UK	7087	62,495	113
Italy	5193	60,785	85
Ireland	87	4,570	19

## Beneficiaries

Member State	Net contribution	Population	Net contribution per capital
Spain	-428	46,155	-9
Croatia	-155	4,489	-35
Cyprus	-113	0,840	-135
Belgium	-1812	11,001	-165
Slovakia	-948	5,392	-176
Romania	-4485	21,416	-209
Bulgaria	-1796	7,369	-244
Czech R.	-2872	10,487	-274
Portugal	-3197	10,572	-302
Estonia	-467	1,340	-348
Poland	-13482	38,529	-350
Slovenia	-758	2,050	-370
Latvia	-793	2,075	-382
Malta	-179	0,415	-431
Lithuania	-1329	3,053	-435
Greece	-5145	11,310	-455
Hungary	-5625	9,986	-563
Luxembourg	-1467	0,512	-2866

**The EU Cohesion Policy is based on the Principle of solidarity!**