

The Lisbon Council

Descriptive Statistics and Statistical Inference for the Policy Brief: ‘Human Capital Leading Indicators: How Europe’s Regions and Cities Can Drive Growth and Foster Social Inclusion’

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Variables

1. Gross domestic product (GDP) at current market prices at NUTS level 2 in Purchasing Power Standard per inhabitant [reg_e2gdp]
2. Population aged 15 and over by sex, age and highest level of education attained. Share of working age population with tertiary education. [reg_lfsd2pedu]
3. Regional employment by occupation. Share of "Legislators, senior officials and managers" (ISCO1) and "Professionals" (ISCO2) of total labor force regional [special data request Eurostat]
4. Employment by sex, occupation and highest level of education attained (1000) [lfsa_egised]
 - o Share of "Legislators, senior officials and managers" (ISCO1) and "Professionals" (ISCO2) of total labor force national.
5. Arrivals due to internal migration (excluding intra-regional migration) [reg_mig2arr]
6. Departures due to internal migration [reg_mig2dep]
7. Employment rates by sex and age, at NUTS levels 1 and 2 (%) [reg_lfe2emprt]
 - o Employment rates men in working age (25-64)
 - o Employment rates women in working age (25-64) [reg_lfe2emprt]
 - o Employment rates women in younger child-bearing age (25-34) [reg_lfe2emprt]
 - o Employment rates of the elderly (55-64) [reg_lfe2emprt]
 - o Employment rates of the retired (65+) [reg_lfe2emprt]
8. Population at 1st January [reg_d2jan]
9. Long-term unemployment (12 months and more), at NUTS levels 1 and 2 (1000; %) [reg_lfu2ltu]
10. Average number of usual weekly hours of work in main job, at NUTS levels 1 and 2 (hours) [reg_lfe2ehour]
11. Mean annual holidays by economic activity, sex, occupation [earn_ses06_51]
12. Mean annual holidays by size of the enterprise, sex, occupation [earn_ses_agt46]
13. Mean annual holidays by economic activity, collective pay agreement, sex [earn_ses_agt40]
14. Mean annual holidays by economic activity, collective pay agreement, sex [earn_ses06_40]
15. Average exit age from the labour force - annual data [lfsi_exi_a]
16. Employment by economic activity, at NUTS levels 1 and 2 (1000) [reg_lfe2enace]
17. National accounts by 31 branches - aggregates at current prices [nama_nace31_c]
18. National accounts by 31 branches - aggregates at current prices [nama_nace31_c]
19. Innovationscoreboard - The European Regional Innovation Scoreboard (RIS) 2009
20. Unemployment rates by sex and age, at NUTS levels 1, 2 and 3 (%) [reg_lfu3rt]
21. Number of households by degree of urbanisation of residence, at NUTS levels 1 and 2 (1000) [reg_lfsd2hh]
22. Total intramural R&D expenditure (GERD) by sectors of performance and region [rd_e_gerdreg]
23. Patent applications to the EPO by priority year at the regional level [pat_ep_rtot]
24. Households with broadband access [isoc_r_broad_h]
25. Year 1999-2008
26. Dummy East / West
27. Dummy Population Density in Western Europe
28. Dummy Northern Europe vs. Continental Europe
29. Dummy Capital

Definitions

- GDP: Regional GDP PPS per capita in euros. Data collected 1999-2007.
- ISCED: Share of highly educated (ISCED 5 or higher). Data collected 1999-2007.
- ISCO: Share of complex jobs in the regional work force. Complex jobs are those with starting digits 1 and 2 according to the ISCO classification of the International Labor Organization Labour Organisation (ILO). In the statistical analysis the share of complex jobs in the work force is closely related to the share of the population with a tertiary degree. Data available 2007-2009, 2008 data used because of maximal availability.
- Youth: Rate of youth unemployment in a region. Data collected 1999-2008.
- Inno: Degree of innovativeness in a region as measured by R&D spending as share of regional GDP percentile rank and patent applications per million inhabitants percentile rank among all regions with available data. Data collected 1999-2007, 2003 data used because of maximal availability.
- Longterm: Share of long term unemployed among all unemployed in a region. Data collected 1999-2007.
- Group: Declares whether a region has a communist history, it is a thinly populated regions in the West or a densely populated regions in the West.
 - Eastern: Regions with a communist history, reference group.
 - BG, CZ, DE (Berlin and former GDR), EE, HU, IT, LV, PT, RO, SK
 - West_thin_Pop: Thinly populated regions in the West
 - BE34, BE35, DK02, DK03, DK04, DK05, DE13, DE14, DE21, DE22, DE23, DE24, DE25, DE26, DE27, DE72, DE73, DE91, DE92, DE93, DE94, DEB1, DEB2, DEF0, IE01, GR11, GR12, GR13, GR14, GR21, GR22, GR23, GR24, GR25, GR41, GR42, GR43, ES11, ES12, ES13, ES22, ES23, ES24, ES41, ES42, ES43, ES51, ES52, ES53, ES61, ES62, ES70, FR21, FR22, FR23, FR24, FR25, FR26, FR41, FR42, FR43, FR51, FR52, FR53, FR61, FR62, FR63, FR71, FR72, FR81, FR82, FR83, FR91, FR92, FR93, FR94, ITC1, ITC2, ITD1, ITD2, ITD4, ITD5, ITE1, ITE2, ITE3, ITF1, ITF2, ITF4, ITF5, ITF6, ITG1, ITG2, CY00, MT00, NL11, NL12, NL13, NL34, AT11, AT12, AT21, AT22, AT31, AT32, AT33, AT34, PT11, PT15, PT16, PT18, PT20, PT30, SI01, SI02, FI13, FI19, FI1A, FI20, SE12, SE21, SE22, SE23, SE31, SE32, SE33, UKD1, UKE2, UKF3, UKG1, UKG2, UKH1, UKK2, UKK3, UKK4, UKL1, UKL2, UKM2, UKM3, UKM5, UKM6, UKN0
 - West_dense_Pop: Densely populated regions in the West
 - BE21, BE22, BE23, BE24, BE25, BE31, BE32, BE33, DK01, DE11, DE12, DE50, DE60, DE71, DEA1, DEA2, DEA3, DEA4, DEA5,

DEB3, DEC0, IE02, GR30, ES21, ES30, ES63, ES64, FR10, FR30, ITC3, , ITC4, ITD3, ITE4, ITF3, LU00, NL21, NL22, NL23, NL31, NL32, NL33, NL41, NL42, AT13, PT17, FI18, SE11, UKC1, UKC2, UKD2, UKD3, UKD4, UKD5, UKE1, UKE3, UKE4, UKF1, UKF2, UKG3, UKH2, UKH3, UKI2, UKJ1, UKJ2, UKJ3, UKJ4, UKK1

- North_Conti: This variable indicates whether a Western region is in the Northern range of member states or a Continental region (Germanic and Romanic).
 - Continental: Continental regions, reference group.
 - AT, BE [Walloon], CY, DE [West-Germany without Berlin], ES, FR, GR, IT, MT, PT, SI
 - Northern: Northern range of member states
 - BE [Flanders], DK, FI, IE, NL, SE, UK
- Capital: Indicates whether a region includes a national capital (Brussels [BE10] and Inner London [UKI1] are excluded)
 - BG41, CZ01, DK01, DE30, EE00, IE02, GR30, ES30, FR10, ITE4, CY00, LV00, LT00, LU00, HU10, MT00, NL32, AT13, PL12, PT17, RO32, SI02, SK01, FI18, SE11

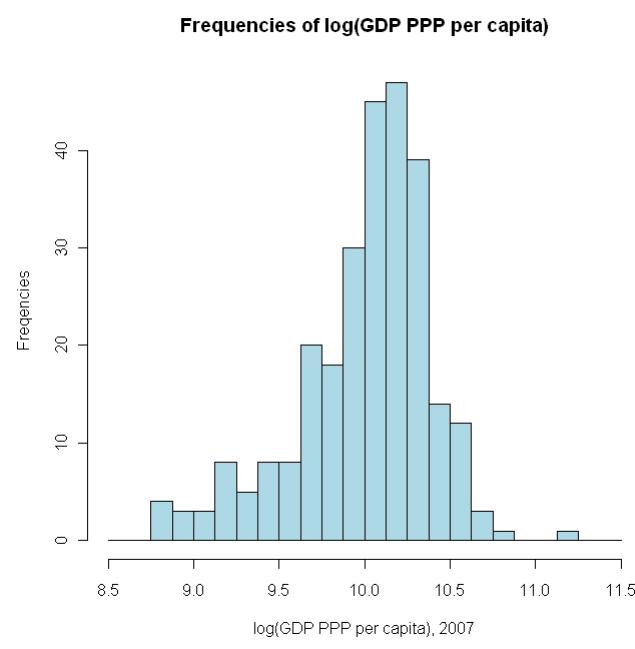
Descriptive statistics

Descriptive statistics for the groups

	# of regions		
Excluded (Brussels and Inner London)	2		2
Regions with a communist history	61		61
Thinly populated regions in the West	141		-
Densely populated regions in the West	67 <i>(37 Northern, 30 Continental)</i>		-
Western region in the Northern range of member states	-		73
Western region in the Continental Europe	-		135
All Regions (NUTS2)	271		271

Descriptive statistics for the main indicators

Variable in 2007	Min	25 th Quantile	Median	Mean	75 th Quantile	Max	NA's
GDP	6400 €	18700 €	24000 €	23700 €	28400 €	68500 €	0
ISCED	7.3%	16.5%	22.8%	22.9%	28.4%	47.6%	4
ISCO¹	8.0%	17.0%	20.0%	21.6%	26.0%	43.0%	4
Longterm	9.1%	25.1%	40.4%	39.5%	51.9%	85.4%	1
Youth	4.9%	11.1%	14.9%	16.3%	20.2%	55.7%	27
Inno²	2.0%	29.5%	51.0%	49.2%	69.9%	96.8%	6



¹ 2008

² 2003

Regression results used in the main document

1. Log(GDP) explained by human capital and non-human capital variables among 269 regions.

Focus: Regions (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- **Share of longterm unemployed among all unemployed, 2007**
- **Youth unemployment rate, 2007**
- **Innovation, 2003**
- **Share of complex occupations, 2008**
- **Dummies:**
 - **Communist history**
 - **Western European densely populated northern region**
 - **Western European densely populated continental region**
 - **Western European thinly populated region**
 - **Capital**

Call:

```
lm(formula = log(GDP[Year == 2007]) ~ Longterm[Year == 2007] + Youth[Year == 2007] + Inno[Year == 2003] +  
ISCO[Year == 2008] + Group[Year == 2007] + North_Conti[Year == 2007] + Capital[Year == 2007])
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	9.47427	0.08516	111.247	< 2e-16 ***
Longterm[Year == 2007]	-0.26149	0.10698	-2.444	0.015283 *
Youth[Year == 2007]	-1.33762	0.20364	-6.568	3.48e-10 ***
Inno[Year == 2003]	0.62980	0.06311	9.979	< 2e-16 ***
ISCO[Year == 2008]	1.21319	0.33895	3.579	0.000422 ***
Group[Year == 2007]West_dense_Pop	0.39350	0.04490	8.764	4.66e-16 ***
Group[Year == 2007]West_thin_Pop	0.36022	0.03779	9.531	< 2e-16 ***
North_Conti[Year == 2007]Northern	-0.12927	0.04433	-2.916	0.003907 **
Capital[Year == 2007]	0.18215	0.04773	3.816	0.000175 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1				

Residual standard error: 0.1778 on 225 degrees of freedom
(35 observations deleted due to missingness)

Multiple R-squared: 0.813, Adjusted R-squared: 0.8064

F-statistic: 122.3 on 8 and 225 DF, p-value: < 2.2e-16

2. Log(GDP) explained by human capital variables (incl. occupation) among 269 regions.

Focus: Regions (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- Share of longterm unemployed among all unemployed, 2007
- Youth unemployment rate, 2007
- Innovation, 2003
- Share of complex occupations, 2008

Call:

```
lm(formula = log(GDP[Year == 2007]) ~ Longterm[Year == 2007] +  
  Youth[Year == 2007] + Inno[Year == 2003] + ISCO[Year == 2008])
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
--	----------	------------	---------	----------

(Intercept)	9.62697	0.09319	103.301	< 2e-16 ***
-------------	---------	---------	---------	-------------

Longterm[Year == 2007]	-0.52080	0.10326	-5.044	9.28e-07 ***
------------------------	----------	---------	--------	--------------

Youth[Year == 2007]	-1.02781	0.24370	-4.217	3.56e-05 ***
---------------------	----------	---------	--------	--------------

Inno[Year == 2003]	0.93098	0.06757	13.778	< 2e-16 ***
--------------------	---------	---------	--------	-------------

ISCO[Year == 2008]	1.25298	0.27822	4.504	1.06e-05 ***
--------------------	---------	---------	-------	--------------

Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.2202 on 229 degrees of freedom

(35 observations deleted due to missingness)

Multiple R-squared: 0.7079, Adjusted R-squared: 0.7028

F-statistic: 138.7 on 4 and 229 DF, p-value: < 2.2e-16

3. Log(GDP) explained by human capital and non-human capital variables among 27 countries.

Focus: Countries (NUTS0)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- Share of longterm unemployed among all unemployed, 2007
- Youth unemployment rate, 2007
- Innovation, 2003
- Share of complex occupations, 2008

Call:

```
lm(formula = log(GDP[Year == 2007]) ~ ISCO[Year == 2008] + Youth[Year ==  
2007] + Longterm[Year == 2007] + Inno[Year == 2003])
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	9.3106	0.3796	24.530	< 2e-16 ***
ISCO[Year == 2008]	1.7175	1.1675	1.471	0.155409
Youth[Year == 2007]	0.2880	1.1785	0.244	0.809206
Longterm[Year == 2007]	-0.5147	0.4147	-1.241	0.227662
Inno[Year == 2003]	0.9039	0.2253	4.013	0.000585 ***

Signif. codes: 0 '****' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 '' 1				

Residual standard error: 0.2771 on 22 degrees of freedom

Multiple R-squared: 0.635, Adjusted R-squared: 0.5686

F-statistic: 9.568 on 4 and 22 DF, p-value: 0.0001223

4. Log(GDP) 2007 explained by log(GDP) 2000 and youth unemployment rate 2000 among 269 regions.

Focus: Regions (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- Youth unemployment rate, 2000
- Log(GDP), 2000

Call:

```
lm(formula = log(GDP[Year == 2007]) ~ Youth[Year == 2000] + log(GDP[Year == 2000]))
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
--	----------	------------	---------	----------

```
(Intercept) 2.57739 0.17033 15.132 < 2e-16 ***
```

```
Youth[Year == 2000] -0.20241 0.06241 -3.243 0.00138 **
```

```
log(GDP[Year == 2000]) 0.76877 0.01692 45.425 < 2e-16 ***
```

```
---
```

```
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 '' 1
```

Residual standard error: 0.09955 on 206 degrees of freedom

(60 observations deleted due to missingness)

Multiple R-squared: 0.931, Adjusted R-squared: 0.9303

F-statistic: 1390 on 2 and 206 DF, p-value: < 2.2e-16

5. Youth unemployment rate 2007 explained by log(GDP) 2000 and youth unemployment rate 2000 among 269 regions.

Focus: Regions (NUTS2)

Dependent Variable: Youth unemployment rate, 2007

Independent Variable(s):

- Log(GDP), 2000
- Youth unemployment rate, 2000

Call:

```
lm(formula = Youth[Year == 2007] ~ Youth[Year == 2000] + log(GDP[Year == 2000]))
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
--	----------	------------	---------	----------

(Intercept)	0.194773	0.072936	2.670	0.0082 **
-------------	----------	----------	-------	-----------

Youth[Year == 2000]	0.409017	0.027942	14.638	<2e-16 ***
---------------------	----------	----------	--------	------------

log(GDP[Year == 2000])	-0.011101	0.007231	-1.535	0.1263
------------------------	-----------	----------	--------	--------

Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.04207 on 201 degrees of freedom

(65 observations deleted due to missingness)

Multiple R-squared: 0.6033, Adjusted R-squared: 0.5994

F-statistic: 152.8 on 2 and 201 DF, p-value: < 2.2e-16

6. Log(GDP) 2007 explained by log(GDP) 2000 and share of long-term unemployed among all unemployed 2000 (269 regions).

Focus: Regions (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- **Log(GDP), 2000**
- **Share of longterm unemployed among all unemployed, 2000**

Call:

```
lm(formula = log(GDP[Year == 2007]) ~ Longterm[Year == 2000] + log(GDP[Year == 2000]))
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
--	----------	------------	---------	----------

(Intercept)	2.42620	0.16061	15.106	<2e-16 ***
-------------	---------	---------	--------	------------

Longterm[Year == 2000]	-0.04844	0.05238	-0.925	0.356
------------------------	----------	---------	--------	-------

log(GDP[Year == 2000])	0.78239	0.01558	50.227	<2e-16 ***
------------------------	---------	---------	--------	------------

Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.09942 on 230 degrees of freedom

(36 observations deleted due to missingness)

Multiple R-squared: 0.9272, Adjusted R-squared: 0.9266

F-statistic: 1465 on 2 and 230 DF, p-value: < 2.2e-16

7. Share of long-term unemployed among all unemployed 2007 explained by log(GDP) 2000 and share of long-term unemployed among all unemployed 2000 (269 regions).

Focus: Regions (NUTS2)

Dependent Variable: Share of longterm unemployed among all unemployed, 2007

Independent Variable(s):

- Log(GDP), 2000
- Share of longterm unemployed among all unemployed, 2000

Call:

```
lm(formula = Longterm[Year == 2007] ~ Longterm[Year == 2000] + log(GDP[Year == 2000]))
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
--	----------	------------	---------	----------

(Intercept)	0.49663	0.16353	3.037	0.00267 **
-------------	---------	---------	-------	------------

Longterm[Year == 2000]	0.79431	0.05319	14.933	< 2e-16 ***
------------------------	---------	---------	--------	-------------

log(GDP[Year == 2000])	-0.04545	0.01586	-2.865	0.00456 **
------------------------	----------	---------	--------	------------

Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1009 on 229 degrees of freedom

(37 observations deleted due to missingness)

Multiple R-squared: 0.5674, Adjusted R-squared: 0.5636

F-statistic: 150.2 on 2 and 229 DF, p-value: < 2.2e-16

8. Log(GDP) 2007 explained by non-human capital variables among 269 regions.

Focus: Regions (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- **Dummies:**
 - **Communist history**
 - **Western European densely populated northern region**
 - **Western European densely populated northern region**
 - **Western European thinly populated region**

Call:

```
lm(formula = log(GDP[Year == 2007]) ~ Group[Year == 2007] + North_Conti[Year == 2007]  
+ Capital[Year == 2007])
```

Estimate Std. Error t value Pr(>|t|)

(Intercept) 9.46311 0.03446 274.634 < 2e-16 ***

Group[Year == 2007]West_dense_Pop 0.71459 0.05082 14.060 < 2e-16 ***

Group[Year == 2007]West_thin_Pop 0.58779 0.04161 14.125 < 2e-16 ***

North_Conti[Year == 2007]Northern 0.07722 0.03948 1.956 0.0515 .

Capital[Year == 2007] 0.37195 0.05654 6.578 2.54e-10 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 '' 1

Residual standard error: 0.2592 on 264 degrees of freedom

Multiple R-squared: 0.5672, Adjusted R-squared: 0.5606

F-statistic: 86.49 on 4 and 264 DF, p-value: < 2.2e-16

9. Log(GDP) 2007 explained by human capital and non-human capital variables within Western Europe densely populated regions.

Focus: Densely populated regions in Western Europe (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- Share of longterm unemployed among all unemployed, 2007
- Youth unemployment rate, 2007
- Innovation, 2003
- Share of complex occupations, 2008
- Dummies:
 - Western European densely populated northern region
 - Western European densely populated continental region (reference group)

Call:

```
lm(formula = log(GDP[Year == 2007 & West_Pop_Density == "West_dense_Pop"]) ~
+Longterm[Year == 2007 & West_Pop_Density == "West_dense_Pop"]
+Youth[Year == 2007 & West_Pop_Density == "West_dense_Pop"]
+Inno[Year == 2003 & West_Pop_Density == "West_dense_Pop"]
+ISCO[Year == 2008 & West_Pop_Density == "West_dense_Pop"]
+Capital[Year == 2007 & West_Pop_Density == "West_dense_Pop"]
+North_Conti[Year == 2007 & West_Pop_Density == "West_dense_Pop"])
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	10.29023	0.14426	71.330	< 2e-16 ***
Longterm[Year == 2007 & West_Pop_Density == "West_dense_Pop"]	-0.52070	0.17435	-2.987	0.004235 **
Youth[Year == 2007 & West_Pop_Density == "West_dense_Pop"]	-2.34132	0.34362	-6.814	8.27e-09 ***
Inno[Year == 2003 & West_Pop_Density == "West_dense_Pop"]	0.15481	0.12481	1.240	0.220213
ISCO[Year == 2008 & West_Pop_Density == "West_dense_Pop"]	2.20576	0.48504	4.548	3.11e-05 ***
Capital[Year == 2007 & West_Pop_Density == "West_dense_Pop"]	0.19965	0.04862	4.107	0.000137 ***
North_Conti[Year == 2007 & West_Pop_Density == "West_dense_Pop"]	Northern	-0.37552	0.06575	-5.712 4.93e-07 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 '' 1				

Residual standard error: 0.1261 on 54 degrees of freedom

(6 observations deleted due to missingness)

Multiple R-squared: 0.7541, Adjusted R-squared: 0.7268

F-statistic: 27.6 on 6 and 54 DF, p-value: 8.413e-15

10. Log(GDP) 2007 explained by human capital variables within Western Europe thinly populated regions.

Focus: Thinly populated regions in Western Europe (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- Share of longterm unemployed among all unemployed, 2007
- Youth unemployment rate, 2007
- Innovation, 2003
- Share of complex occupations, 2008

Call:

```
lm(formula = log(GDP[Year == 2007 & West_Pop_Density == "West_thin_Pop"]) ~  
    Longterm[Year == 2007 & West_Pop_Density == "West_thin_Pop"] +  
    Youth[Year == 2007 & West_Pop_Density == "West_thin_Pop"] +  
    Inno[Year == 2003 & West_Pop_Density == "West_thin_Pop"] +  
    ISCO[Year == 2008 & West_Pop_Density == "West_thin_Pop"])
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)		
(Intercept)	10.14419	0.07841	129.369	< 2e-16 ***		
Longterm[Year == 2007 & West_Pop_Density == "West_thin_Pop"]	-0.29064	0.08191	-3.548	0.000577 ***		
Youth[Year == 2007 & West_Pop_Density == "West_thin_Pop"]	-1.32862	0.18565	-7.157	1.08e-10 ***		
Inno[Year == 2003 & West_Pop_Density == "West_thin_Pop"]	0.40618	0.05503	7.381	3.58e-11 ***		
ISCO[Year == 2008 & West_Pop_Density == "West_thin_Pop"]	0.19978	0.27780	0.719	0.473628		

Signif. codes:	0 '***'	0.001 '**'	0.01 '*'	0.05 '.'	0.1 ''	1

Residual standard error: 0.1194 on 107 degrees of freedom

(29 observations deleted due to missingness)

Multiple R-squared: 0.6594, Adjusted R-squared: 0.6467

F-statistic: 51.79 on 4 and 107 DF, p-value: < 2.2e-16

11. Log(GDP) 2007 explained by human capital variables within Ex-Communist regions.

Focus: Regions with a communist history (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- Share of longterm unemployed among all unemployed, 2007
- Youth unemployment rate, 2007
- Innovation, 2003
- Share of complex occupations, 2008

Call:

```
lm(formula = log(GDP[Year == 2007 & West_Pop_Density == "Eastern"]) ~  
    Longterm[Year == 2007 & West_Pop_Density == "Eastern"] +  
    Youth[Year == 2007 & West_Pop_Density == "Eastern"] +  
    Inno[Year == 2003 & West_Pop_Density == "Eastern"] +  
    ISCO[Year == 2008 & West_Pop_Density == "Eastern"])
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	9.0365	0.2295	39.368	< 2e-16 ***
Longterm[Year == 2007 & West_Pop_Density == "Eastern"]	0.2026	0.3270	0.619	0.53813
Youth[Year == 2007 & West_Pop_Density == "Eastern"]	-1.7127	0.5202	-3.293	0.00172 **
Inno[Year == 2003 & West_Pop_Density == "Eastern"]	1.1478	0.1727	6.647	1.32e-08 ***
ISCO[Year == 2008 & West_Pop_Density == "Eastern"]	2.0014	0.6469	3.094	0.00308 **

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1				

Residual standard error: 0.2211 on 56 degrees of freedom

Multiple R-squared: 0.735, Adjusted R-squared: 0.716

F-statistic: 38.82 on 4 and 56 DF, p-value: 1.538e-15

12. Log(GDP) explained by human capital variables (incl. education) among 269 regions.

Focus: Regions (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- **Innovation, 2003**
- **Share of highly educated, 2007**
- **Share of longterm unemployed among all unemployed, 2007**
- **Youth unemployment rate, 2007**

Call:

```
lm(formula = log(GDP[Year == 2007]) ~ Longterm[Year == 2007] +  
  Youth[Year == 2007] + Inno[Year == 2003] + ISCED[Year == 2007])
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
--	----------	------------	---------	----------

(Intercept)	9.72319	0.09259	105.010	< 2e-16 ***
-------------	---------	---------	---------	-------------

Longterm[Year == 2007]	-0.52933	0.10904	-4.855	2.23e-06 ***
------------------------	----------	---------	--------	--------------

Youth[Year == 2007]	-0.99427	0.24926	-3.989	8.94e-05 ***
---------------------	----------	---------	--------	--------------

Inno[Year == 2003]	0.92803	0.07330	12.661	< 2e-16 ***
--------------------	---------	---------	--------	-------------

ISCED[Year == 2007]	0.75470	0.24750	3.049	0.00256 **
---------------------	---------	---------	-------	------------

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 '' 1

Residual standard error: 0.2253 on 229 degrees of freedom

(35 observations deleted due to missingness)

Multiple R-squared: 0.6944, Adjusted R-squared: 0.6891

F-statistic: 130.1 on 4 and 229 DF, p-value: < 2.2e-16

13. Log (GDP) explained by share of complex occupations within Ex-Communist regions.

Focus: Regions with a communist history (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- **Share of complex occupations, 2008**

Call:

```
lm(formula = log(GDP[Year == 2007 & West_Pop_Density == "Eastern"]) ~  
      ISCO[Year == 2008 & West_Pop_Density == "Eastern"])
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)		
(Intercept)	8.7100	0.1576	55.271	< 2e-16 ***		
ISCO[Year == 2008 & West_Pop_Density == "Eastern"]	4.4261	0.8229	5.379	1.35e-06 ***		

Signif. codes:	0 '***'	0.001 '**'	0.01 '*'	0.05 '.'	0.1 ''	1

Residual standard error: 0.3427 on 59 degrees of freedom

Multiple R-squared: 0.329, Adjusted R-squared: 0.3177

F-statistic: 28.93 on 1 and 59 DF, p-value: 1.350e-06

14. Log (GDP) explained by share of complex occupations within Western Europe thinly populated regions.

Focus: Thinly populated regions in Western Europe (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- **Share of complex occupations, 2008**

Call:

```
lm(formula = log(GDP[Year == 2007 & West_Pop_Density == "West_thin_Pop"]) ~  
    ISCO[Year == 2008 & West_Pop_Density == "West_thin_Pop"])
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)		
(Intercept)	10.04531	0.08362	120.129	<2e-16 ***		
ISCO[Year == 2008 & West_Pop_Density == "West_thin_Pop"]	0.22306	0.40102	0.556	0.579		

Signif. codes:	0 '***'	0.001 '**'	0.01 '*'	0.05 '.'	0.1 ''	1

Residual standard error: 0.2088 on 135 degrees of freedom

(4 observations deleted due to missingness)

Multiple R-squared: 0.002287, Adjusted R-squared: -0.005104

F-statistic: 0.3094 on 1 and 135 DF, p-value: 0.579

15. Log (GDP) explained by share of complex occupations within Ex-Communist regions.

Focus: Densely populated regions in Western Europe (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- **Share of complex occupations, 2008**

Call:

```
lm(formula = log(GDP[Year == 2007 & West_Pop_Density == "West_dense_Pop"]) ~  
    ISCO[Year == 2008 & West_Pop_Density == "West_dense_Pop"])
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	9.9990	0.1336	74.818	<2e-16 ***
ISCO[Year == 2008 & West_Pop_Density == "West_dense_Pop"]	1.0707	0.4857	2.205	0.031 *

Signif. codes:	0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1			

Residual standard error: 0.2311 on 65 degrees of freedom

Multiple R-squared: 0.06957, Adjusted R-squared: 0.05526

F-statistic: 4.86 on 1 and 65 DF, p-value: 0.03103

16. Log (GDP) explained by youth unemployment rate among 27 countries.

Focus: Countries (NUTS0)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- **Youth unemployment rate, 2007**

Call:

```
lm(formula = log(GDP[Year == 2007]) ~ Youth[Year == 2007])
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
--	----------	------------	---------	----------

(Intercept)	10.2437	0.2585	39.630	<2e-16 ***
-------------	---------	--------	--------	------------

Youth[Year == 2007]	-1.5254	1.6781	-0.909	0.372
---------------------	---------	--------	--------	-------

Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.4233 on 25 degrees of freedom

Multiple R-squared: 0.032, Adjusted R-squared: -0.006725

F-statistic: 0.8263 on 1 and 25 DF, p-value: 0.372

17. Log (GDP) explained by youth unemployment rate among 269 regions.

Focus: Regions (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- **Youth unemployment rate, 2007**

Call:

```
lm(formula = log(GDP[Year == 2007]) ~ Youth[Year == 2007])
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
--	----------	------------	---------	----------

(Intercept)	10.39382	0.05333	194.909	< 2e-16 ***
-------------	----------	---------	---------	-------------

Youth[Year == 2007]	-2.44098	0.29604	-8.245	1.08e-14 ***
---------------------	----------	---------	--------	--------------

Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.3545 on 240 degrees of freedom

(27 observations deleted due to missingness)

Multiple R-squared: 0.2207, Adjusted R-squared: 0.2175

F-statistic: 67.99 on 1 and 240 DF, p-value: 1.084e-14

18. Log (GDP) explained by youth unemployment rate within Western Europe thinly populated regions.

Focus: Thinly populated regions in Western Europe (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- **Youth unemployment rate, 2007**

Call:

```
lm(formula = log(GDP[Year == 2007 & West_Pop_Density == "West_thin_Pop"]) ~  
  Youth[Year == 2007 & West_Pop_Density == "West_thin_Pop"])
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
--	----------	------------	---------	----------

(Intercept)	10.34157	0.03026	341.734	< 2e-16 ***
-------------	----------	---------	---------	-------------

Youth[Year == 2007 & West_Pop_Density == "West_thin_Pop"]	-1.54254	0.16116	-9.572	2.23e-16 ***
---	----------	---------	--------	-----------------

Signif. codes: 0 '****' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 '' 1

Residual standard error: 0.1536 on 117 degrees of freedom

(22 observations deleted due to missingness)

Multiple R-squared: 0.4392, Adjusted R-squared: 0.4344

F-statistic: 91.62 on 1 and 117 DF, p-value: 2.229e-16

19. Log (GDP) explained by youth unemployment rate within Western Europe Ex-Communist regions.

Focus: Regions with a communist history, (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- **Youth unemployment rate, 2007**

Call:

```
lm(formula = log(GDP[Year == 2007 & West_Pop_Density == "Eastern"])) ~  
  Youth[Year == 2007 & West_Pop_Density == "Eastern"])
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
--	----------	------------	---------	----------

(Intercept)	10.1455	0.1392	72.859	< 2e-16 ***
-------------	---------	--------	--------	-------------

Youth[Year == 2007 & West_Pop_Density == "Eastern"]	-3.4568	0.7318	-4.724	1.48e-05 ***
---	---------	--------	--------	--------------

Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.3564 on 59 degrees of freedom

Multiple R-squared: 0.2744, Adjusted R-squared: 0.2621

F-statistic: 22.31 on 1 and 59 DF, p-value: 1.475e-05

20. Log (GDP) explained by youth unemployment rate within Western Europe densely populated regions.

Focus: Densely populated regions in Western Europe (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- **Youth unemployment rate, 2007**

Call:

```
lm(formula = log(GDP[Year == 2007 & West_Pop_Density == "West_dense_Pop"]) ~  
  Youth[Year == 2007 & West_Pop_Density == "West_dense_Pop"])
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
--	----------	------------	---------	----------

(Intercept)	10.53074	0.06859	153.536	< 2e-16 ***
-------------	----------	---------	---------	-------------

Youth[Year == 2007 & West_Pop_Density == "West_dense_Pop"]	-1.72025	0.44887	-3.832
0.000306 ***			

Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.2181 on 60 degrees of freedom

(5 observations deleted due to missingness)

Multiple R-squared: 0.1966, Adjusted R-squared: 0.1833

F-statistic: 14.69 on 1 and 60 DF, p-value: 0.0003064

21. Log (GDP) explained by share of long-term unemployed among all unemployed (269 regions).

Focus: Regions (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- Share of longterm unemployed among all unemployed, 2007

Call:

```
lm(formula = log(GDP[Year == 2007]) ~ Longterm[Year == 2007])
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
--	----------	------------	---------	----------

(Intercept)	10.5433	0.2062	51.131	<2e-16 ***
-------------	---------	--------	--------	------------

Longterm[Year == 2007]	-1.3276	0.4900	-2.709	0.012 *
------------------------	---------	--------	--------	---------

Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.3782 on 25 degrees of freedom

Multiple R-squared: 0.227, Adjusted R-squared: 0.196

F-statistic: 7.34 on 1 and 25 DF, p-value: 0.012

22. Log (GDP) explained by share of long-term unemployed among all unemployed within Ex-Communist regions.

Focus: Regions with a communist history, (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- **Share of longterm unemployed among all unemployed, 2007**

Call:

```
lm(formula = log(GDP[Year == 2007 & Group == "Eastern"]) ~ Longterm[Year ==  
2007 & Group == "Eastern"])
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
--	----------	------------	---------	----------

(Intercept)	9.57053	0.28534	33.541	<2e-16 ***
-------------	---------	---------	--------	------------

Longterm[Year == 2007 & Group == "Eastern"]	-0.08777	0.52960	-0.166	0.869
---	----------	---------	--------	-------

Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.4183 on 59 degrees of freedom

Multiple R-squared: 0.0004653, Adjusted R-squared: -0.01648

F-statistic: 0.02746 on 1 and 59 DF, p-value: 0.869

23. Log (GDP) explained by Innovation (269 regions).

Focus: Regions (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- **Innovation, 2003**

Call:

```
lm(formula = log(GDP[Year == 2007]) ~ Inno[Year == 2003])
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
--	----------	------------	---------	----------

(Intercept)	9.409	0.122	77.096	< 2e-16 ***
-------------	-------	-------	--------	-------------

Inno[Year == 2003]	1.140	0.203	5.616	7.65e-06 ***
--------------------	-------	-------	-------	--------------

Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.2861 on 25 degrees of freedom

Multiple R-squared: 0.5578, Adjusted R-squared: 0.5401

F-statistic: 31.54 on 1 and 25 DF, p-value: 7.648e-06

24. Log (GDP) explained by innovation within Ex-Communist regions.

Focus: Regions with a communist history, (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- **Innovation, 2003**

Call:

```
lm(formula = log(GDP[Year == 2007 & West_Pop_Density_Eastern]) ~  
    Inno[Year == 2003 & West_Pop_Density_Eastern])
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
--	----------	------------	---------	----------

(Intercept)	9.08549	0.05575	162.978	< 2e-16 ***
-------------	---------	---------	---------	-------------

Inno[Year == 2003 & West_Pop_Density_Eastern]	1.57265	0.16085	9.777	5.95e-14 ***
---	---------	---------	-------	--------------

Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.2585 on 59 degrees of freedom

Multiple R-squared: 0.6183, Adjusted R-squared: 0.6119

F-statistic: 95.59 on 1 and 59 DF, p-value: 5.948e-14

25. Log (GDP) explained by innovation within Western Europe densely populated regions.

Focus: Densely populated regions in Western Europe (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- **Innovation, 2003**

Call:

```
lm(formula = log(GDP[Year == 2007 & West_Pop_Density West_dense_Pop]) ~  
    Inno[Year == 2003 & West_Pop_Density West_dense_Pop])
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
--	----------	------------	---------	----------

(Intercept)	9.8747	0.0954	103.510	< 2e-16 ***
-------------	--------	--------	---------	-------------

Inno[Year == 2003 & West_Pop_Density West_dense_Pop]	0.6257	0.1394	4.487	3.13e-05 ***
--	--------	--------	-------	--------------

Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.2088 on 63 degrees of freedom

(2 observations deleted due to missingness)

Multiple R-squared: 0.2422, Adjusted R-squared: 0.2301

F-statistic: 20.13 on 1 and 63 DF, p-value: 3.134e-05

26. Log (GDP) explained by innovation within Western Europe thinly populated regions.

Focus: Thinly populated regions in Western Europe (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- **Innovation, 2003**

Call:

```
lm(formula = log(GDP[Year == 2007 & West_Pop_Density West_thin_Pop]) ~  
    Inno[Year == 2003 & West_Pop_Density West_thin_Pop]) ~
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
--	----------	------------	---------	----------

(Intercept)	9.79040	0.03587	272.953	< 2e-16 ***
-------------	---------	---------	---------	-------------

Inno[Year == 2003 & West_Pop_Density West_thin_Pop]	0.56022	0.06396	8.758	7.26e-15 ***
---	---------	---------	-------	--------------

Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1771 on 135 degrees of freedom

(4 observations deleted due to missingness)

Multiple R-squared: 0.3623, Adjusted R-squared: 0.3576

F-statistic: 76.71 on 1 and 135 DF, p-value: 7.265e-15

27. Log (GDP) explained by innovation, share of highly educated and share of complex occupations within Western Europe thinly populated regions.

Focus: Thinly populated regions in Western Europe (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- **Innovation, 2003**
- **Share of highly educated, 2008**
- **Share of complex occupations, 2008**

Call:

```
lm(formula = log(GDP[Year == 2007 & Group == "West_thin_Pop"]) ~  
    Inno[Year == 2003 & Group == "West_thin_Pop"] +  
    ISCED[Year == 2007 & Group == "West_thin_Pop"] +  
    ISCO[Year == 2008 & Group == "West_thin_Pop"])
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)		
(Intercept)	9.79874	0.07356	133.200	< 2e-16 ***		
Inno[Year == 2003 & Group == "West_thin_Pop"]	0.43558	0.06789	6.416	2.43e-09 ***		
ISCED[Year == 2007 & Group == "West_thin_Pop"]	0.94658	0.28215	3.355	0.00104 **		
ISCO[Year == 2008 & Group == "West_thin_Pop"]	-0.72479	0.41123	-1.762	0.08036 .		

Signif. codes:	0 '***'	0.001 '**'	0.01 '*'	0.05 '.'	0.1 ''	1

Residual standard error: 0.167 on 129 degrees of freedom

(8 observations deleted due to missingness)

Multiple R-squared: 0.3823, Adjusted R-squared: 0.3679

F-statistic: 26.61 on 3 and 129 DF, p-value: 1.833e-13

28. Log (GDP) explained by share of highly educated and share of complex occupations within Western Europe thinly populated regions.

Focus: Thinly populated regions in Western Europe (NUTS2)

Dependent Variable: Log(GDP), 2007

Independent Variable(s):

- **Share of highly educated, 2008**
- **Share of complex occupations, 2008**

Call:

```
lm(formula = log(GDP[Year == 2007 & West_Pop_Density == "West_thin_Pop"]) ~  
    ISCED[Year == 2007 & West_Pop_Density == "West_thin_Pop"] +  
    ISCO[Year == 2008 & West_Pop_Density == "West_thin_Pop"])
```

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)		
(Intercept)	9.9812	0.0764	130.646	< 2e-16 ***		
ISCED[Year == 2007 & West_Pop_Density == "West_thin_Pop"]	1.6271	0.2902	5.607	1.13e-07 ***		
ISCO[Year == 2008 & West_Pop_Density == "West_thin_Pop"]	-1.2488	0.4474	-2.791	0.00601 **		

Signif. codes:	0 '***'	0.001 '**'	0.01 '*'	0.05 '.'	0.1 ''	1

Residual standard error: 0.1886 on 134 degrees of freedom

(4 observations deleted due to missingness)

Multiple R-squared: 0.1919, Adjusted R-squared: 0.1798

F-statistic: 15.91 on 2 and 134 DF, p-value: 6.32e-07

29. Other results and data request

In this report are only those results depicted which have been mentioned in The Lisbon Council Policy Brief "Human Capital Leading Indicators: How Europe's Regions and Cities Can Drive Growth and Foster Social Inclusion". For other results, e.g. fixed-effects estimations, or data requests please contact:

Dr. Peer Ederer (peer.ederer@lisboncouncil.net)

30. NUTS2-Codes and names of the regions

NUTS-Code	Name of the region
BE10	Région de Bruxelles-Capitale / Brussels Hoofdstedelijk Gewest
BE21	Prov. Antwerpen
BE22	Prov. Limburg (B)
BE23	Prov. Oost-Vlaanderen
BE24	Prov. Vlaams-Brabant
BE25	Prov. West-Vlaanderen
BE31	Prov. Brabant Wallon
BE32	Prov. Hainaut
BE33	Prov. Liège
BE34	Prov. Luxembourg (B)
BE35	Prov. Namur
BG31	Северозападен / Severozapaden
BG32	Северен централен / Severen tsentralen
BG33	Североизточен / Severoiztochen
BG34	Югоизточен / Yugoiztochen
BG41	Югозападен / Yugozapaden
BG42	Южен централен / Yuzhen tsentralen
CZ01	Praha
CZ02	Střední Čechy
CZ03	Jihozápad
CZ04	Severozápad
CZ05	Severovýchod
CZ06	Jihovýchod
CZ07	Střední Morava
CZ08	Moravskoslezsko
DK01	Hovedstaden
DK02	Sjælland
DK03	Syddanmark
DK04	Midtjylland
DK05	Nordjylland
DE11	Stuttgart
DE12	Karlsruhe
DE13	Freiburg
DE14	Tübingen
DE21	Oberbayern
DE22	Niederbayern
DE23	Oberpfalz
DE24	Oberfranken
DE25	Mittelfranken
DE26	Unterfranken
DE27	Schwaben
DE30	Berlin
DE41	Brandenburg - Nordost
DE42	Brandenburg - Südwest

DE50	Bremen
DE60	Hamburg
DE71	Darmstadt
DE72	Gießen
DE73	Kassel
DE80	Mecklenburg-Vorpommern
DE91	Braunschweig
DE92	Hannover
DE93	Lüneburg
DE94	Weser-Ems
DEA1	Düsseldorf
DEA2	Köln
DEA3	Münster
DEA4	Detmold
DEA5	Arnsberg
DEB1	Koblenz
DEB2	Trier
DEB3	Rheinhessen-Pfalz
DEC0	Saarland
DED1	Chemnitz
DED2	Dresden
DED3	Leipzig
DEE0	Sachsen-Anhalt
DEF0	Schleswig-Holstein
DEG0	Thüringen
EE00	Eesti
IE01	Border, Midland and Western
IE02	Southern and Eastern
GR11	Ανατολική Μακεδονία, Θράκη / Anatoliki Makedonia, Thraki
GR12	Κεντρική Μακεδονία / Kentriki Makedonia
GR13	Δυτική Μακεδονία / Dytiki Makedonia
GR14	Θεσσαλία / Thessalia
GR21	Ήπειρος / Ipeiros
GR22	Ιόνια Νησιά / Ionia Nisia
GR23	Δυτική Ελλάδα / Dytiki Ellada
GR24	Στερεά Ελλάδα / Sterea Ellada
GR25	Πελοπόννησος / Peloponnisos
GR30	Αττική / Attiki
GR41	Βόρειο Αιγαίο / Voreio Aigaio
GR42	Νότιο Αιγαίο / Notio Aigaio
GR43	Κρήτη / Kriti
ES11	Galicia
ES12	Principado de Asturias
ES13	Cantabria
ES21	País Vasco
ES22	Comunidad Foral de Navarra
ES23	La Rioja

ES24	Aragón
ES30	Comunidad de Madrid
ES41	Castilla y León
ES42	Castilla-La Mancha
ES43	Extremadura
ES51	Cataluña
ES52	Comunidad Valenciana
ES53	Illes Balears
ES61	Andalucía
ES62	Región de Murcia
ES63	Ciudad Autónoma de Ceuta
ES64	Ciudad Autónoma de Melilla
ES70	Canarias
FR10	Île de France
FR21	Champagne-Ardenne
FR22	Picardie
FR23	Haute-Normandie
FR24	Centre
FR25	Basse-Normandie
FR26	Bourgogne
FR30	Nord - Pas-de-Calais
FR41	Lorraine
FR42	Alsace
FR43	Franche-Comté
FR51	Pays de la Loire
FR52	Bretagne
FR53	Poitou-Charentes
FR61	Aquitaine
FR62	Midi-Pyrénées
FR63	Limousin
FR71	Rhône-Alpes
FR72	Auvergne
FR81	Languedoc-Roussillon
FR82	Provence-Alpes-Côte d'Azur
FR83	Corse
FR91	Guadeloupe
FR92	Martinique
FR93	Guyane
FR94	Réunion
ITC1	Piemonte
ITC2	Valle d'Aosta/Vallée d'Aoste
ITC3	Liguria
ITC4	Lombardia
ITD1	Provincia Autonoma Bolzano/Bozen
ITD2	Provincia Autonoma Trento
ITD3	Veneto
ITD4	Friuli-Venezia Giulia

ITD5	Emilia-Romagna
ITE1	Toscana
ITE2	Umbria
ITE3	Marche
ITE4	Lazio
ITF1	Abruzzo
ITF2	Molise
ITF3	Campania
ITF4	Puglia
ITF5	Basilicata
ITF6	Calabria
ITG1	Sicilia
ITG2	Sardegna
CY00	Kúpros / Kıbrıs
LV00	Latvija
LT00	Lietuva
LU00	Luxembourg (Grand-Duché)
HU10	Közép-Magyarország
HU21	Közép-Dunántúl
HU22	Nyugat-Dunántúl
HU23	Dél-Dunántúl
HU31	Észak-Magyarország
HU32	Észak-Alföld
HU33	Dél-Alföld
MT00	Malta
NL11	Groningen
NL12	Friesland (NL)
NL13	Drenthe
NL21	Overijssel
NL22	Gelderland
NL23	Flevoland
NL31	Utrecht
NL32	Noord-Holland
NL33	Zuid-Holland
NL34	Zeeland
NL41	Noord-Brabant
NL42	Limburg (NL)
AT11	Burgenland (A)
AT12	Niederösterreich
AT13	Wien
AT21	Kärnten
AT22	Steiermark
AT31	Oberösterreich
AT32	Salzburg
AT33	Tirol
AT34	Vorarlberg
PL11	Łódzkie

PL12	Mazowieckie
PL21	Małopolskie
PL22	Śląskie
PL31	Lubelskie
PL32	Podkarpackie
PL33	Świętokrzyskie
PL34	Podlaskie
PL41	Wielkopolskie
PL42	Zachodniopomorskie
PL43	Lubuskie
PL51	Dolnośląskie
PL52	Opolskie
PL61	Kujawsko-Pomorskie
PL62	Warmińsko-Mazurskie
PL63	Pomorskie
PT11	Norte
PT15	Algarve
PT16	Centro (P)
PT17	Lisboa
PT18	Alentejo
PT20	Região Autónoma dos Açores
PT30	Região Autónoma da Madeira
RO11	Nord-Vest
RO12	Centru
RO21	Nord-Est
RO22	Sud-Est
RO31	Sud - Muntenia
RO32	Bucureşti - Ilfov
RO41	Sud-Vest Oltenia
RO42	Vest
SI01	Vzhodna Slovenija
SI02	Zahodna Slovenija
SK01	Bratislavský kraj
SK02	Západné Slovensko
SK03	Stredné Slovensko
SK04	Východné Slovensko
FI13	Itä-Suomi
FI18	Etelä-Suomi
FI19	Länsi-Suomi
FI1A	Pohjois-Suomi
FI20	Åland
SE11	Stockholm
SE12	Östra Mellansverige
SE21	Småland med öarna
SE22	Sydsverige
SE23	Västsverige
SE31	Norra Mellansverige

SE32	Mellersta Norrland
SE33	Övre Norrland
UKC1	Tees Valley and Durham
UKC2	Northumberland and Tyne and Wear
UKD1	Cumbria
UKD2	Cheshire
UKD3	Greater Manchester
UKD4	Lancashire
UKD5	Merseyside
UKE1	East Yorkshire and Northern Lincolnshire
UKE2	North Yorkshire
UKE3	South Yorkshire
UKE4	West Yorkshire
UKF1	Derbyshire and Nottinghamshire
UKF2	Leicestershire, Rutland and Northamptonshire
UKF3	Lincolnshire
UKG1	Herefordshire, Worcestershire and Warwickshire
UKG2	Shropshire and Staffordshire
UKG3	West Midlands
UKH1	East Anglia
UKH2	Bedfordshire and Hertfordshire
UKH3	Essex
UKI1	Inner London
UKI2	Outer London
UKJ1	Berkshire, Buckinghamshire and Oxfordshire
UKJ2	Surrey, East and West Sussex
UKJ3	Hampshire and Isle of Wight
UKJ4	Kent
UKK1	Gloucestershire, Wiltshire and Bristol/Bath area
UKK2	Dorset and Somerset
UKK3	Cornwall and Isles of Scilly
UKK4	Devon
UKL1	West Wales and The Valleys
UKL2	East Wales
UKM2	Eastern Scotland
UKM3	South Western Scotland
UKM5	North Eastern Scotland
UKM6	Highlands and Islands
UKN0	Northern Ireland