MINISTRY OF THE ECONOMY AND INNOVATION

Assessment of the labour productivity developments in Lithuania. Investment and labour productivity in the EU.

National Productivity Board

Overview of investment[1] in the European Union

Investment has a positive impact on labour productivity. Labour productivity is higher in those groups of Member States where investment per employee is higher.

The largest investment per employee – EUR 34 201 – was in EU Member States that are labour productivity leaders, with Ireland investing the most per employee at EUR 59 134.

In 2020, investment in Lithuania per employee amounted to EUR 6 948. This placed it 22nd out of the 27 EU Member States.

COVID-19 has contributed towards negative investment growth in most of the EU27.

Investment fell most in the EU Member States that are labour productivity leaders and in Western European countries (-7.4 % and -4 % respectively). In countries with lower labour productivity, the decline in investment was more gradual.

Nevertheless, when considered from a longer-term perspective, average 5-yearly growth in investment per employee in the EU Member States that are leaders in terms of labour productivity remains strong, so there will be no significant convergence with them in the near future.

Investment per employee: who invests the most?

In 2019, of the EU 27, Ireland invested the most per employee (EUR 59 134).

In Lithuania, investment per employee amounted to EUR 6 948, placing the country 22nd out of the 27 EU Member States and, in comparison to neighbouring countries (Estonia, Latvia and Poland), only ahead of Poland. Investment per employee in Poland – EUR 5 314 – is less than in Lithuania.

In 2020, Poland ranked 25th among the EU 27, having fallen one place in comparison to 2019.

Estonia had invested significantly more per employee than its neighbours – EUR 12 055, or nearly twice as much as Lithuania. Accordingly, Estonia ranked 11th among the EU 27. In 2020, Estonia rose 4 places in comparison to 2019. It was one of the few countries where investment growth was positive.

In Latvia, investment per employee was EUR 7 744 (placing it 18th out of EU 27), more than per employee in Lithuania (EUR 6 948, placing it 22nd out of EU 27).

Investment per employee is higher in groups of EU Member States with higher labour productivity.

In 2019, the leading group of EU Member States in terms of labour productivity (Ireland, Luxembourg, and Denmark) invested EUR 34 201 per employee.

In Member States with average labour productivity (EU Member States with labour productivity in quartiles 2 and 3 of between 25 % and 75 %), investment per employee amounted to EUR 11 298.

In the CEE countries group[2], investment per employee amounted to EUR 6 948.

The Western European group of countries[3] invested EUR 19 215 per employee.

[1] Investment or investment flow is gross fixed capital formation at constant prices. Gross fixed capital formation comprises the acquisition of fixed assets by resident producers during the period, less disposals/sales, plus certain additions to the value of non-produced assets realised by the productive activity of the producer or institutional units. Fixed assets are assets created and used for more than one year for production (source: Statistics Lithuania).

[2] Central and Eastern European countries (Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovenia, and Slovakia) or CEE.

[3] Western European countries (Belgium, Denmark, Germany, Ireland, Greece, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal, Finland, Sweden, and the United Kingdom) or WE.

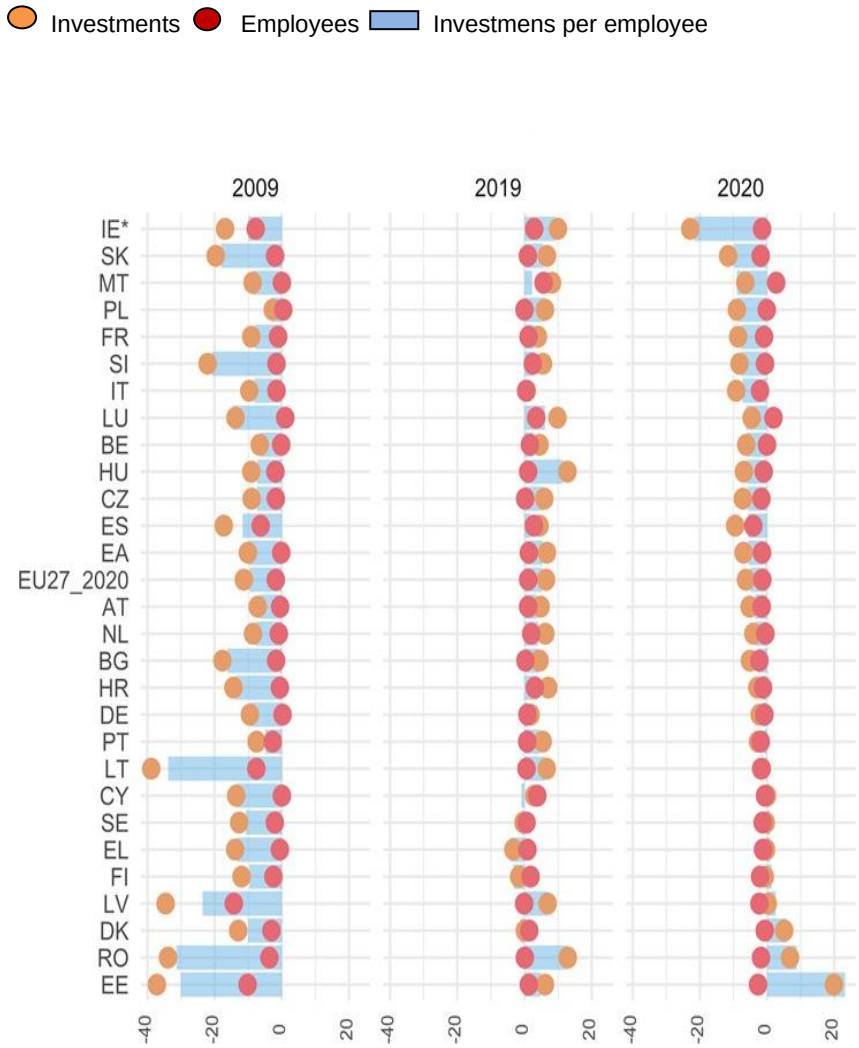
Investment trends in 2020 — negative investment growth in most EU countries

2020 was marked by negative investment growth in almost the whole of the EU 27. Because of COVID-19, however, investment growth and growth in investment per employee declined much more gradually than in 2009 (see Figure 1).

Investment growth was not negative in just 8 EU Member States in 2020 (including Estonia and Latvia). Negative growth in investment per employee was seen in just five EU Member States (Denmark, Greece, Cyprus, Finland and Sweden) in 2019 (see Figure 3).

Fig. 1

Changes in investment and investment per employee in EU 27*



* Source: Eurostat; Calculations made by the Ministry of the Economy and Innovation (EIM).

* Full names of EU Member States can be found in the Annex (page 17).

Table 1

Changes in remuneration in EU 27 and groups of countries

Name	2009–2020 average change
Leading EU Member States in terms of labour productivity	5.2 %
25% < x < 75%	0.5 %
< 10%	0.3 %
EU 27	2.5 %
Lithuania	**0.9 %**
Euro area	5.5 %
WE countries	0.5 %
CEE countries	1.9 %

Within a group of countries, average growth is calculated as the change in the average labour productivity within that group. Further on in the text, the average change in labour productivity for country groups is calculated as the arithmetic mean of the changes in labour productivity of the countries making up the group (e.g. the leaders).

In 2020, investment grew fastest in Estonia (23 %), Romania (9 %) and Denmark (6 %).

Lithuania did not make any progress in terms of investment per employee. According to this indicator, it was ranked 21st among the EU 27. Lithuania's position in terms of growth in investment per employee, however, did not decline. The ratio of investment per employee in Lithuania to the EU 27 average even improved by 2 percentage points in comparison to 2019. Under the circumstances of COVID-19, the growth in investment per employee in Lithuania was not markedly negative, in view of the fact that in most EU Member States, investment fell more sharply.

In 2020, investment per employee in Lithuania remained relatively stable, declining by 0.3 % and amounting to 52 % of the EU 27 average (see Figure 2), whereas average five-yearly growth remained just as strong as the growth in investment per employee in the EU Member States that are leaders in terms of labour productivity, i.e. 4.9 % (see Figure 4). The sharpest fall in investment per employee in 2020 was in the group of countries with higher labour productivity: Germany, Estonia, Greece, Cyprus, Latvia, Romania, Finland, Sweden.

The average change in investment per employee in the CEE countries amounted to 1.3 %, with the investment amounting to 57 % of the EU 27 average.

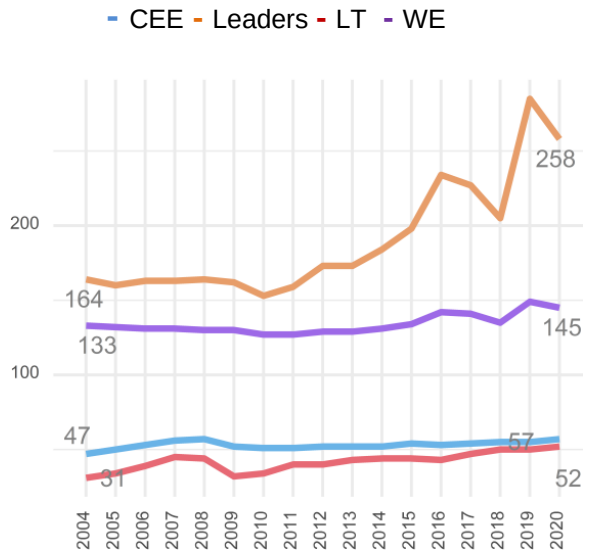
The average change in investment per employee in the Western European group of countries was nearly 4 %, with the investment amounting to 145 % of the EU 27 average or 4 percentage points less than in 2019.

The decline in investment per employee in the EU Member States that are leaders in terms of labour productivity was -7.4 %, 27 percentage points less than in 2019.

In 2020, the average five-yearly increase in investment in the EU Member States that are leaders in terms of labour productivity remained considerably more rapid that in the WE or CEE groups of countries (see Figure 2 and Table 1). There will therefore be no significant convergence of labour productivity with the EU Member States that are leaders in terms of labour productivity in the near future.

Fig. 2

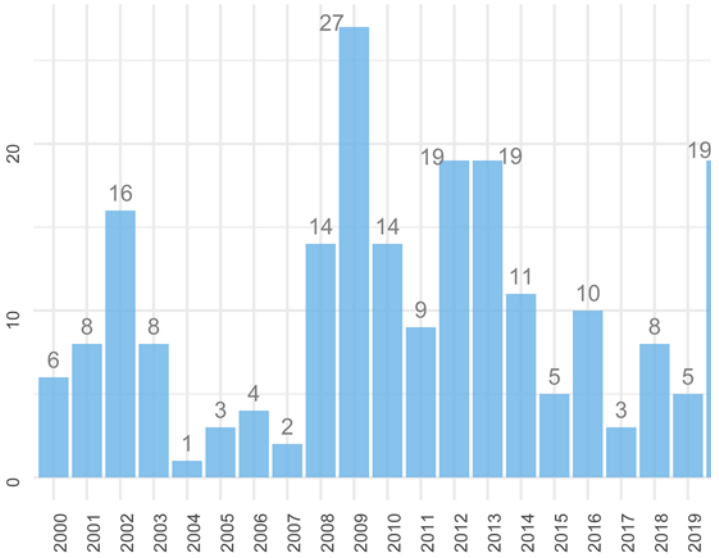
Investment per employee, in comparison to the EU 27 average (%)



Source: Eurostat; EIM calculations.

Fig. 3

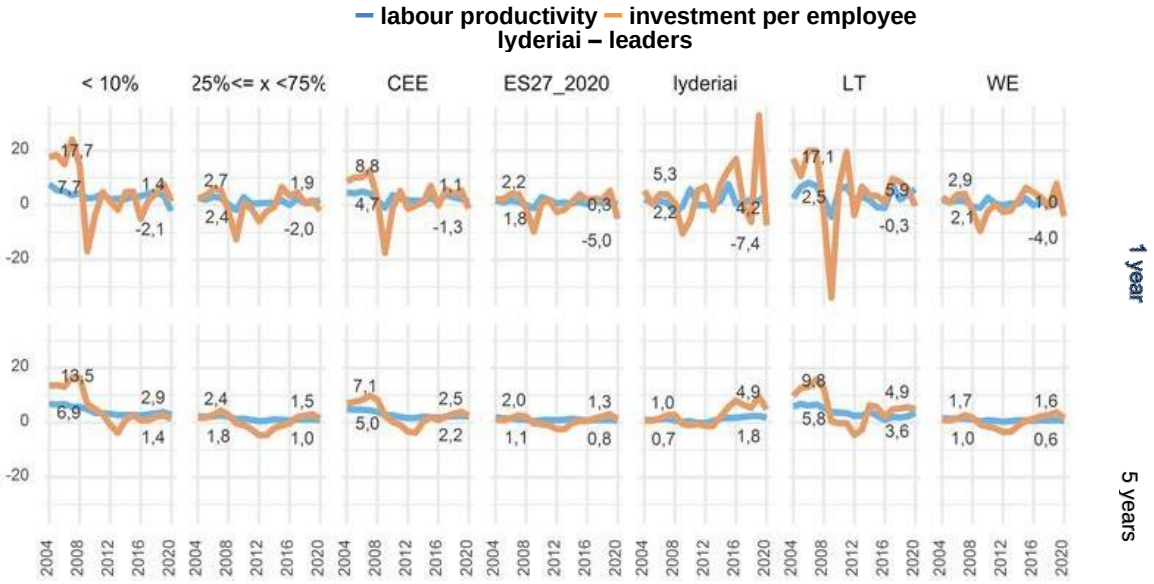
Number of EU 27 countries showing negative growth in investment per employee



Source: EIM calculations.

Fig. 4

Average change in investment per employee and hourly labour productivity in the EU (%)



Source: Eurostat; EIM calculations.

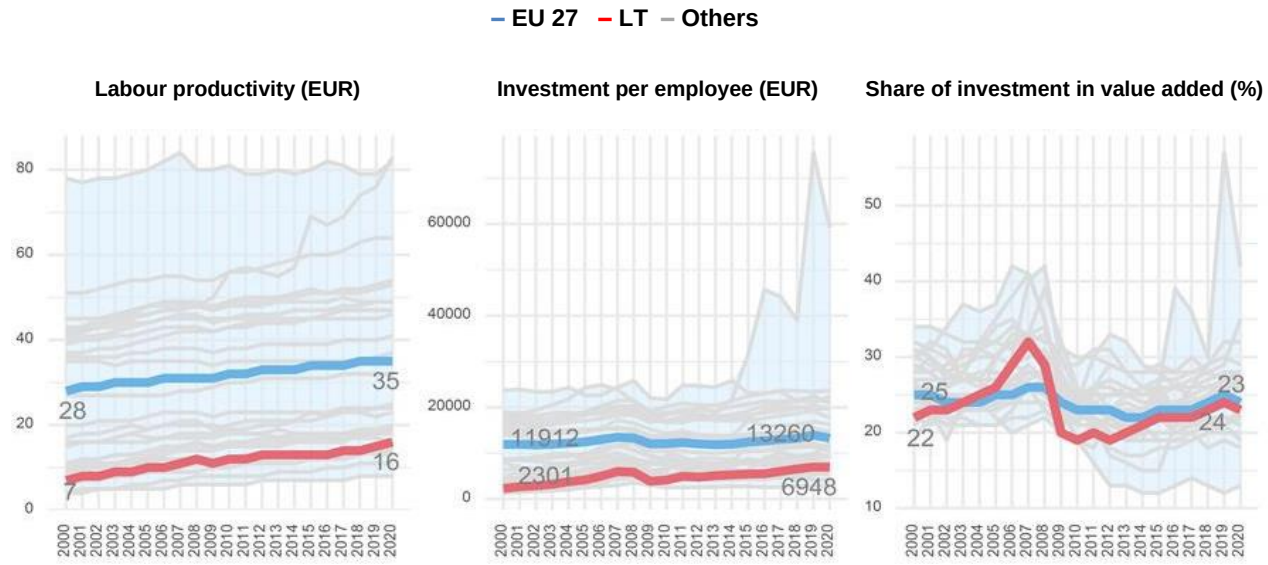
Convergence in the EU by investment

Lithuania has achieved slightly higher convergence in terms of investment per employee than in terms of labour productivity. In terms of labour productivity, Lithuania reached 46 % of the EU 27 average in 2020, whereas, in terms of investment per employee, it reached 52 % of the EU 27 average (see Figure 5). Lithuania's investment share in value added[5] comes to 23 %, which is nearly the same as the average share of investment by the EU 27 in value added 24 %.

In terms of this indicator, Lithuania was ranked 18th. Only in Ireland the share of investment in value added was significantly greater, reaching as high as 42 %. Estonia, where the share of GDP accounted for investment was 35 %, ranked second. The share of investment in value added in other EU Member States (ranked from 3rd to 14th) ranged from 24 to 31 %.

Fig. 5

Labour productivity and investment per employee in the EU 27 2000–2020



Source: Eurostat; EIM calculations.

Investment per employee is higher in countries with higher labour productivity. The top 5 countries with the most investment per employee are Sweden, Ireland, Denmark, Luxembourg and Belgium. These are the countries with high labour productivity. Thus among the top 5 countries with the lowest investment per employee are those with low labour productivity: Hungary, Romania, Poland, Greece, Romania, and Bulgaria (see Figure 6 and Table 2). In 2020, Lithuania thus came eighth-to-last among EU 27 in terms of labour productivity and in sixth-to-last among EU 27 in terms of investment per employee.

The correlation between investment per employee and labour productivity in the EU 27 in 2020 was 0.9. The interdependence between labour productivity and investment in the EU is significant, but varies between countries (see Figure 9).

This may indicate significant structural differences in investment or other factors more important to the level of remuneration in the country, e.g. more investments directly linked to infrastructure development or long-term investment projects. Investment has a stronger impact on labour productivity after 1 or 2 years (see Figures 10-12)[6].

Investments have a positive impact not only on labour productivity growth, but also on the development of exports (see Figures 13 and 14).

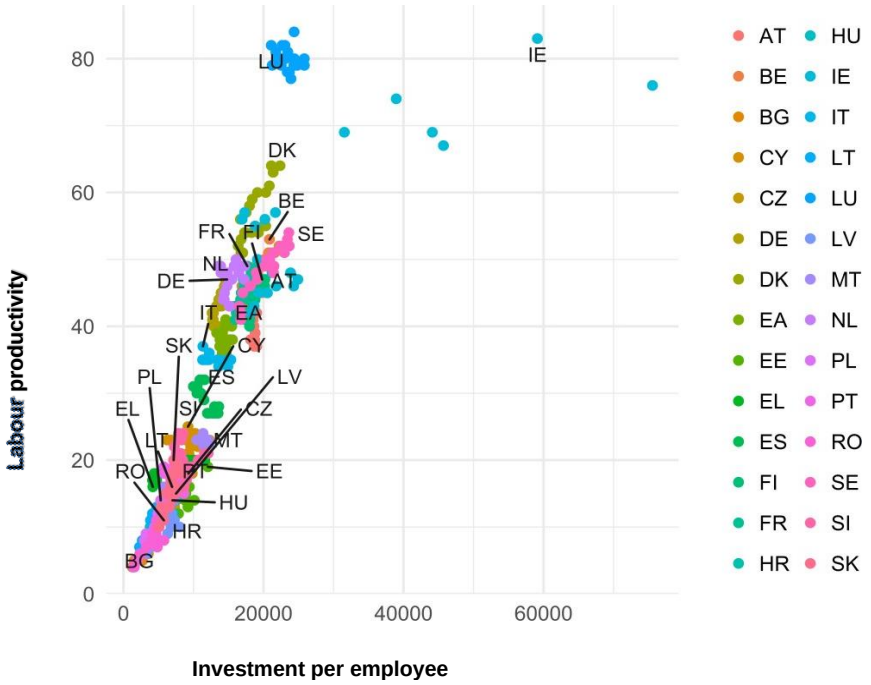
In Lithuania's case, it is not only faster investment growth that matters, but also the quality of investment, i.e. how much it contributes to the country's sustainable growth. The study shows that there is positive potential for innovation reform in Lithuania. The efficiency of the R&D sector is the most striking example of GDP growth.

[5] Investment and GDP at current prices.

[6] Panel regression coefficients for changes in labour productivity and investment are larger when the investment lag is greater.

Fig. 6

Correlation between investment per employee and labour productivity per hour worked in the EU 27*



Source: Eurostat; EIM calculations.
* Full names of EU Member States can be found in the Annex (page 17).

When will Lithuania overtake the EU 27 average in terms of investment per employee?

Lithuania will only overtake the EU 27 average for investment per employee in 2035 if Lithuania and the EU 27 countries grow at the same rate as the average growth in the period between 2009 and 2020, i.e. 5.5 % and 0.9 % respectively (see Figure 7).

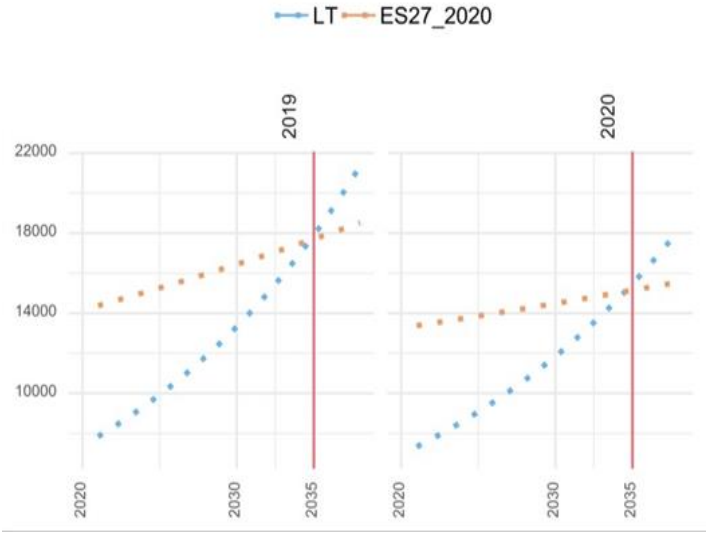
According to data from 2019, Lithuania should exceed the EU 27 average of investment per employee in 2035.

In 2019, the difference between investment per employee in Lithuania and the EU 27 countries did not change significantly. In Lithuania, the growth rate of investment per employee was 6.1 % from 2009 to 2019, compared with 1.5 % in the EU 27 countries.

In order for Lithuania to reach the EU 27 level of investment per employee in 2030, Lithuania's average annual growth should be at least 7.63 %.

Fig. 7

Convergence of Lithuania with the EU27 countries by investment per employee



Source: Eurostat; EIM calculations.

When will Lithuania overtake the WE countries in terms of investment per employee?

Lithuania is lagging behind the WE countries in terms of investment per employee, but the gap will gradually narrow. In 2020, the change in investment per employee was -0.3 % in Lithuania and -4 % in the Western European countries.

Investment per employee in Lithuania will overtake Western European countries in 2050, if growth in Lithuania and Western European countries matches their average growth in the period of 2009–2020, i.e. 5.5 % and 2 % respectively (see Figure 8).

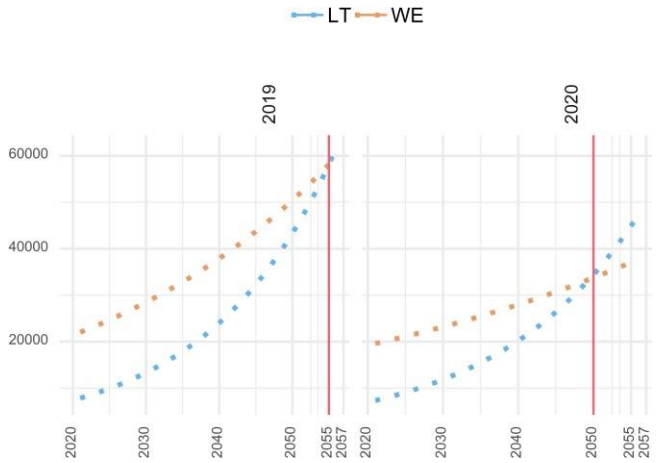
It should be noted that in 2019, it would have taken 5 additional years to reach the average for Western European countries in terms of investment per employee. This was influenced by a sharper drop in investment in the Western European countries than in Lithuania, not by an increase in investment growth in Lithuania.

For Lithuania to reach the level of the Western European countries in terms of investment per employee by 2030, an annual growth rate of 12.8 % is required (all other things being equal, e.g. growth in the number of persons employed etc.). This means growth that is 13.1 percentage points faster than in 2020.

Currently, however, the greatest risk to investment growth is China's blocking of Lithuania's participation in the international production chain by excluding goods or services from China if their origin is connected in one way or another to Lithuania[7].

Fig. 8

Lithuania's convergence with the WE countries in terms of investment per employee



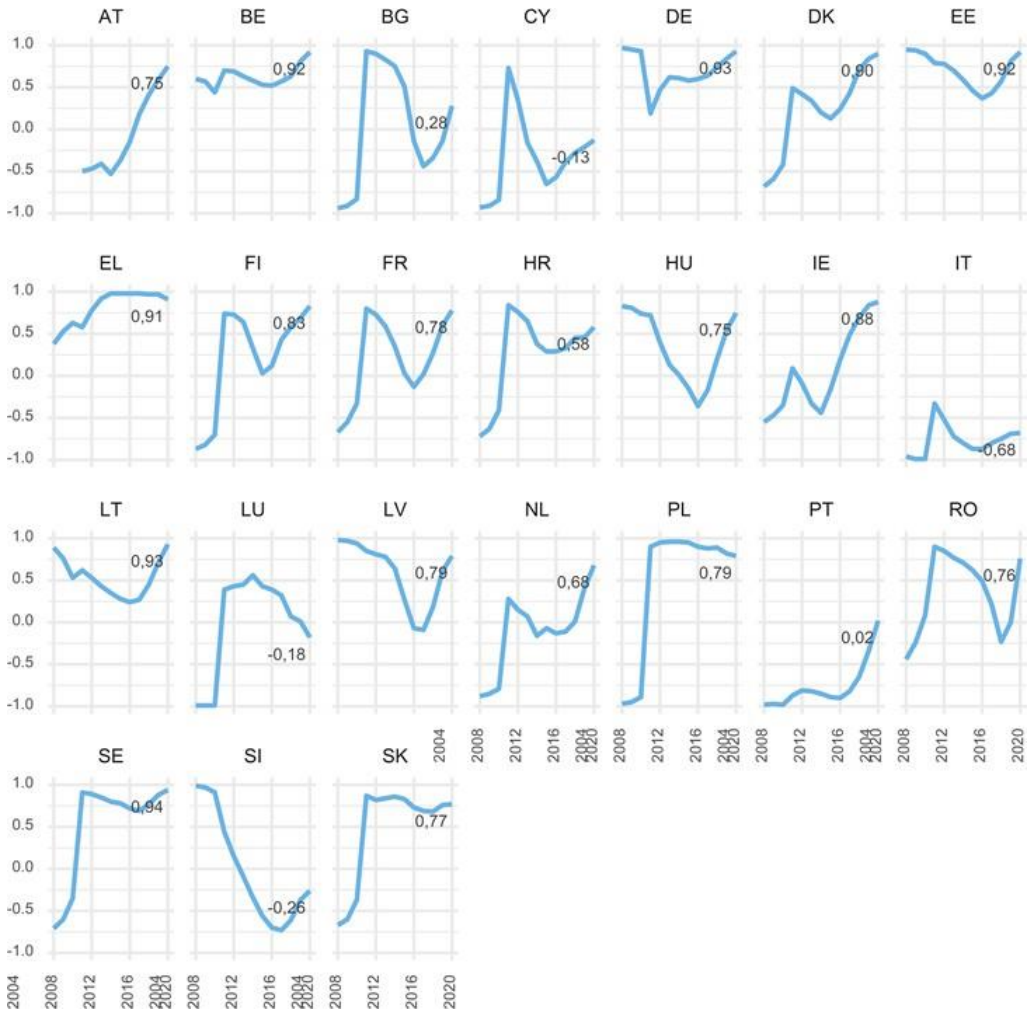
Source: Eurostat; EIM calculations.

[7] 'China deleted Lithuania from its customs system (effectively banning its exports), and is organising a corporate boycott of Lithuanian firms' https://davidskilling.substack.com/p/china-and-the-ending-of-an-era

Annex

Fig. 9

Rolling 10-year average correlation of labour productivity per hour worked and investment per employee in the EU 27*



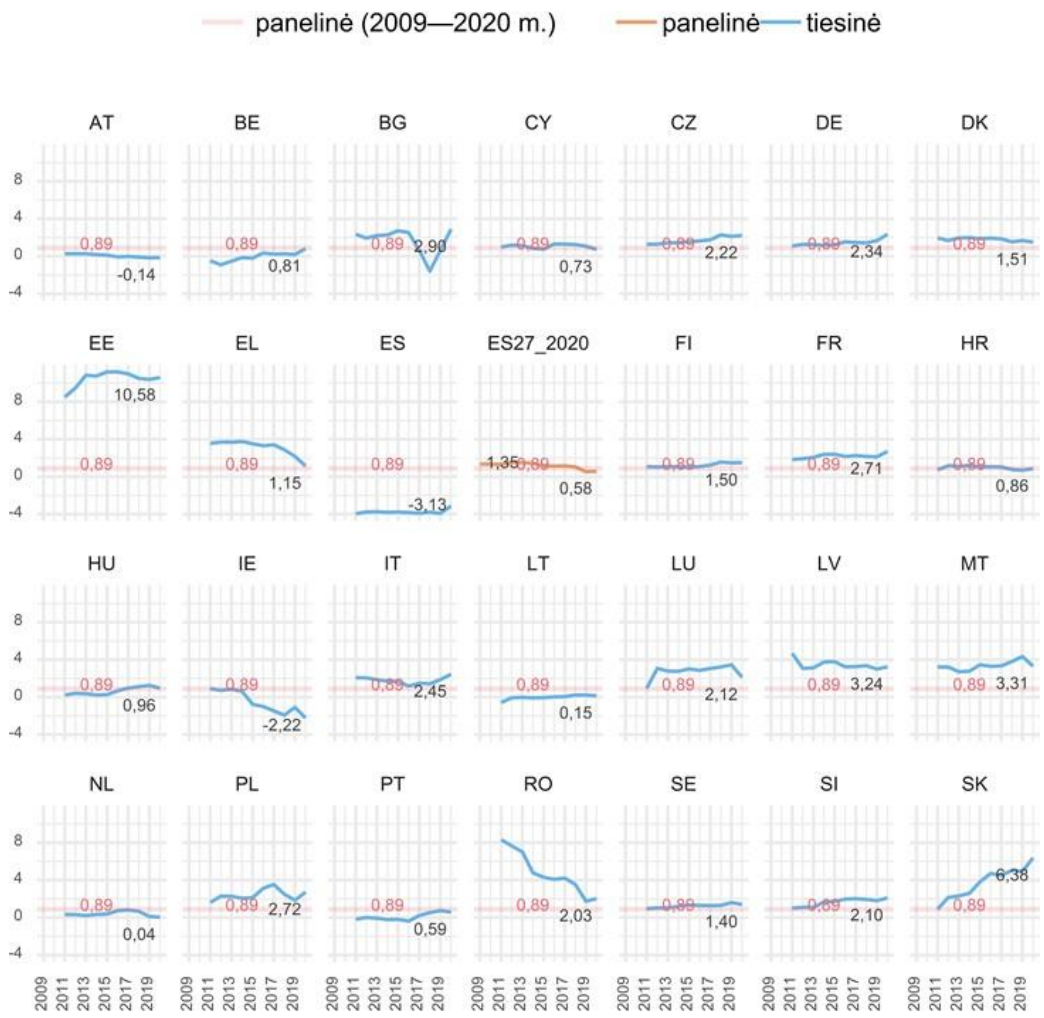
Source: Eurostat; EIM calculations.

*- Full names of EU Member States can be found in the Annex (page 17).

Fig. 10

Rolling 10-year linear and panel regression coefficients and panel regression coefficients (for 2009 to 2020) of labour productivity per hour worked in the EU 27*

(Key: panelinė = panel regression; tiesinė = linear regression)



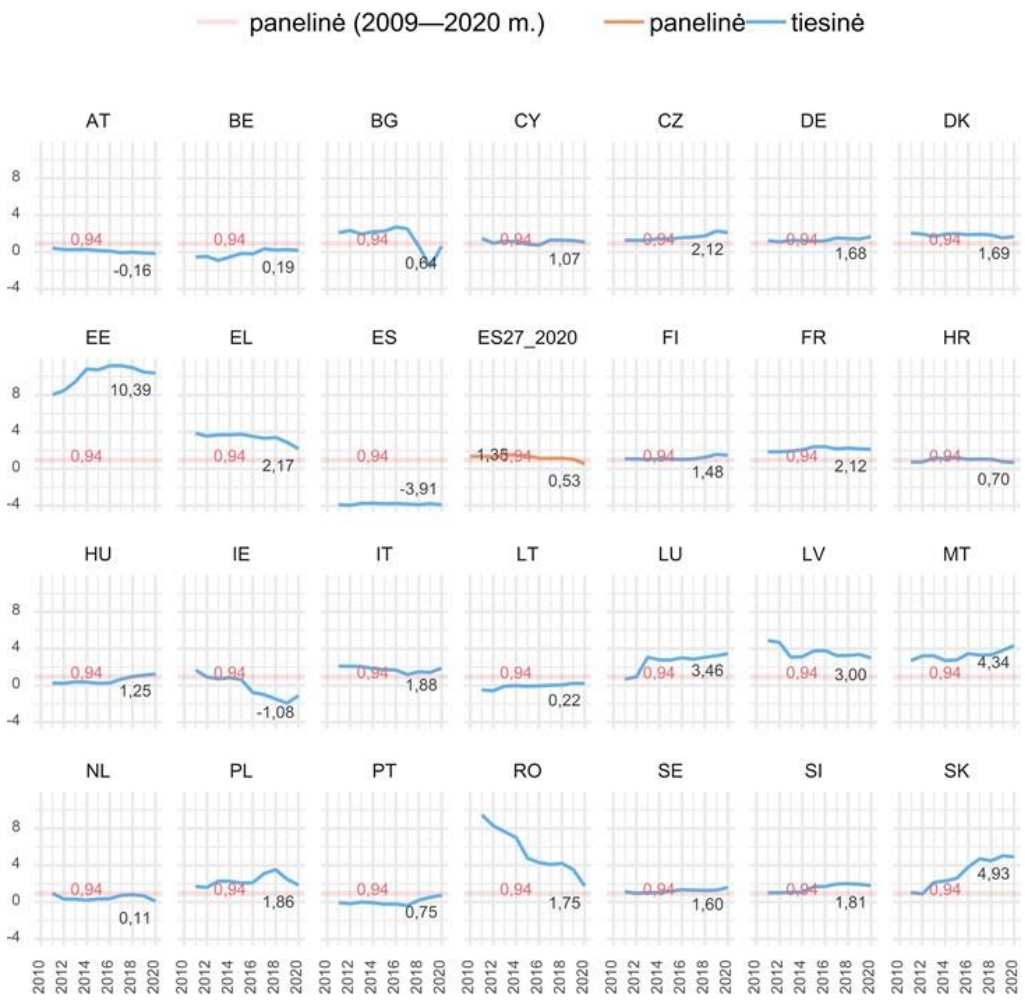
Source: Eurostat; EIM calculations.

Note: Linear regression: logarithmic changes; panel regression: logarithmic data for the ‘first difference’ (FD).

*- Full names of EU Member States can be found in the Annex (page 17).

Fig. 11

Rolling 10-year linear and panel regression coefficients and panel regression coefficients (for 2009 to 2020) of labour productivity per hour worked in the EU 27*
(Key: panelinė = panel regression; tiesinė = linear regression)



Source: Eurostat; EIM calculations.

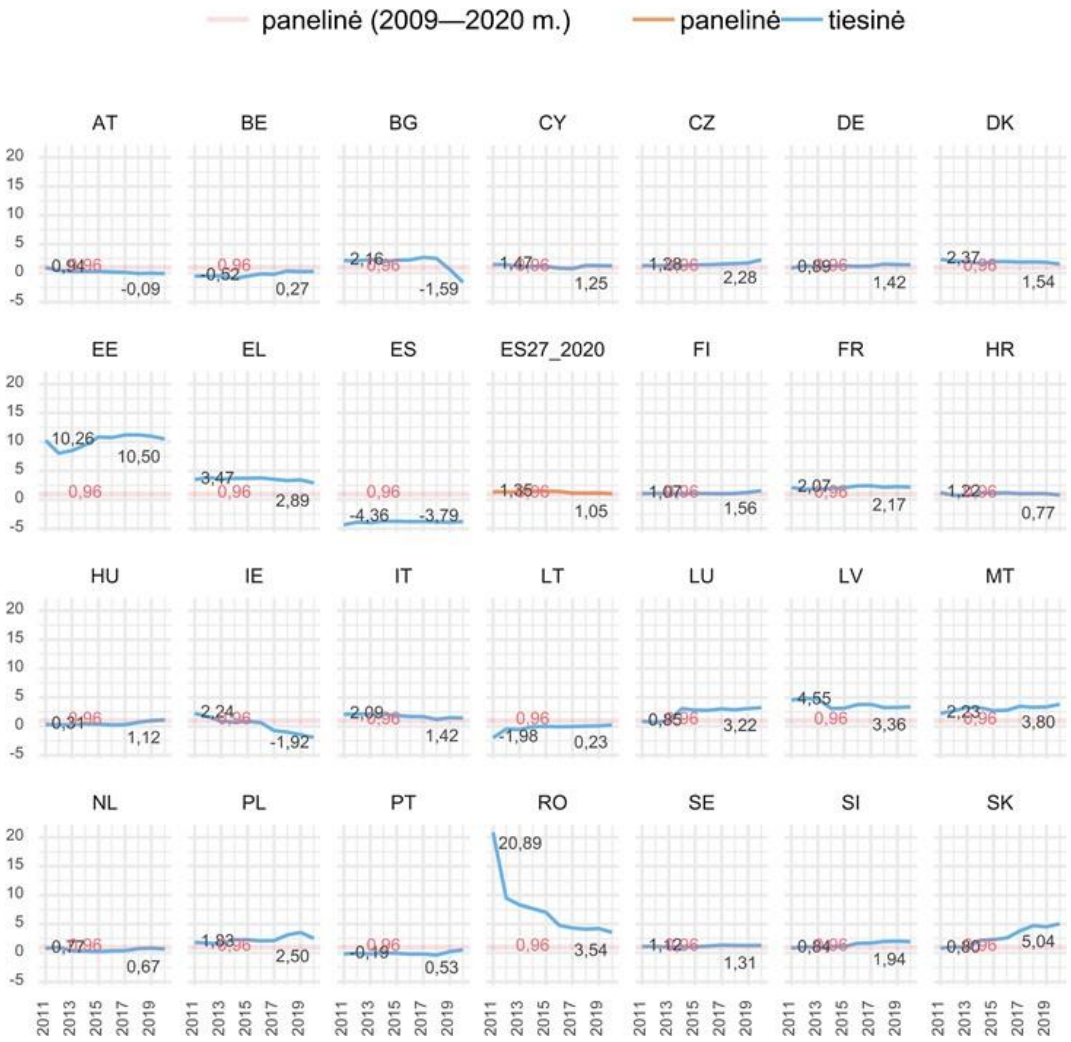
Note: Linear regression: logarithmic changes; panel regression: logarithmic data for the 'first difference' (FD). Changes in investment appear with a one-year lag.

*- Full names of EU Member States can be found in the Annex (page 17).

Fig. 12

Rolling 10-year linear and panel regression coefficients and panel regression coefficients (for 2009 to 2020) of labour productivity per hour worked in the EU 27*

(Key: panelinė = panel regression; tiesinė = linear regression)



Source: Eurostat; EIM calculations.

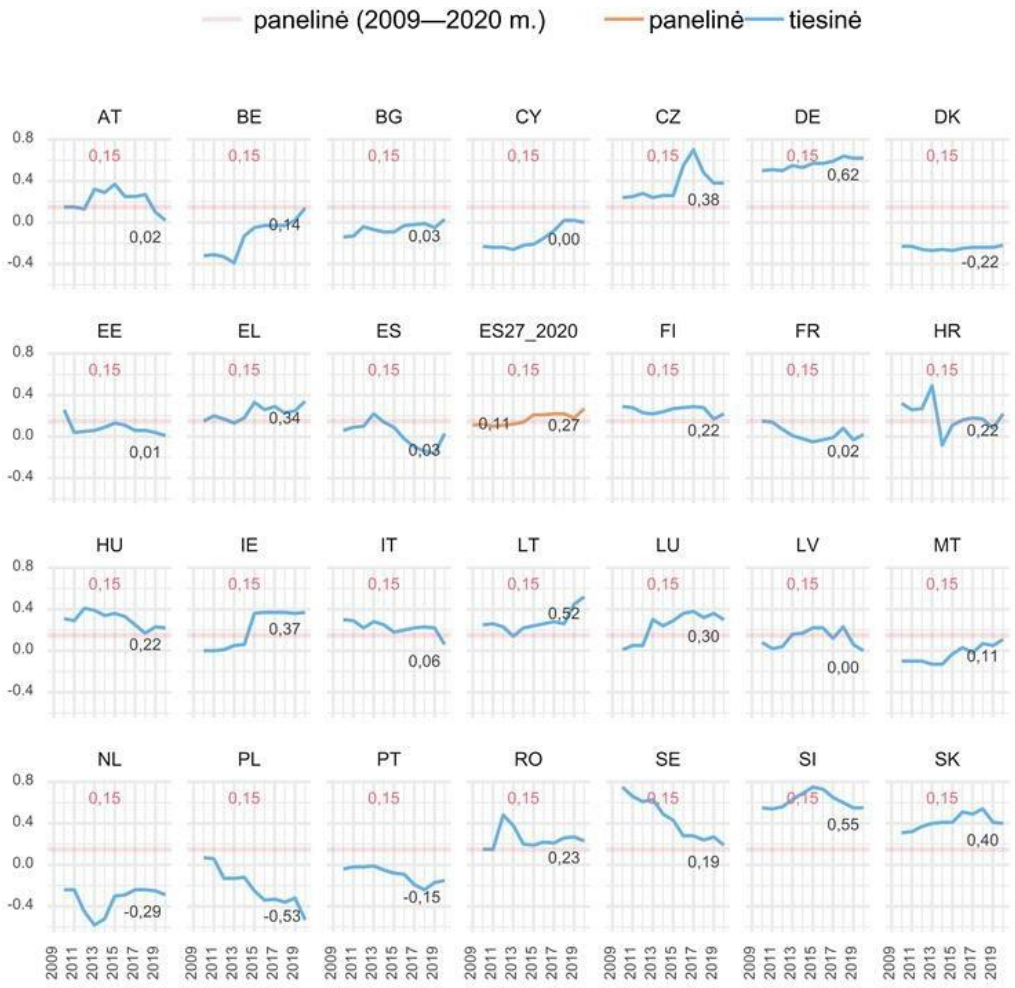
Note: Linear regression: logarithmic changes; panel regression: logarithmic data for the 'first difference' (FD). Changes in investment appear with a two-year lag.

*- Full names of EU Member States can be found in the Annex (page 17).

Fig. 13

Rolling 10-year linear and panel regression coefficients, and panel regression coefficients for 2009 to 2019 (estimates), of changes in labour productivity per employee and changes in export market share in the EU 27*

(Key: panelinė = panel regression; tiesinė = linear regression)

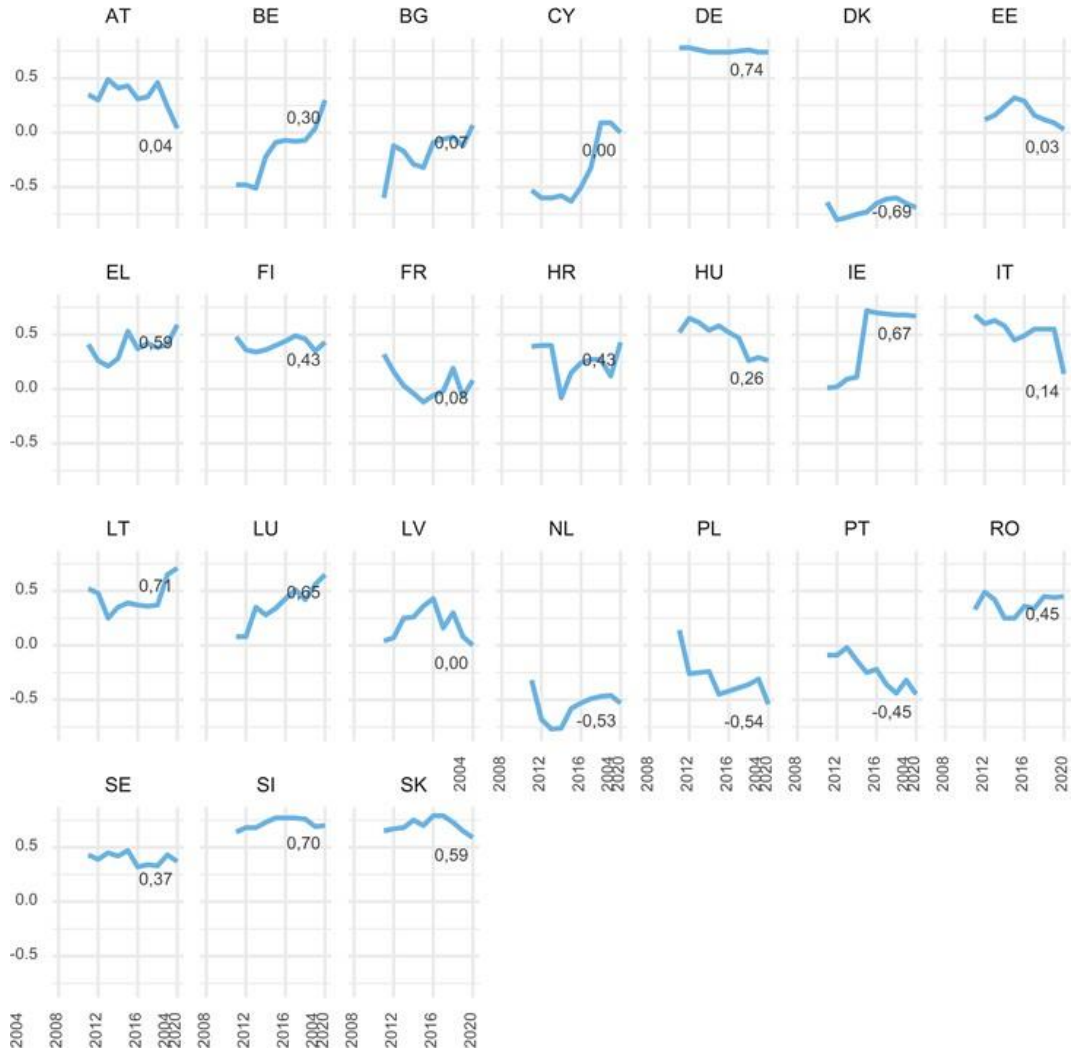


Source: Eurostat; EIM calculations.

*- Full names of EU Member States can be found in the Annex (page 17).

Fig. 14

Correlation between investment per employee and 10-year rolling average changes in export market shares in the EU 27[*]



Source: Eurostat; EIM calculations.

*- Full names of EU Member States can be found in the Annex (page 17).

Table 2

EU 27* countries with the most investment per employee

Ranking	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1	**LU**	**LU**	**LU**	**LU**	**LU**	**IE**	**IE**	**LU**	**LU**	**LU**	**LU**	**LU**	**LU**	**LU**	**LU**	**IE**	**IE**	**IE**	**IE**	**IE**	**IE**
2	AT	AT	IE	IE	IE	LU	LU	IE	SE	IE	SE	SE	SE	SE	IE	LU	LU	SE	SE	SE	SE
3	**IE**	**IE**	**AT**	**AT**	**AT**	**BE**	**SE**	**SE**	**IE**	**SE**	**BE**	**BE**	**IE**	**BE**	**SE**	**SE**	**SE**	**LU**	**BE**	**LU**	**DK**
4	FI	FI	FI	FI	FI	SE	DK	BE	BE	BE	FI	FI	BE	IE	BE	BE	BE	BE	DK	BE	LU
5	**BE**	**BE**	**BE**	**SE**	**BE**	**FI**	**BE**	**FI**	**FI**	**FI**	**FR**	**AT**	**FI**	**AT**	**DK**	**DK**	**DK**	**DK**	**LU**	**DK**	**BE**
6	DK	SE	SE	BE	SE	AT	FI	DK	DK	AT	AT	FR	AT	DK	AT	AT	FI	FI	FI	AT	FI
7	**SE**	**DK**	**DK**	**DK**	**DK**	**DK**	**AT**	**AT**	**AT**	**DK**	**IE**	**IE**	**DK**	**FI**	**FI**	**FI**	**AT**	**AT**	**AT**	**FI**	**AT**
8	FR	FR	FR	FR	FR	FR	FR	FR	FR	FR	DK	DK	FR	FR	FR	NL	FR	FR	FR	FR	FR
9	**NL**	**NL**	**IT**	**IT**	**IT**	**IT**	**NL**	**NL**	**NL**	**NL**	**NL**	**NL**	**NL**	**NL**	**DE**	**FR**	**NL**	**NL**	**NL**	**NL**	**NL**
10	IT	IT	NL	NL	NL	NL	IT	IT	IT	IT	IT	DE	DE	DE	NL	DE	DE	DE	DE	DE	DE
11	**DE**	**DE**	**DE**	**DE**	**ES**	**ES**	**DE**	**DE**	**DE**	**DE**	**DE**	**IT**	**IT**	**IT**	**IT**	**MT**	**MT**	**IT**	**IT**	**IT**	**EE**
12	ES	ES	ES	ES	DE	DE	ES	ES	ES	ES	ES	ES	ES	ES	ES	IT	IT	MT	ES	ES	IT
13	**CY**	**EL**	**CY**	**EL**	**EL**	**SI**	**CY**	**CY**	**CY**	**CY**	**CY**	**CY**	**EE**	**EE**	**EE**	**ES**	**ES**	**ES**	**MT**	**MT**	**ES**
14	PT	SI	EL	CY	SI	CY	SI	EL	SI	SI	MT	CZ	CZ	SI	CZ	CZ	CY	CY	EE	CZ	MT
15	**SI**	**PT**	**SI**	**SI**	**CY**	**MT**	**EL**	**SI**	**EL**	**EL**	**SI**	**SI**	**MT**	**CZ**	**SI**	**SK**	**EE**	**EE**	**CZ**	**EE**	**CZ**
16	EL	CY	PT	PT	MT	EL	EE	EE	EE	CZ	CZ	EE	CY	MT	MT	EE	CZ	CZ	CY	CY	CY
17	**MT**	**MT**	**CZ**	**MT**	**PT**	**EE**	**MT**	**MT**	**CZ**	**MT**	**EL**	**MT**	**SI**	**SK**	**SK**	**SI**	**SK**	**SI**	**SI**	**SI**	**SI**
18	CZ	CZ	MT	CZ	CZ	PT	CZ	CZ	MT	PT	PT	SK	LV	CY	CY	CY	SI	SK	SK	SK	LV
19	**SK**	**SK**	**EE**	**EE**	**EE**	**CZ**	**PT**	**LV**	**PT**	**EE**	**SK**	**PT**	**SK**	**LV**	**LV**	**PT**	**PT**	**PT**	**PT**	**HU**	**SK**
20	HU	EE	SK	HR	HR	SK	SK	PT	SK	HR	EE	EL	PT	PT	PT	LV	HR	LV	LV	LV	PT
21	**EE**	**HU**	**HU**	**SK**	**SK**	**LV**	**LV**	**SK**	**LV**	**SK**	**HR**	**LV**	**HR**	**HR**	**HU**	**HU**	**LV**	**HR**	**HU**	**PT**	**HU**
22	HR	HR	HR	HU	HU	HR	HR	HR	HR	HU	HU	HR	HU	HU	HR	HR	**LT**	**LT**	**LT**	**LT**	**LT**
23	**PL**	**LV**	**LV**	**LV**	**LV**	**HU**	**HU**	**LT**	**HU**	**LV**	**LV**	**HU**	**EL**	**LT**	**LT**	**LT**	**HU**	**HU**	**HR**	**HR**	**HR**
24	LV	PL	PL	**LT**	**LT**	**LT**	**LT**	HU	**LT**	PL	PL	**LT**	PL	PL	PL	PL	PL	PL	PL	PL	RO
25	**LT**	**LT**	**LT**	**PL**	**PL**	**PL**	**PL**	**RO**	**RO**	**RO**	**LT**	**PL**	**LT**	**EL**	**RO**	**RO**	**RO**	**RO**	**RO**	**RO**	**PL**
26	RO	RO	RO	RO	RO	RO	RO	PL	PL	**LT**	RO	RO	RO	RO	EL	EL	EL	EL	EL	EL	EL
27	**BG**	**BG**	**BG**	**BG**	**BG**	**BG**	**BG**	**BG**	**BG**	**BG**	**BG**	**BG**	**BG**	**BG**	**BG**	**BG**	**BG**	**BG**	**BG**	**BG**	**BG**

*- Full names of EU Member States can be found in the Annex (page 17).

Table 3

EU 27* countries with the most investment per employee (EUR)

Code	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AT	18976	17708	17121	17980	17956	18174	17930	18233	18774	19253	19767	20480	19734
BE	20257	18947	18827	19548	19592	19203	20152	20724	21318	21283	21611	22225	20859
BG	3553	2976	2550	2492	2603	2628	2710	2772	2576	2612	2756	2871	2790
CY	12301	10620	10404	9162	7631	6825	6450	6239	8910	10247	9254	9172	9221
CZ	8745	8103	8216	8325	8015	7816	8026	8684	8289	8560	9295	9824	9267
DE	14010	12665	13286	14097	13906	13619	13939	14049	14405	14585	14875	15011	14798
DK	19261	17307	16701	16774	17524	18006	18406	19157	20331	20834	21385	21123	22363
EA	15264	13753	13788	13960	13569	13317	13364	13794	14149	14471	14679	15466	14601
EE	8826	6172	6349	8079	8912	8904	8602	8093	8482	9403	9339	9784	12056
EL	10647	9216	7627	5946	4850	4555	4258	4394	4349	4741	4336	4157	4197
ES	13019	11498	11073	10502	10129	9990	10291	10498	10521	10950	11392	11584	10928
EU27	13319	12028	12093	12334	12022	11828	11966	12450	12697	13006	13258	13957	13260
FI	19869	17934	18458	18874	18661	17937	17685	17782	19292	20000	20212	19542	19811
FR	18302	16835	17168	17392	17373	17201	17116	17256	17601	18230	18647	19171	17687
HR	7129	6145	5419	5491	5511	5749	5447	5584	5930	6082	6311	6557	6440
HU	6065	5618	5121	5056	4860	5269	5653	5799	4999	5869	6672	7442	6993
IE	21237	19143	16955	17305	20200	18809	21710	31554	45709	44113	38965	75561	59134
IT	14819	13599	13659	13427	12152	11576	11311	11435	11732	11970	12225	12248	11351
LT	5841	3864	4142	4949	4771	5097	5280	5460	5519	6054	6571	6967	6948
LU	25827	22041	21771	24836	24665	24404	25843	23126	23067	23475	21239	22531	21105
LV	7271	5554	4776	5923	6870	6418	6253	6043	5562	6199	6829	7309	7501
MT	8441	7706	9494	8042	7897	7550	7758	12132	12229	11377	11238	11498	10464
NL	16487	15204	14270	14842	13934	13875	13553	17318	15814	16094	16226	16896	16282
PL	4573	4435	4554	4925	4832	4784	5175	5410	4928	5056	5499	5834	5314
PT	7997	7601	7624	6796	5902	5784	5834	6094	6150	6639	6889	7203	7138
RO	5776	3961	3981	4323	4396	4173	4299	4657	4707	4757	4699	5299	5763
SE	21431	19116	20179	20896	20519	20432	21365	22506	22989	23684	23634	23416	23628
SI	12096	9583	8475	8194	7565	7913	7875	7679	7270	7783	8275	8520	7866
SK	7454	6103	6727	7541	6786	6922	7029	8368	7421	7471	7528	7953	7168

*- Full names of EU Member States can be found in the Annex (page 17).

Table 4

EU 27* ranking by share of the most investment in GDP

Ranking	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1	SK	CZ	CZ	EE	EE	EE	EE	EE	EE	RO	BG	CZ	RO	EE	EE	EE	CZ	IE	IE	IE	IE	IE
2	CZ	PT	SK	CZ	CZ	LV	LV	LV	LV	BG	CZ	RO	EE	RO	CZ	CZ	RO	EE	EE	HU	HU	EE
3	SI	SI	PT	SK	HR	CZ	IE	IE	RO	LV	HR	BG	CZ	LV	RO	RO	EE	CZ	SE	CZ	CZ	HU
4	PT	HU	EE	PT	ES	ES	ES	ES	BG	EE	RO	SE	FI	CZ	LV	SE	MT	MT	CZ	SE	EE	CZ
5	HU	EE	LV	ES	SI	IE	CZ	BG	ES	SI	SI	FI	LV	FI	AT	HU	SE	SE	FI	EE	AT	AT
6	EE	SK	SI	HU	EL	HR	SI	HR	CZ	HR	CY	CY	SK	BE	FI	LV	SK	FI	AT	FI	SE	LV
7	AT	AT	HU	SI	IE	SI	HR	SI	SI	CZ	HU	HR	SE	SE	SE	BE	HU	BE	HU	AT	FI	FI
8	PL	ES	ES	HR	LV	HU	BG	CZ	IE	CY	FI	BE	BE	AT	BE	AT	IE	AT	BE	BE	BE	SE
9	EL	LV	EL	LV	HU	EL	SK	RO	LT	ES	EE	FR	AT	FR	BG	FI	BE	RO	FR	FR	LV	RO
10	ES	EL	AT	IE	SK	SK	HU	CY	HR	LT	BE	EE	FR	BG	HU	FR	AT	FR	RO	LV	FR	BE
11	IE	PL	IE	EL	PT	PT	PT	LT	CY	FI	SE	AT	BG	HR	FR	BG	LV	DK	DK	DK	HR	HR
12	LU	IE	FI	AT	AT	AT	RO	SK	EL	IE	AT	SI	HR	HU	HR	HR	FI	HR	MT	HR	RO	FR
13	FI	FI	SE	SE	RO	FI	MT	DK	SK	SE	LV	MT	PL	DE	SI	SK	NL	SK	HR	MT	DK	DK
14	LV	DE	BE	FI	FI	LT	FI	HU	DK	SK	ES	ES	HU	SK	SK	IE	BG	HU	CY	SK	SK	DE
15	NL	MT	HR	DK	SE	RO	AT	EL	FI	HU	FR	HU	SI	PL	DE	PL	FR	DE	SK	DE	MT	MT
16	DE	BE	NL	RO	LT	SE	LT	SE	HU	BE	PL	PT	DE	SI	DK	DE	HR	NL	LV	RO	LT	NL
17	HR	NL	DK	LU	DK	BG	SE	FI	SE	EL	PT	SK	NL	DK	PL	SI	DK	LV	DE	LT	NL	LT
18	LT	SE	LU	IT	MT	DK	DK	PT	MT	DK	NL	PL	IT	IE	LU	DK	PL	LT	NL	NL	DE	CY
19	BE	DK	DE	NL	LU	BE	BE	MT	BE	PL	IE	IT	ES	LU	NL	LU	DE	BG	LT	SI	SI	ES
20	MT	HR	FR	LT	FR	MT	CY	AT	NL	FR	DK	NL	CY	NL	IE	LT	LT	CY	BG	BG	ES	SK
21	DK	FR	RO	FR	IT	LU	FR	FR	PT	PT	EL	DE	LU	IT	LT	NL	SI	PL	SI	CY	BG	PT
22	SE	IT	LT	CY	NL	FR	IT	BE	FR	AT	SK	LV	PT	ES	IT	ES	ES	SI	ES	ES	CY	SI
23	FR	LU	MT	BE	BE	CY	EL	IT	PL	NL	IT	DK	DK	MT	ES	MT	LU	ES	PL	PL	PT	BG
24	CY	CY	PL	DE	CY	IT	NL	NL	AT	IT	DE	IE	MT	LT	MT	IT	IT	IT	LU	PT	PL	IT
25	IT	LT	IT	BG	BG	NL	LU	PL	IT	MT	MT	EL	LT	PT	PT	PT	PT	LU	IT	IT	IT	PL
26	RO	RO	BG	PL	DE	DE	PL	DE	DE	DE	LU	LT	IE	CY	CY	CY	CY	PT	PT	LU	LU	LU
27	BG	BG	CY	MT	PL	PL	DE	LU	LU	LU	LT	LU	EL	EL	EL	EL	EL	EL	EL	EL	EL	EL

*- Full names of EU Member States can be found in the Annex (page 17).

Table 5

EU 27* ranking by share of the most investment in GDP (%)

Rankking	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AT	28	29	28	26	27	26	26	25	26	26	25	24	25	25	26	25	25	26	26	27	28	28
BE	25	25	25	23	23	24	25	25	26	27	26	25	26	26	25	25	26	26	26	26	27	27
BG	18	19	22	21	23	24	30	33	33	39	32	26	24	25	25	24	24	21	21	22	22	21
CY	23	22	21	23	23	23	25	29	30	31	27	25	21	17	16	15	15	21	24	22	21	23
CZ	33	34	34	33	32	32	32	31	33	32	31	30	30	29	28	28	29	28	28	29	30	29
DE	26	26	24	22	22	21	21	22	22	23	21	22	23	23	22	22	22	23	23	23	24	24
DK	25	25	25	24	24	24	25	27	28	27	23	21	21	22	22	22	23	24	24	25	24	26
EA	25	25	25	24	24	24	24	25	26	25	23	23	23	22	22	22	22	23	23	23	25	24
EE	29	30	31	34	37	36	37	42	41	35	26	24	30	33	32	29	28	28	30	28	29	35
EL	27	28	28	26	28	27	23	27	29	27	23	19	16	13	13	12	12	13	14	13	12	13
ES	27	29	28	29	30	31	32	34	33	30	25	24	22	20	19	20	20	20	21	21	22	22
EU27		25	25	24	24	24	25	25	26	26	24	23	23	23	22	22	23	23	23	24	25	24
FI	26	26	26	25	25	25	26	26	28	28	26	25	26	27	26	25	25	26	27	28	27	28
FR	23	24	24	23	23	24	24	25	26	26	24	25	25	25	25	24	24	24	25	26	26	26
HR	25	24	25	27	31	31	30	32	32	33	30	25	24	23	24	23	24	24	24	25	26	27
HU	29	30	29	28	27	28	28	27	28	27	27	24	23	23	25	26	26	23	26	29	32	32
IE	27	27	27	27	28	31	34	35	32	28	24	19	18	22	20	23	26	39	36	30	57	42
IT	22	23	23	24	23	23	24	24	24	24	22	22	22	20	19	19	19	19	19	20	20	20
LT	25	22	23	23	24	25	26	29	32	29	20	19	20	19	20	21	22	22	22	23	24	23
LU	26	23	24	24	24	24	22	20	21	22	20	19	21	21	21	21	19	19	20	18	19	18
LV	26	28	30	27	28	32	35	38	41	35	25	21	26	29	28	26	25	22	24	25	27	28
MT	25	25	23	19	24	24	26	26	26	23	21	24	21	20	19	19	27	27	24	24	24	24
NL	26	25	25	24	23	23	23	24	26	25	24	22	22	21	20	20	25	22	22	23	24	24
PL	28	27	23	21	21	21	21	23	26	26	24	23	24	22	21	22	23	20	20	21	21	19
PT	32	32	31	30	27	27	27	26	26	26	24	23	21	18	17	17	18	18	19	20	21	22
RO	20	21	23	24	25	25	26	30	40	42	29	29	31	31	28	28	28	26	25	23	25	27
SE	24	25	26	25	24	25	25	26	27	28	25	25	26	26	25	26	27	27	28	28	27	28
SI	32	31	30	28	29	30	30	32	33	34	28	24	23	22	23	22	22	20	21	22	22	21
SK	35	30	32	31	27	27	30	29	28	27	23	23	26	23	23	23	26	23	24	23	24	22

*- Full names of EU Member States can be found in the Annex (page 17).

Table 6

EU 27* ranking by share of the most investment in GDP

Year / Ranking	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
1	SK	CZ	CZ	EE	EE	EE	EE	EE	EE	RO	BG	CZ	RO	EE	EE	EE	CZ	IE	IE	IE	IE
2	CZ	PT	SK	CZ	CZ	CZ	LV	LV	LV	BG	CZ	RO	CZ	RO	CZ	CZ	MT	CZ	SE	CZ	HU
3	SI	SI	EE	SK	ES	LV	IE	IE	RO	LV	RO	SE	EE	CZ	RO	RO	RO	SE	CZ	SE	CZ
4	PT	EE	PT	ES	HR	ES	ES	ES	CZ	EE	HR	CY	SK	LV	LV	SE	EE	MT	EE	HU	EE
5	EE	SK	LV	PT	EL	IE	CZ	CZ	ES	SI	SI	BG	BE	FI	AT	BE	IE	EE	AT	FI	SE
6	HU	ES	SI	HU	SI	SI	SI	SI	IE	CZ	CY	FI	SE	BE	SE	AT	SE	BE	FI	AT	AT
7	AT	AT	ES	SI	IE	HR	SK	BG	SI	HR	ES	BE	FI	SE	BE	LV	SK	AT	BE	EE	BE
8	ES	HU	HU	LV	LV	EL	BG	RO	LT	ES	FI	FR	AT	AT	FR	HU	BE	RO	FR	BE	FI
9	EL	LV	AT	EL	SK	HU	HR	HR	BG	CY	BE	ES	FR	FR	FI	FR	AT	FI	RO	FR	RO
10	PL	EL	EL	IE	AT	SK	HU	LT	HR	LT	HU	AT	LV	BG	BG	FI	HU	FR	HU	LV	FR
11	IE	IE	IE	AT	PT	AT	LT	SK	EL	IE	EE	MT	BG	SK	HU	BG	NL	DK	DK	DK	LV
12	DE	PL	FI	HR	HU	PT	RO	CY	CY	SK	SE	HR	PL	DE	SK	IE	LV	SK	SK	DE	DK
13	NL	DE	SE	SE	RO	LT	PT	EL	SK	SE	AT	SK	DE	LU	DE	SK	FR	DE	CY	RO	DE
14	LV	FI	BE	FI	FI	RO	AT	HU	FI	FI	LV	SI	HR	PL	HR	DE	FI	HR	LV	SK	SK
15	LU	NL	NL	RO	SE	FI	FI	DK	SE	BE	FR	EE	NL	IE	SI	LU	BG	NL	MT	LT	LT
16	FI	BE	DE	IT	LT	SE	SE	SE	HU	EL	PL	PT	ES	HR	LU	PL	PL	LT	DE	NL	NL
17	BE	MT	LU	NL	FR	BE	BE	FI	DK	FR	NL	PL	SI	HU	DK	HR	DE	HU	NL	HR	HR
18	MT	SE	FR	LU	IT	FR	MT	AT	NL	HU	PT	HU	IT	SI	PL	DK	DK	LV	HR	ES	ES
19	LT	FR	DK	FR	MT	IT	FR	PT	BE	AT	IE	IT	HU	DK	IE	SI	LT	BG	LT	SI	MT
20	SE	DK	RO	CY	DK	BG	CY	FR	FR	PL	SK	NL	LU	NL	LT	LT	HR	LU	LU	CY	SI
21	CY	IT	IT	BE	NL	DK	IT	BE	AT	DK	EL	DE	CY	ES	NL	ES	SI	PL	ES	MT	CY
22	HR	LU	LT	LT	BE	CY	DK	MT	PT	PT	DK	LV	LT	IT	MT	NL	LU	ES	BG	BG	PL
23	DK	CY	HR	DK	LU	MT	EL	IT	PL	NL	IT	DK	PT	MT	ES	MT	ES	CY	SI	PL	PT
24	FR	HR	PL	DE	CY	LU	NL	NL	MT	IT	DE	LU	DK	LT	IT	IT	IT	SI	PL	IT	BG
25	IT	LT	MT	BG	BG	NL	LU	PL	IT	DE	LU	EL	MT	PT	UK	UK	UK	UK	IT	PT	IT
26	RO	RO	BG	PL	DE	DE	DE	DE	DE	LU	MT	IE	IE	CY	PT	PT	PT	IT	UK	UK	UK
27	UK	UK	CY	UK	PL	PL	PL	UK	LU	MT	LT	LT	UK	UK	CY	CY	CY	PT	PT	LU	LU
28	BG	BG	UK	MT	UK	UK	UK	LU	UK	UK	UK	UK	EL	EL	EL	EL	EL	EL	EL	EL	EL

*- The following EU Member States abbreviations are used in this assessment:
Ireland – IE, Austria – AT, Belgium – BE, Bulgaria – BG, Czech Republic – CZ, Denmark – DK, Estonia – EE, Euro zone – EA, Greece – EL, Spain – ES, Italy – IT, United Kingdom – UK, Cyprus – CY, Croatia – HR, Latvia – LV, Poland – PL, Lithuania – LT, Luxembourg – LU, Malta – MT, Netherlands – NL, Portugal – PT, France – FR, Romania – RO, Slovakia – SK, Slovenia – SI, Finland – FI, Sweden – SE, Hungary – HU, Germany – DE.

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