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# Labour productivity analyses of gross value added and turnover per person employed of transportation companies of European countries in 2005 - 2011

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## Abstract

The purpose of this article is to analyse the labour productivity of transportation and storage companies of European Union (EU) and European Free Trade Association (EFTA) countries in 2005 - 2011 by gross value added per person employed and employee and turnover per person employed. The objective is to analyse labour productivity of transportation and storage companies in the EU-15 and EFTA countries and continue with the new EU Member States from Central and Eastern Europe (CEE-8) and the Baltic States or new EU countries before and after the economic crisis, and to compare them on the EU level. We will look at how the economic crisis has affected the labour productivity of transportation companies and analyze the changes in the companies. What are the lessons learned from the economic crisis? The literature review shows in short the crisis theory. It is concerned with explaining the recession, depression and business cycle in economics. We will make a short view of the financial crisis. Based on this and previous publications, we will offer a number of generalized suggestions.

# 1. Introduction

We analyze the labour productivity of the transport companies of the EU and EFTA countries by gross value added per employed and per employee and turnover per person employed.

The situations before the crisis, during the crisis and after the crisis will be viewed.

Here, we look at the labour productivity of transportation and storage enterprises in total and by regions and countries. Our analysis does not separate Greece, Cyprus and Malta.

Let us attempt to draw comparisons with EU countries, particularly in the developed economies, the old EU-15 and EFTA countries and with CEE (Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, Slovenia and Slovakia) and Baltic (Estonia, Latvia and Lithuania) countries.

For an introduction, let us look at the background of these countries.

The EU was established on 1 November 1993, when the Maastricht Treaty came into force. On 31 December 1994, the EU had 12 members: Belgium, Denmark, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, the Netherlands, Portugal and the

United Kingdom. On 1 January 1995, Sweden, Finland and Austria joined the EU (EU-15), on 1 May 2004 Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovenia and Slovakia joined EU (EU-25). The most recently joined countries are Bulgaria and Romania who joined the EU on 1 January 2007 (EU-27) and at 1 July 2013 Croatia joined the EU, so the EU-28. [1] Here we look from EFTA countries Norway and Switzerland. [2]

Central and Eastern European Countries is an OECD term for the group of countries comprising Albania, Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, the Slovak Republic, Slovenia, and the three Baltic States: Estonia, Latvia and Lithuania. [3] 2. Literature Review

### 2.1. Eastern Bloc

Use of the term "Eastern Bloc" generally refers to the "communist states of eastern Europe" or satellite states of the former Soviet Union (FSU) or former communist states in Europe [4 - 7].

The CEE-8 and Baltic States were a half-century of Soviet-bloc countries. This will help to understand better the economic backwardness of the Western European countries. [8 - 9]

### 2.2. Financial Crisis

The term financial crisis is applied broadly to a variety of situations in which some financial assets suddenly lose a large part of their nominal value. In the 19th and early 20th centuries, many financial crises were associated with banking panics, and many recessions coincided with these panics. Other situations that are often called financial crises include stock market crashes and the bursting of other financial bubbles, currency crises, and sovereign defaults. [10 - 11]

Financial crisis directly result in a loss of paper wealth but do not necessarily result in changes in the real economy. Many economists have offered theories about how financial crisis develop and how they could be prevented. There is no consensus, however, and financial crises continue to occur from time to time. [12 - 13]

### 2.3. Economic Cycle (Crises) Theory

The term economic cycle or business cycle refers to economy-wide fluctuations in production or economic activity over several months or years. These fluctuations occur around a long-term growth trend, and typically involve shifts over time between periods of relatively rapid economic growth, and periods of relative stagnation or decline. [14] These fluctuations are often measured using the growth rate of real GDP. Despite being termed cycles, most of these fluctuations in economic activity do not follow a mechanical or predictable periodic pattern. [15]

### 2.4. Crisis Theory

Crisis theory has been the subject of much debate within the history of political economy. It is concerned with explaining the recession, depression and business cycle in economics. We will make a short view of the financial crisis. The economic crisis has been a sharp deterioration in the economic situation.

A recession in economics is a business cycle contraction, it is a general slowdown in economic activity. [16, 17]

Recessions generally occur when there is a widespread drop in spending (an adverse demand shock). This may be triggered by various events, such as a financial crisis, an external trade shock, an adverse supply shock or the bursting of an economic bubble. Governments usually respond to recessions by adopting expansionary macroeconomic policies, such as increasing money supply, increasing government spending and decreasing taxation. [16, 17]

### 2.5. The Theoretical Bases

The theoretical bases have been brought in more detail in the authors' earlier works [15, 18 - 26] and in the works of other authors [27 - 29].

# **3. Methodology and Definitions**

### **3.1. Business Statistics of Eurostat**

Eurostat collects and disseminates methodological information. A basic summary of the methodology employed for structural business statistics is available at summary methodology for SBS. [30]

More detailed methodological information relating to structural business statistics is stored on the RAMON server at methodological manuals relating to SBS. This server also includes country specific methodological information as well as quality reports relating to the collection of structural business statistics in the Member States and other EEA countries at SBS methodology by country. [31]

Structural business statistics can provide answers to questions on the wealth creation, investment and labour input of different economic activities. The data can be used to analyse structural shifts, country specialisations, sectoral productivity and profitability, as well as a range of other topics. Structural business statistics provide useful background information on which to base an interpretation of short-term statistics and the business cycle. [32]

The Statistical classification of economic activities in the European Community, abbreviated as NACE, is the nomenclature of economic activities in the EU. NACE is a four-digit classification providing the framework for collecting and presenting a large range of statistical data according to economic activity in the fields of economic statistics and in other statistical domains developed within the European statistical system. The first reference year for NACE Rev. 2 compatible statistics is 2008, after which NACE Rev. 2 will be consistently applied to all relevant statistical domains. [33]

The Eurostat publication Business economy by sector -NACE Rev. 2 presents an overview of structural business statistics analysed per activity sector of the NACE Rev. 2 classification.

We will first observe the main total (SIZE\_EMP: Total) quantitative indicators of transportation (NACE\_R2: Transportation and storage), as well as the changes in the number of transportation companies, etc. Eurostat's primary data will be used as the main sources (Services by employment size class – NACE Rev. 2, H, S95).

#### 3.2. Definitions

Gross value added (GVA) at market prices is output at market prices minus intermediate consumption at purchaser prices. [34]

Productivity (Economics) is the rate at which goods or services are produced especially output per unit of labour. [35]

Number of persons employed is defined as the total number of persons who work in the observation unit, as well as persons who work outside the unit who belong to it and are paid by it. It excludes manpower supplied to the unit by other enterprises, persons carrying out repair and maintenance work in the enquiry unit on behalf of other enterprises, as well as those on compulsory military service. [36]

Number of employees is defined as those persons who work for an employer and who have a contract of employment and receive compensation in the form of wages, salaries, fees, gratuities, piecework pay or remuneration in kind. A worker from an employment agency is considered to be an employee of that temporary employment agency and not of the unit in which they work. [36]

Turnover, in the context of structural business statistics, comprises the totals invoiced by the observation unit during the reference period, and this corresponds to the total value of market sales of goods and services to third parties. [37]

The techniques and labour market survey definitions used by the authors have been specified in Eurostat (Methodological Notes EU-LFS) [38].

# 4. Labour Productivity Analyses of Transportation and Storage Companies

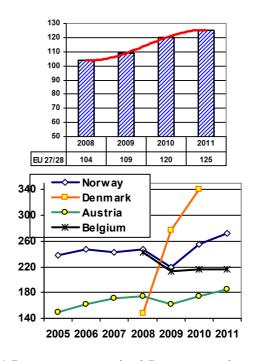
### 4.1. Labour Productivity Analyses by Turnover Per Person Employed

We look at the total turnover per employed of European Union and EFTA countries transportation and storage companies.

The total turnover per person employed grew in 2009 and 2010 in the EU-27 in comparison to 2008. Two-year growth was 15.4%. According to this indicator, transportation and storage enterprises of EU successfully got through the crisis year 2009. 2011th grew EU-28 apparent labour productivity 4.2%. 2011th average labour productivity in the EU-28 grew by 4.2%.

 Table 1. Turnover per person employed. Transportation and storage of EU-15 and EFTA countries. [39]

	2005	2006	2007	2008	2009	2010	2011
Belgium	:	:	:	242.0	213.5	215.6	216.0
Denmark	:	:	:	148.1	276.6	340.0	:
Germany	:	:	:	130.7	117.5	125.8	129.1
Ireland	:	:	:	171.5	158.1	171.9	199.9
Spain	:	:	:	108.6	101.1	108.1	113.8
Italy	:	:	:	126.3	112.0	130.1	:
Luxembourg	:	:	:	210.8	180.9	210.8	219.7
Netherlands	:	:	:	172.4	159.9	166.3	175.6
Austria	149.6	161.0	170.6	174.7	162.4	174.2	184.9
Portugal	:	:	:	106.0	98.2	104.4	111.4
Finland	:	134.1	135.7	142.2	129.0	139.7	153.6
Sweden	:	:	:	161.8	136.6	160.3	172.2
United Kingdom	:	:	:	136.2	117.3	129.1	134.3
Norway	237.3	247.3	242.4	247.5	218.8	255.6	273.0
Switzerland	:	:	:	:	186.0	229.3	



*Figure 1. Turnover per person employed. Transportation and storage. [39]. (Source: the authors' illustration.)* 

On the other hand, if we view turnover per person employed in transportation and storage by countries and by the size of companies, this trend is no longer valid for the majority. [8]

Thus, the EU average is not enough to draw definite conclusions on the whole EU.

In Norway, the total turnover per person employed has been relatively stable, with minor fluctuations. In 2009, compared with the previous year, it decreased by 11.6%, but in the following years there was record high turnover per person employed, which was the second best productivity for Denmark. The productivity growth in Denmark in 2009 was 1.9 and, in the following year, even 22.9%. The reasons for such a sharp rise in Denmark and throughout Europe during the economic crisis require a separate investigation on the basis of modal size class.

In Denmark, the number of persons employed decreased 2.3 times in 2009, and by further 4.6% in the following year. The turnover of Denmark decreased 1.25 times in 2009 compared to the previous year. This answers the question of why there was such a steep increase in labour productivity.

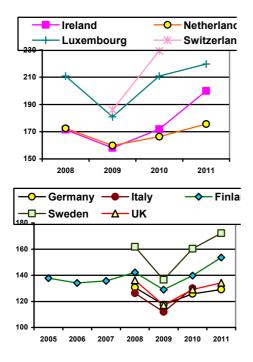


Figure 2. Turnover per person employed of transportation of major EU and EFTA countries. [39]. (Source: the authors' illustration.)

14 countries had turnover per person employed of transportation and storage above the EU 27 average. As a rule, the labour productivity fell in 2009 in comparison with the previous year. Of these six countries remained the 2010th the lower level of the 2008th year level. Derogation from Denmark was a great turnover per employee growth from the 2008th year. Thus, according to the average, it can not yet make definitive conclusions.

The following is a comparison of the CEE-8 and Baltic States total turnover per person employed.

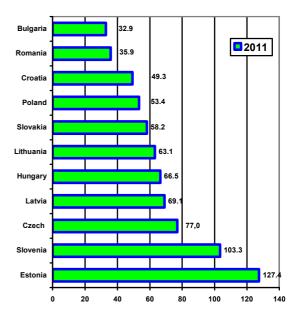


Figure 3. Total turnover per person employed in transportation in CEE and the Baltic countries of the EU in 2011. [39].(Source: the authors' illustration.)

They were very large differences between countries. Estonian transport enterprises, labour productivity in the 2010th was 3.7 times higher than in Bulgaria (in 2011. was 3.9 times), but 3.1 times less than in Denmark. Thus, the Danish transport companies, in turn, productivity was 11.3 times higher than in Bulgaria (!).

This leads the standard of living (salary) and part of the whole economy of difference. This difference is due to both objective (modes of transportation, etc.) and subjective, the overall look.

Next, analyze the labour productivity dynamics during the crisis in Eastern Europe and the Baltic countries has been brought here.

*Table 2.* Turnover per person employed in CEE and the Baltic countries. Transportation and storage. [39].

	2005	2006	2007	2008	2009	2010	2011
Bulgaria	:	:	:	32.2	26.9	30.2	32.9
Czech Republic	:	:	:	71.5	61.5	:	77.0
Estonia	82.7	90.3	100.5	101.1	94.1	110.6	127.4
Croatia	:	:	:	55.7	45.3	48.4	49.3
Latvia	:	:	:	57.6	52.5	58.7	69.1
Lithuania	34.7	41.5	48.2	52.4	43.0	54.8	63.1
Hungary	43.3	51.2	55.9	64.0	55.4	60.1	66.5
Poland	35.1	40.2	45.7	51.5	41.1	49.4	53.4
Romania	22.1	26.3	31.7	34.5	28.3	32.8	35.9
Slovenia	68.4	74.9	81.1	87.8	77.3	88.4	104.3
Slovakia	:	:	:	57.7	50.8	54.4	58.2

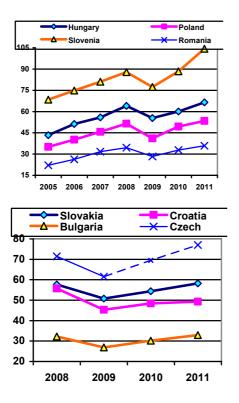


Figure 4. Turnover per person employed of transportation of the CEE countries. [39]. (Source: the authors' illustration.)

Only Slovenia surpassed the level of 2008 in 2010, but in other CEE-8 countries the pre-crisis levels were not reached. In 2011, all CEE and Baltic countries with the exception of Croatia exceeded this level.

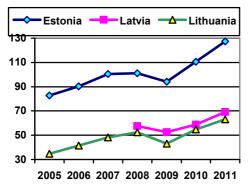


Figure 5. Turnover per person employed of transportation of the Baltic countries. [39]. (Source: the authors' illustration.)

These countries also experienced a decline in labour productivity in 2009, compared with the previous year; while in 2010 the 2008 level was once again exceeded. In 2011 increase their productivity even more.

Regard less in 2009 decline, labour productivity growth in Lithuania from 2005 to 2011 81.8%, at the same time in Estonia 54.0% and in Latvia from 2008 to 2011 20.0%.

Thus, the transportation companies of the Baltic States and Slovenia successfully exited the economic crisis, as did some Northern and Western European countries.

Estonia and Slovenia had the largest turnover per person

employed in transportation and storage of the post-socialist states among new EU member states.

### 4.2. Labour Productivity Analyses by Gross Value Added Per Person Employed

Next we analyze the transport enterprises productivity by apparent labour productivity or by gross value added (GVA) per employed.

France apparent labour productivity in 2010 was 55.9 thousand.

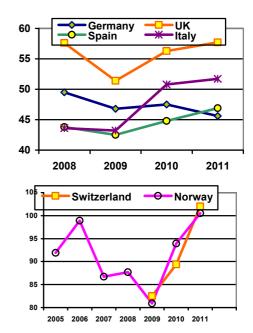


Figure 6. Gross value added per employed. Transportation and storage companies. [40]. (Source: the authors' illustration.)

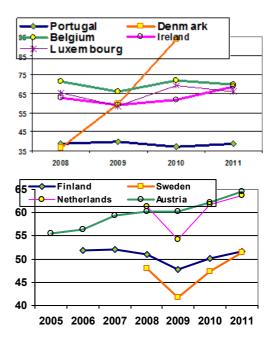


Figure 7. Gross value added per employed. Transportation and storage companies. [40] (Source: the authors' illustration.)

	2005	2006	2007	2008	2009	2010	2011
EU-27/28				38.0	41.85	:	45.6
Belgium	:	:	:	71.2	65.9	71.7	69.9
Denmark	:	:	:	36.4	59.6	93.5	:
Germany	:	:	:	49.5	46.8	47.5	45.6
Ireland	:	:	:	62.7	59.1	62.0	68.9
Spain	:	:	:	43.8	42.5	44.8	46.9
Italy	:	:	:	43.6	43.2	50.8	51.7
Luxembourg	:	:	:	65.5	58.7	69.5	65.9
Netherlands	:	:	:	61.4	54.2	61.7	63.7
Austria	55.6	56.4	59.4	60.2	60.2	62.2	64.6
Portugal	:	:	:	38.8	39.6	36.9	38.6
Finland	:	51.8	52.0	51.0	47.8	50.1	51.7
Sweden	:	:	:	48.0	41.7	47.3	51.4
United Kingdom	:	:	:	57.6	51.4	56.3	57.7
Norway	91.9	98.9	86.7	87.7	80.9	93.9	100.5
Switzerland	:	:	:	:	82.5	89.4	102

Table 3. Apparent labour productivity (gross value added per employed). Transportation and storage of EU-15 and EFTA countries. [40].

Identify the highest gross value added per employed of transportation and storage was the EFTA countries Norway and Switzerland. Their gross value added per employed in 2011th was a European record. Denmark made a very big jump, two-year increase was 127.5% (!). Denmark gross value added per employed in 2010. was the Europe record. Also, Ireland, Spain, Italy, Luxembourg, Netherlands, Austria, Sweden and United Kingdom exceeded the precrisis level. Labour productivity has grown steadily in Austria, 12.9% during the period under consideration. Finland, however, was the opposite trend - the steady decline. Germany, labour productivity was in 2011. 7.9% lower than in 2008.

Norway had a long-term decline until 2009. In Belgium and Switzerland were small and in Denmark large changes. However, the absolute level of these countries is very high, especially in 2011th year. Also in this group of countries is large, nearly double the differences.

We analyze the labour productivity dynamics during the crisis in Eastern Europe and the Baltic countries has been brought here. The following is a comparison of the CEE-8 and Baltic States total gross value added per person employed.

**Table 4.** Apparent labour productivity (gross value added per employed).Transportation and storage of CEE-8 and Baltic countries. [40]

	2005	2006	2007	2008	2009	2010	2011
Bulgaria	:	:	:	9.1	8.3	9.6	10.0
Czech Republic	:	:	:	21.8	20.2	:	21.9
Estonia	17.6	21.5	19.4	21.2	22.7	25.1	28.2
Croatia	:	:	:	25.6	21.1	22.2	21.8
Latvia	:	:	:	19.2	18.3	17.4	19.1
Lithuania	11.2	12.2	14.5	14.5	12.4	14.1	16.4
Hungary	13.9	15.0	17.8	16.1	14.9	16.5	18.2
Poland	12.1	14.3	15.7	17.4	14.1	16.3	17.6
Romania	6.7	9.0	10.3	45.2	10.0	12.0	13.2
Slovenia	23.8	25.7	25.4	28.5	25.7	34.1	36.3
Slovakia	:	:	:	15.4	14.7	18.2	22.1

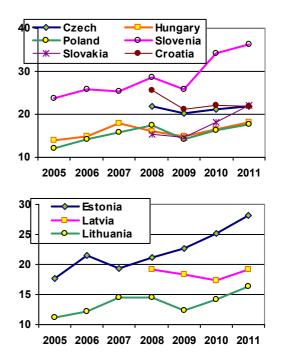


Figure 8. Gross value added per employed. Transportation and storage companies. [40] (Source: the authors'illustration.)

In all CEE and Baltic countries of transportation and storage had one year of gross value added per employed loss, compared with the previous year. This was followed growth. As a rule, the decline was in 2009 and the record high productivity in 2011. Only Slovenia surpassed in the 2010th 2008. year's level, but in other CEE-8 countries precrisis levels remained missing. In the 2011th excess of this level all CEE and Baltic countries. The only failed to achieve in 2011. the pre-crisis level in CEE countries Croatia (-14.8%) and the Baltic States Latvia (-0.5%).

In years 2005 and to 2011 the largest growth was in CEE countries in Romania (1.97 times), Slovenia (1.52 times), Poland (1.45 times) and Hungary (13.1 times). In the Baltic States increased 1.60 times and Lithuania 1.46 time.

This leads the standard of living (salary) and part of the whole economy of difference. This difference is due to both objective (modes of transportation, etc.) and subjective, the overall look.

They were very large differences between countries. Slovenian labour productivity of transport enterprises in the 2011th was 3.6 times higher than in Bulgaria (Estonia was 2.8 times), but 2.8 times less (Estonia was 3.6 times) than in Switzerland. Thus, the Switzerland transport companies, in turn, productivity was 10.2 times higher than in Bulgaria (!). Thus, the transportation companies of the Baltic States and Slovenia successfully exited the economic crisis. Slovenia and Estonia had the largest gross value added per person employed in transportation and storage of the post-socialist states among new EU member states.

### 4.3. Share of Employees in Persons Employed. Transportation and Storage

Table 5. Share of employees in persons employed. Transportation and storage [40].

	2005	2006	2007	2008	2009	2010	2011
Germany	:	:	:	94.8	95.0	95.2	95.2
France	:	:	:	:	:	96.8	96.4
United Kingdom	:	:	:	96.5	94.9	95.8	96.4
Norway	90.9	90.9	91.0	91.1	91.2	91.2	91.3
Estonia	99.0	98.9	99.1	98.2	97.8	97.1	97.4

In 2009th was Greece 59.7 and Turkey 52.3. In 2011th under 80 was Spain and Poland; under 90 was Czech Republic, Ireland, Italy, Slovenia, Slovakia and Finland. Cyprus was 100. European Union (28 countries) was in 2011th 90.3.

This means, that the productivity of the gross value added per person by employed and by employee a little different from the majority of countries. Trends are basically the same. It is therefore appropriate analyze only those countries, where the share of employees in persons employed is small.

### 4.4. Gross Value Added Per Employee. Transportation and Storage

Next we analyze the transport companies productivity by gross value added per employee.

The difference between the employed and the employee has been given to their definitions [1].

In 2009, compared with the previous year, the total gross value added per employee of EU-27 decreased 11.6%. Labour productivity in 2010 in comparison to 2008, two-year growth was 3.7%. 2011th grew EU-28 labour productivity 0.5%.

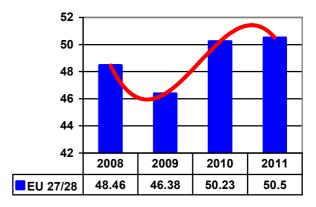
As a rule, the labour productivity fell in 2009 in comparison with the previous year. 2011th 13 EU-15 and EFTA countries had gross value added per employee of transportation and storage above the EU 27 average.

Germany labour productivity was smaller the EU average.

In Norway, the total gross value added per employee has been relatively stable, with minor fluctuations. Derogation from Denmark was a great gross value added per employee growth from the 2008th year. Denmark made a very big jump, two-year increase was 127.5% (!).

 Table 6. Gross value added per employee. Transportation and storage of EU-15 and EFTA countries. [40].

	2005	2006	2007	2008	2009	2010	2011
Belgium		:	:	77.4	70.8	77.4	75.7
Denmark			:	43.7	63.9	99.4	:
	•	•					
Germany	:	:	:	52.2	49.3	50.0	47.9
Ireland	:	:	:	71.6	67.2	69.7	77.4
Spain	:	:	:	55.1	54.4	56.7	59.1
France	:	:	:	58.1	56.1	57.7	:
Italy	:	:	:	51.6	51.1	60.4	:
Luxembourg	:	:	:	66.5	59.2	70.2	67.0
Netherlands	:	:	:	66.3	58.7	66.8	68.8
Austria	58.7	59.7	63.2	64.0	64.0	66.3	68.9
Portugal	:	:	:	39.5	40.4	38.7	40.5
Finland	59.1	62.8	58.5	57.1	53.5	56.1	57.9
Sweden	:	:	:	56.4	49.0	56.1	61.3
United Kingdom	:	:	:	59.7	54.1	58.8	59.9
Norway	101.1	108.8	109.9	96.2	88.7	103.0	110.2



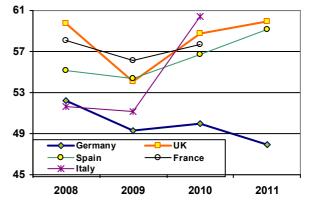
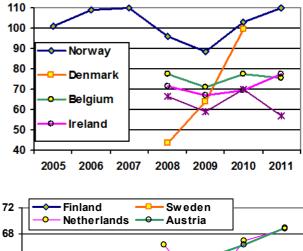
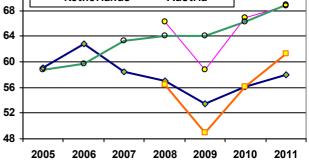


Figure 9. Gross value added per employee. Transportation and storage companies. [40] (Source: the authors' illustration.)





*Figure 10.* Gross value added per employee. Transportation and storage companies. [40] (Source: the authors' illustration.)

Netherlands also surpassed pre-crisis levels. Labour productivity has grown steadily in Austria, 12.9% during the period under consideration. Finland, however, was the opposite trend - the steady decline.

Also in this group of countries is large, nearly double the differences. When others decline was in 2009, in Austria it was not.

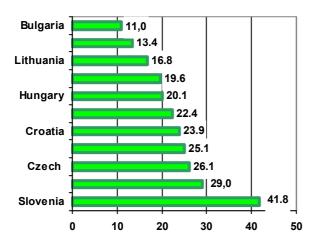
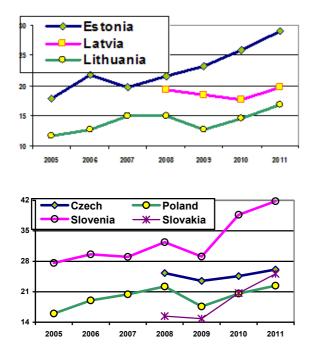


Figure 11. Gross value added per person employee of SEE and Baltic countries. 2011. Transportation and storage. [40] (Source: the authors' illustration.)

If the turnover per employed was the best of Eastern Europe and the Baltic countries Estonia ahead of Slovenia, then the gross value added per person employee basis, is exchange places, best was Slovenia.

However, all of these countries, the level is much lower than in Western European countries.



*Figure 12.* Gross value added per employee. Transportation and storage companies. [40] (Source: the authors' illustration.)

 Table 7. Gross value added per employee of CEE-8 and Baltic countries.

 Transportation and storage. [40].

	2005	2006	2007	2008	2009	2010	2011
Bulgaria	:	:	:	9.9	9.1	10.5	11.0
Czech Republic	:	:	:	25.3	23.5	24.6	26.1
Estonia	17.8	21.8	19.6	21.5	23.2	25.9	29.0
Croatia	:	:	:	28.5	23.9	24.8	23.9
Latvia	:	:	:	19.3	18.4	17.7	19.6
Lithuania	11.6	12.7	15.0	15.0	12.7	14.5	16.8
Hungary	15.7	16.8	19.8	17.9	16.5	18.3	20.1
Poland	16.0	19.0	20.4	22.2	17.6	20.6	22.4
Romania	6.8	9.1	10.4	12.5	10.2	12.3	13.4
Slovenia	27.6	29.6	29.0	32.4	29.1	38.7	41.8
Slovakia	:	:	:	15.4	14.8	20.7	25.1

The level of Latvia and Lithuania corresponds to the level of the majority of Eastern European countries. Estonia's level is significantly higher than the other Baltic countries, but remains several times less than the level of Western European countries.

Estonia was constant growth including blended well during the crisis. Lithuania remained barely missing the pre-crisis level in 2010, but in 2011 was already a recordbreaking productivity. Latvia, however, was two years of recession, but in 2011 barely exceeded, 2008 year's level.

CEE-8 countries Bulgaria, Hungary, Slovenia and Slovakia and Baltic countries the Estonia in 2010 exceeded 2008 year's level. Hungary remained, nevertheless, still missing the 2007 record level productivity.

Norway and Denmark had the highest gross added value per employee in transportation and storage, while Bulgaria (10.5) and Romania (12.3) had the lowest. The different was tenfold.

The labour productivity analyze of the transport companies of the Baltic countries by turnover per person employed have in the authors' earlier works. [15, 18 - 26]

## 5. Discussion & Conclusions

- As a rule, European transportation enterprises have exited the economic crisis successfully, some sooner, some later. There were great differences between how enterprises overcame the economic crisis.
- In 2011, turnover and added value in the EU-27 remained below the 2008 level, while gross operating surplus was higher.
- In 2011, number of persons employed in the EU-27 remained below the 2008 was level.
- In 2011, turnover, added value at factor cost, number of enterprises, turnover per person employed and gross value added per person employed in the EU-27 remained below the 2008 level, was higher.
- In 2010, apparent labour productivity and gross

operating rate in the EU-27 were higher than in 2008. Total turnover per person employed in the EU-27 grew in 2009 and 2010 compared to 2008. According to this indicator, transportation and storage successfully overcame the crisis year 2009.

- However, if we look at turnover per person employed in transportation and storage by countries and the sizes of companies, this trend is no longer valid for most states.
- Estonia had the largest labour productivity of the Baltic countries, however, it only comprises 51.6% of the EU-27 average. Slovenia was followed by Croatia and the Czech Republic.
- Labour productivity dropped in Lithuania and Latvia in 2009 compared to the previous year. Estonia has had a steady increase.
- Labour productivity for micro companies with 2 to 9 persons employed was significantly higher in four countries, incl. Estonia, than in other states. This is the first time an old post-socialist country is successfully competing at labour productivity with older and stronger EU states. At the same time, there are more than 10 time differences in this group of enterprises, and nearly 5 time differences among post-socialist states.
- In principle, the transportation companies of the Baltic and CEE countries as a whole exited the economic crisis successfully. On the other hand, the crisis meant the death of thousands of companies and a rise in unemployment.
- There were great differences in the dynamics of the labour productivities of countries during the crisis and labour productivity by size class, thus also in how the economic crisis was overcome.
- Thus, in order to get a more accurate overview of what were the lessons learnt by countries as a result of the economic crisis, other key indicators in their interconnection should be observed as well. A more detailed analysis of different types of transportation would also provide a more accurate picture.

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