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# Regional Differences in Wage in Some European Countries

**Key words:** diversity, salaries, wages, Europe, region, branches of the national economy, employee, employer

### Admission

Problems remuneration are fundamental and important issues of the modern economy and economics. It concerns the human factor and provided by his work and the expectations of employees with the work-related in the form of wages. Attitudes and behavior of people and involving their actions, skills and knowledge „translate” the same time for certain expenditures and tangible effects as in the economy as a whole system and in each of its divisions or business organizations.

Among the various aspects of the evolution of wages in a market economy deserves special attention regional wage differentiation in selected European countries. It is when the result of various factors: demographic – social (including age, sex and education) and economic (economic development, labor market situation, the economic attractiveness). Knowledge of the level and diversity of remuneration for the work may be used in the European economy (and so the scale micro- and macro) to efforts to increase efficiency and improve the competitive position of enterprises and to a more ra-

tional management of human resources in the region and country<sup>1</sup>. Level, dynamics and relationships wage in business organizations depend on the situation on the labor market, and thus require a detailed and continuous monitoring and analysis and evaluation. Wage differentiation points because among other things, how much should be paid to different positions in order to obtain, among others, employees with the desired qualifications.

In Europe, the current notice at the same time and a situation in which there are professional and social groups that achieve relatively diverse and high level of income. For example. There are already people who within a month time, they are able to earn more than others for a lifetime. This situation raises specific discussions and emotions in different environments. The more that a dozen or so years ago, differences in income, including wage and were small<sup>2</sup>. Also, the level, relation-

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<sup>1</sup> H. Karaszewska, *Evolution of wages in Poland in the period of change of the economic system*, Publishing Nicolaus Copernicus University in Torun, Torun 2003, p. 169.

<sup>2</sup> W. Jarmołowicz, M. Knapieńska, *Remuneration for the float*

ships and wage growth in various sectors of the national economy in Europe vary considerably today also<sup>3</sup>. This applies when the persons employed on similar-ranking positions as well and performing similar activities. In order to get to know the real scale of wage disparities in the sectors of the national economy, their causes and consequences, it was inter alia the preparation of the present article.

## 1. The amount and wage differentials in France

To carry out the analysis of regional differentiation of salaries in France in 2010–2014 will be used data on average monthly nominal gross wages by sectors of national economy, the differences in relation to the average monthly nominal gross wage in the national economy in general (Table 1).

the national economy in comparison to the average total wage in the national economy in France.

And so, in 2010, the highest average salary, and compared to the average total wage in the national economy in France was recorded in financial intermediation. Salaries in this department developed because of 3,106.98 euro and in relation to the average wage in the total national economic in France were higher by 678.60 euros. This section is dynamically developing in this country, and expertise needed to be well rewarded. Also, high salaries and large differences were observed in the section Electricity, gas and water as well as in the section other services, community, social and personal. High wages also occurred in mining and quarrying, despite the decline in the economic importance of this department. However, in the section hotels and restaurants experienced the lowest average salary of all departments and compared to the average total wage in the national

**Table 1.** Average monthly nominal gross wages by type of activity and differences in comparison the average monthly nominal gross wage in France in 2010–2014 (in euros)

Type of activity	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
	in euros					altogether = 100				
<b>Altogether</b>	<b>2428,28</b>	<b>2478,16</b>	<b>2790,00</b>	<b>2746,00</b>	<b>3002,00</b>	–	–	–	–	–
including:										
mining and quarrying	2548,40	2598,28	2924,00	3332,00	3898,00	+120,12	+120,12	+134,00	+586,00	+896,00
manufacturing	2415,34	2461,54	2772,00	2918,00	3126,00	–12,94	–16,62	–18,00	+172,00	+124,00
supply of electricity, gas and water	2908,76	2964,20	3338,00	3744,00	3922,00	+480,48	+486,04	+548,00	+998,00	+920,00
building	2200,96	2243,48	2526,00	2450,00	2720,00	–227,32	–234,68	–264,00	–296,00	–282,00
trade and repairs	2154,76	2197,28	2476,00	2446,00	2666,00	–273,52	–280,88	–314,00	–300,00	–336,00
Hotels and restaurants	1796,26	1831,36	2060,00	1816,00	2182,00	–632,02	–646,80	–730,00	–930,00	–820,00
transport, storage and communication	1828,32	2332,18	2628,00	3012,00	3294,00	–599,96	–145,98	–168,00	+266,00	+292,00
Financial intermediation	3106,98	3200,74	3606,00	3876,00	4266,00	+678,60	+722,58	+816,00	+1130,00	+1264,00
real estate and business	2745,21	2829,28	3186,00	3048,00	3478,00	+316,93	+351,12	+396,00	+302,00	+476,00
public administration and defense	2004,12	2408,67	2633,71	2928,00	3184,00	–424,16	–69,49	–156,29	–182,00	+182,00
education	2194,87	2315,54	2608,00	2960,00	3212,00	–233,41	–262,62	–182,00	+214,00	+210,00
health care and social	2045,17	2367,28	2666,00	2560,00	2662,00	–383,11	–110,88	–124,00	–186,00	–340,00
Other services, community, social and personal	2489,65	2746,12	3092,00	2404,00	2630,00	+61,37	+267,94	+302,00	–342,00	–372,00

Source: Own study based on: Average gross nominal wages by type of activity. The forecast for 2010–2014. Deviations own calculations.

The analyzes conducted reveal that in 2010–2014 occurred significant differences in average salaries between departments of the national economy and the significant differences in average wages in the sectors of

economy in this country. Salaries in this section totaled 1,796.26 euros and were lower by 632.02 euros from the average total remuneration. Low level of education and high competition in this industry influenced the level of wages. Average wages in other sectors of the national economy and in comparison to the average total wage in the national economy remained on a similar level. Such a situation in average wages in the sectors of the national economy and in relations to the average total wage in the national economy in this country lasted until the end of 2014. Not without significance was the

*and their role in motivating to work in management of work in the modern enterprise. Theory and Practice*, ed. W. Jarmolowicz, Publishing Science Forum, Poznań 2007, p 225.

<sup>3</sup> W. Jarmolowicz, A. Strużyna, *Regional wage differentiation in labor market conditions, changes in the political system*, ed. W. Jarmolowicz, Publishing House of the Academy of Economics in Poznan, Poznan 2003, p. 146.

fact that in France the private sector creates better conditions for wage employees. High salaries received by all those who have close contact with the customer. Also in companies in France about the level of wages determined to a greater extent the effects of work.

In the course of further analysis presented here also the dynamics of average monthly nominal gross wages in France by sectors of national economy in 2010–2014 assuming previous year = 100 (Table 2).

difficult to notice that in all divisions achieved growth in 2013 was lower than in other years. The scale of the slowdown in the growth of average monthly gross wages in that period witnessed the fact that France was struggling with the economic crisis and this was reflected in an increase in wages.

**Table 2.** Dynamics of growth in average monthly gross nominal wages by activities in France in the years 2010–2014 (in %)

Type of activity	2010	2011	2012	2013	2014
	(in %)				
<b>Altogether</b>	<b>101,18</b>	<b>102,05</b>	<b>112,58</b>	<b>98,42</b>	<b>109,32</b>
including:					
mining and quarrying	102,54	101,96	112,54	113,95	116,99
manufacturing	104,32	101,91	112,61	105,27	107,13
supply of electricity, gas and water	101,87	101,91	112,61	112,16	104,75
building	102,45	101,93	112,59	96,99	111,02
trade and repairs	103,12	101,97	112,68	98,79	108,99
Hotels and restaurants	104,75	101,95	112,48	88,16	120,15
transport, storage and communication	114,68	127,56	112,68	114,61	109,36
Financial intermediation	108,34	103,02	112,66	107,49	110,06
real estate and business	109,76	103,06	112,61	95,67	114,11
public administration and defense	117,35	120,19	109,34	111,17	108,74
education	109,84	105,50	112,63	113,50	108,51
health care and social	105,13	115,75	112,62	96,02	103,98
Other community, social and persona	106,45	110,10	112,60	77,75	109,40

Source: Own calculations based on Table 1.

The data of this table shows that there was a fairly significant differences in the rate of growth of average wages. In 2010, the average gross salary in total increased by 1.18%, while in some sectors increased by 17.35% (public administration and defense), while in others about 1.87% (supply of electricity, gas and water). In 2011, while there were some major differences with the increase in average gross wages by a total of 2.05%, in public administration and national defense, they increased by 20.19%, and production activities and the supply of electricity, gas and water supply by only 1, 91%. Even greater differences were noted in 2013. Although average wages in France, according to the sectors of national economy in total in 2013 fell by 98.42% in transport, storage and communications with 14.61%, and other decreased by 22.25% (other services, utilities, social and individual). In 2014, the average gross nominal wages grew by a total of 9.32%, in hotels and restaurants by 20.15%, and in health and social care only about 3.98%.

Comparing the growth of average gross wages by sectors of national economy in 2010–2014 is not dif-

## 2. The amount and wage differentials in the UK

Data on average monthly nominal gross wages by sectors of national economy and compared to the average monthly nominal gross wage in the national economy in general in the UK in years 2010–2014 is presented in Table 2.

In the course of the analysis it noted that in the years 1994–2004 occurred significant differences in average salaries between departments of the national economy and the significant differences in average wages in the sectors of the national economy in comparison to the average total wage in the national economy in the UK. And so, in 2010, the highest average salary, and compared to the average total wage in the national economy in Britain was recorded in the supply of electricity, gas and water. Salaries in this section stood at 4,178.60 euro and in relation to average total wage in the national economy in this country increased by 748,00 euro. Heavy and dangerous work influenced the level of wages. Also, high salaries and large differences were observed in the section of financial intermediation. Work-

ers employed in the financial sector for many years, leading the way in terms of average salary. In a market economy this forum is the most developed and has the greatest economic importance. However, in the section hotels and restaurants experienced the lowest average salary of all departments and compared to the average total wage in the national economy. Salaries in this section totaled 2,537.21 euros and 893.39 euros difference. Average wages in other sectors of the national economy and in comparison to the average total wage in the national economy in this country remained at a similar level. Such a situation in average wages in the sectors of the national economy and in relation to average total wage in the national economy in the UK lasted until the end of 2014. Regarding geographical diversity, the best profit-making purposes is manifestly London.

by 36,93%, and in transport, storage and communications by only 1.17%. Even greater differences were noted in 2013. Although the average wage in the UK by sectors of national economy overall in 2013 increased by 5.00% in transport, storage and communications with 20.39%, and other increased by 10.78% (supply of electricity, gas and water). In 2014, the average gross nominal wages in total increased by 35.42%, in other service activities, community, social and personal with 18.27% and in manufacturing by only 4.07%.

Comparing the growth of average gross wages by sectors of national economy in 2010–2014 is not difficult to notice that in all divisions achieved growth in 2010 was lower than in other years. The scale of the slowdown in the growth of average monthly gross wages in that period witnessed the fact that France was strug-

**Table 3.** Average gross nominal monthly wage by type of activity and differences in comparison the average nominal gross wage in the United Kingdom in 2010–2014 (in euros)\*

Type of activity	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
	in euros*					altogether = 100				
<b>Altogether</b>	<b>3430,60</b>	<b>3553,00</b>	<b>4076,60</b>	<b>4280,60</b>	<b>5789,00</b>	–	–	–	–	–
including:										
mining and quarrying	3267,00	4256,80	4902,80	5576,00	6541,23	–163,60	+703,80	+826,20	+1295,40	–752,23
manufacturing	3213,00	3342,20	3872,60	4662,20	4851,80	–217,60	–210,80	–204,00	+381,60	+937,20
supply of electricity, gas and water	4178,60	4280,60	4858,60	5382,20	5613,40	+748,00	+727,60	+782,00	+1101,60	+175,60
building	3063,40	3260,60	3546,20	4229,60	4681,80	–367,20	–292,40	–530,40	–51,00	+1107,20
trade and repairs	2859,40	2995,40	3529,20	4022,20	4256,80	–571,20	–557,60	–547,40	–258,40	–1532,20
Hotels and restaurants	2537,21	2213,40	2652,00	3026,00	3179,00	–893,39	–1339,60	–1424,60	–1254,60	–2610,00
transport, storage and communication	3209,60	3247,00	3624,40	4318,00	4856,60	–221,00	–306,00	–452,20	+37,40	+932,40
Financial intermediation	3968,71	4994,60	5943,20	7024,40	7384,80	+538,11	+1441,60	+1866,60	+2743,80	+1595,80
real estate and business	3412,45	4012,00	4664,80	5664,40	5993,40	–18,15	+459,00	+588,20	+1383,80	+204,40
public administration and defense	3006,32	3770,60	4222,80	4763,40	4957,20	–424,28	+21760	+146,20	+482,80	+831,80
education	3421,63	4685,20	4681,80	5283,40	5647,40	–8,97	+1132,20	+605,20	+1002,80	+141,60
health care and social	2768,55	3298,00	3733,20	4396,20	4817,80	–662,05	–255,00	–343,40	+115,60	+971,20
Other services, community, social and personal	2634,74	3226,60	3825,00	4447,20	5259,80	–795,86	–326,40	–251,60	+166,60	+529,20

\* Conversion of sterling into euro at the exchange rate on 09.09.2016 year.

Source: Own study based on: Average gross nominal wages by type of activity. The forecast for 2010–2014. Deviations own calculations.

In the course of further analysis presented here also the dynamics of average monthly nominal gross wages in the UK by sectors of national economy in 2010–2014 assuming previous year = 100 (Table 4).

The data of this table shows that there was a fairly significant differences in the rate of growth of average wages. In 2010, the average gross salary in total increased by 2.65%, while in some sectors increased by 16.33% (financial intermediation), while in others 1.47% (supply of electricity, gas and water). In 2011, while there were some major differences with the increase in average gross wages by a total of 30.30%, in education rose

ging with the economic crisis and this was reflected in an increase in wages.

**Table 4.** Dynamics of growth in average monthly gross nominal wages by activities in the UK in 2010–2014 (in%)

Type of activity	2010	2011	2012	2013	2014
	(in %)				
<b>Altogether</b>	<b>102,65</b>	<b>103,57</b>	<b>114,74</b>	<b>105,00</b>	<b>135,42</b>
including:					
mining and quarrying	114,68	130,30	115,18	113,73	117,31
manufacturing	103,20	104,02	115,87	120,39	104,07
supply of electricity, gas and water	101,47	102,44	113,50	110,78	104,30
building	102,65	106,44	108,76	119,27	110,69
trade and repairs	103,83	104,76	117,82	113,97	105,83
Hotels and restaurants	107,32	87,24	119,82	114,10	105,06
transport, storage and communication	105,74	101,17	111,62	119,14	112,47
Financial intermediation	116,33	125,85	118,99	118,19	105,13
real estate and business	109,65	117,57	116,27	121,43	105,81
public administration and defense	114,22	125,42	111,99	112,80	104,07
education	124,56	136,93	99,93	112,85	106,89
health care and social	108,41	119,12	113,20	117,76	109,59
Other community, social and persona	111,37	112,46	118,55	116,27	118,27

Source: Own calculations based on Table 3.

### 3. The amount and wage differentials in Hungary

Data on average monthly nominal gross wages by sectors of national economy and the average monthly nominal gross wage in the national economy in general in Hungary in 2010–2014 are presented in Table 3.

The analyzes found that in 2010–2014 occurred significant differences in average salaries between departments of the national economy in Hungary and considerable variation in average wages in the sectors of the national economy in comparison to the average total wage in the national economy in Hungary (Table 3).

And so, in 2010, the highest average salary – to the level – and in comparison to the average total wage in the national economy in Hungary was recorded in financial intermediation. Salaries in this division stood at 465.11 euros and in relation to average total wage in the national economy were higher by 173.93 euros. Also, high salaries and large differences were observed in the section mining and quarrying and in the section Electricity, gas and water<sup>4</sup>. It was important that, despite the decline in the economic importance of wages in the mining division were so high. This was due to the action of trade unions and the hard and dangerous work. However, in the section hotels and restaurants, and experienced the lowest average salary of all departments and compared to the average total wage in the national

economy. Salaries in this section amounted to 124.55 euros and 166.63 euros difference. Average wages in other sectors of the national economy and in comparison to the average total wage in the national economy remained in a similar range. Such a situation in average wages in the sectors of the national economy and in relation to average total wage in the national economy in Hungary lasted until the end of 2014.

Although the table below shows the significant increase in earnings in the last few years, data on average earnings conceal huge differences. The level of earnings to a large extent depends on the sector of the economy (public or private), the industry, the size of the organization and its ownership structure. In the last decade there has been a huge change in the span of wages between the private sector and the public sector. Salaries in the private sector initially were much lower, but this changed very quickly. For a moment, just the private sector better reward employees. However, due to the increase in public sector wages in 2010–2014, wages in the public sector exceeded the level of wages of the private sector and so it remains today. The Hungarian economy has always existed sectors where wages are traditionally low. First of all, here you can include: agriculture, construction, textile and paper pulp industry, catering, retail, health care and social services. In recent years, also here there was a change. While earlier, which compensate the best sector was mining and heavy industry, is now the highest salary offers the energy industry and the financial services industry.

<sup>4</sup> Z. Jacukowicz, *Differentiation of wages in Poland in the European Union and in the United States*, ILSS, Warsaw 2000, pp. 146.



**Table 5.** Average nominal gross wages by type of activity and differences in comparison the average nominal gross wages in Hungary in 2010–2014 (in euros)\*

Type of activity	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
	w euros*					altogether = 100				
<b>Altogether</b>	<b>291,18</b>	<b>340,98</b>	<b>579,50</b>	<b>882,26</b>	<b>1239,00</b>	–	–	–	–	–
including:										
mining and quarrying	363,26	427,10	713,80	1072,08	1362,02	+72,08	+86,12	+134,30	+189,82	+123,02
manufacturing	273,00	332,26	564,22	849,56	1146,76	–18,18	–8,72	–15,28	–32,70	–92,24
supply of electricity, gas and water	352,44	426,98	758,56	1139,54	1616,64	+61,26	+86,00	+179,06	+257,28	+377,64
building	254,52	293,26	454,64	669,90	838,20	–36,66	–47,72	–124,86	–212,36	–400,80
trade and repairs	276,62	329,08	526,58	761,00	1027,26	–14,56	–11,90	–52,92	–121,62	–211,74
Hotels and restaurants	124,55	269,64	390,08	572,26	757,58	–166,63	–71,34	–189,42	–310,00	–481,42
transport, storage and communication	298,30	353,86	639,30	961,34	1325,84	+7,12	+12,88	+59,80	+79,08	+86,84
Financial intermediation	465,11	628,32	1196,42	1814,16	2723,64	+173,93	+287,34	+616,92	+931,90	+1484,64
real estate and business	198,73	381,30	681,46	1023,30	1296,90	–92,45	+40,32	+101,96	+141,04	+57,90
public administration and defense	154,62	386,34	635,64	1106,48	1549,62	–136,56	+45,36	+56,14	+224,22	+310,62
education	137,96	293,80	502,50	820,24	1348,10	–153,22	–47,18	–77,00	–62,02	+109,10
health care and social	146,58	283,68	443,60	662,34	1103,20	–144,60	–57,30	–135,90	–219,92	–135,80
Other services, community, social and personal	172,63	340,18	536,72	770,12	1157,00	–118,55	–0,80	–42,78	–112,14	–82,00

\* Convert forints to the euro according to the exchange rate on 09.09.2016 year.

Source: Own study based on: Average nominal wages by type of activity. The forecast for 2010–2014. Deviations own calculations.

In the course of further analysis presented here also the dynamics of average monthly nominal gross wages in Hungary, according to sectors of the national economy in 2010–2014 assuming previous year = 100 (Table 6).

a total of 17.10% in public administration and national defense, they increased by 149.86% and in construction by only 15.22%. Definitely smaller differences were recorded in 2013. The average wage in Hungary, accord-

**Table 6.** The growth of average monthly gross nominal wages by activities in Hungary in the years 2010–2014 (in %)

Type of activity	2010	2011	2012	2013	2014
	(in %)				
<b>Altogether</b>	<b>105,13</b>	<b>117,10</b>	<b>169,95</b>	<b>152,25</b>	<b>140,43</b>
including:					
mining and quarrying	106,89	117,57	167,13	150,19	127,04
manufacturing	108,27	121,71	169,81	150,57	134,98
supply of electricity, gas and water	114,63	121,15	177,66	150,22	141,87
building	106,17	115,22	155,03	147,35	125,12
trade and repairs	102,44	118,96	160,02	144,52	134,99
Hotels and restaurants	129,87	216,49	144,67	146,70	132,38
transport, storage and communication	103,16	118,63	180,66	150,37	137,92
Financial intermediation	117,68	135,09	190,42	151,63	150,13
real estate and business	123,55	191,87	178,72	150,16	126,74
public administration and defense	107,73	249,86	164,53	174,07	140,05
education	109,11	212,96	171,03	163,23	164,35
health care and social	118,12	193,53	156,37	149,31	166,56
Other community, social and persona	123,61	197,06	157,78	143,49	150,24

Source: Own calculations based on Table 5.

The data of this table shows that there was a fairly significant differences in the rate of growth of average wages. In 2010, the average gross salary in total increased by 5.13%, while in some sectors increased by 29.87% (hotels and restaurants), while in others only 2.44% (trade and repairs). In 2011, while there were some major differences with the increase in average gross wages by

ing to sectors of the economy of the national total in 2013 increased by 52.25% in public administration and national defense by 74.07%, while in others it increased by 43.49% (other services, community, social and personal). In 2014, the average gross nominal wages in total increased by 40.43%, in other service activities, community, social and personal by 5.24% and in construc-

tion by 25.12%. Comparing the growth of average gross wages by sectors of national economy in 2010–2014 is not difficult to notice that in all divisions achieved growth in 2010 and 2011 was lower than in other years. The growth rate of average monthly gross wages in that period witnessed the fact that the Hungarian economy in the first years of grappling with the economic crisis, but quickly did an exceptional job as can be seen in the economic recovery and growth in wages.

#### 4. The height and differences in wages in the Czech Republic

Average monthly nominal gross wages by sectors of national economy and the differences compared to the average monthly nominal gross wage in the national economy in general in the Czech Republic in 2010–2014 is presented in Table 4.

In the course of the analyzes it noted that in 2010–2014 occurred significant differences in average salaries between departments of the national economy and the significant differences in average wages in the sectors of the national economy in comparison to the average total wage in the national economy in the Czech Republic (Table 4).

And so, in 2010, the highest average wages and the differences compared to the average total wage in the national economy in the Czech Republic was recorded in financial intermediation. Salaries in this division stood

at 964.36 euros and in relation to average total wage in the national economy were higher by 380.84 euros. Also, high salaries and large differences were observed in the section mining and quarrying and in the section Electricity, gas and water. However, in the section hotels and restaurants experienced the lowest average salary of all departments and compared to the average total wage in the national economy. Salaries in this section amounted to 307.31 euros and 38.21 euros difference. Average wages in other sectors of the national economy and in comparison to the average total wage in the national economy remained in a similar range. Such a situation in average wages in the sectors of the national economy and in relation to average total wage in the national economy in the Czech Republic lasted until the end of 2014.

The highest salary among the included table for sectors of activity occurred in financial intermediation. The worst paid sector, the hotels and restaurants. Wages in the Czech Republic, here are lower than the national average. Manufacturing, especially cars, machine tools, and engineering products, they still have great importance for the Czech economy. Therefore, wages are high there.

In the course of further analysis presented here also the dynamics of average monthly nominal gross wages in the Czech Republic by sectors of national economy in 2010–2014 assuming previous year = 100 (Table 8). The data of this table shows that there was a fairly significant differences in the rate of growth of average wages. In 2010, the average gross salary in total increased by 5.12%, while in some sectors increased by 13.83%

**Table 7.** Average gross nominal wages by type of activity and differences in comparison the average nominal gross wage in the Czech Republic in 2010–2014 (in euros)\*

Type of activity	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
	w euros*					altogether = 100				
<b>Altogether</b>	<b>583,52</b>	<b>691,04</b>	<b>989,82</b>	<b>1238,54</b>	<b>1524,70</b>	–	–	–	–	–
including:										
mining and quarrying	731,00	839,26	1224,16	1484,66	1768,30	+147,48	+148,22	+234,34	+246,12	+243,60
manufacturing	554,36	656,60	960,82	1181,18	1424,12	–29,16	–34,44	–29,00	–57,36	–100,58
supply of electricity, gas and water	684,76	813,42	1214,12	1543,18	1891,70	+101,24	+122,38	+224,30	+304,64	+367,00
building	637,20	738,78	1008,64	1224,58	1510,74	+53,68	+47,74	+18,82	–13,96	–13,96
trade and repairs	527,94	620,00	996,52	1291,20	1533,72	–55,58	–71,04	+6,70	+52,66	+9,02
Hotels and restaurants	512,94	614,62	745,46	959,32	1086,64	–70,58	–76,42	–244,36	–279,22	–438,06
transport, storage and communication	569,06	688,94	1055,70	1342,28	1623,34	–14,46	–2,10	+65,88	+103,74	+98,64
Financial intermediation	964,36	1171,82	1769,64	2436,18	2961,62	+380,84	+480,78	+779,82	+1197,64	+1436,92
real estate and business	568,97	743,70	1092,66	1316,62	1636,98	–14,55	+52,66	+102,84	+78,08	+112,28
public administration and defense	612,33	803,22	1008,38	1282,00	1712,96	+28,81	+112,18	+18,56	+43,46	+188,26
education	574,17	620,82	823,62	1040,48	1372,30	–9,35	–70,22	–166,20	–198,06	–152,40
health care and social	563,89	629,42	831,40	1116,56	1400,56	–19,63	–61,62	–158,42	–121,98	–124,14
Other services, community, social and personal	536,41	561,80	835,74	1021,00	1232,10	–47,11	–129,24	–154,08	–217,54	–292,60

\* Currency Czech crown to the euro according to the exchange rate on 06.09.2016 year.

Source: Own study based on: Average gross nominal wages by type of activity. The forecast for the years 2010–2014. Deviations own calculations.

**Table 8.** Dynamics of growth in average monthly gross nominal wages by activities in the Czech Republic in 2010–2014 (in%)

Type of activity	2010	2011	2012	2013	2014
	(in %)				
<b>Altogether</b>	<b>105,12</b>	<b>118,43</b>	<b>143,24</b>	<b>125,13</b>	<b>123,10</b>
including:					
mining and quarrying	104,61	114,81	145,86	121,28	119,10
manufacturing	107,32	118,44	146,33	122,93	120,57
supply of electricity, gas and water	107,21	118,79	149,26	127,10	122,58
building	106,44	115,94	136,53	121,41	123,37
trade and repairs	107,09	117,44	160,73	129,57	118,78
Hotels and restaurants	108,65	119,82	121,29	128,69	113,27
transport, storage and communication	109,74	121,07	153,24	127,15	120,94
Financial intermediation	109,69	121,51	151,02	137,67	121,57
real estate and business	112,35	130,71	146,92	120,50	124,33
public administration and defense	113,83	131,17	125,54	127,13	133,62
education	102,16	108,12	132,67	126,33	131,89
health care and social	104,62	111,62	132,09	134,30	125,44
Other community, social and persona	101,43	104,73	148,76	122,17	120,68

Source: Own calculations based on Table 7.

(public administration and defense), while in others only 1.43% (other services, community, social and individual). In 2011, while there were some major differences with the increase in average gross wages by a total of 18.43% in public administration and national defense, they increased by 31.17% and other service activities, communal, social and individual only 4.73%. Definitely smaller differences were recorded in 2013. The average salary in the Czech Republic by sectors of national economy overall in 2013 increased by 43.24% in trade and repair of 60.73%, and in others increased by 25.54% (public administration and defense). In 2014, the average gross nominal wages in total increased by 23.10% in public administration and national defense by 33.62% and in hotels and restaurants by 13.27%. Comparing the growth of average gross wages by sectors of national economy in 2010–2014 is not difficult to notice that in all divisions achieved growth in 2010 and 2011 was lower than in 2012–2014. The growth rate of average monthly gross wages in that period witnessed the fact that the Czech economy in the first years of grappling with the economic crisis, but quickly did an exceptional job as can be seen in the economic recovery and growth in wages.

## Summary

In the course of further analysis presented here also the dynamics of average monthly nominal gross wages in the Czech Republic by sectors of national economy in 2010–2014 assuming previous year = 100 (Table 8).

The data of this table shows that there was a fairly significant differences in the rate of growth of average wages. In 2010, the average gross salary in total increased by 5.12%, while in some sectors increased by 13.83% (public administration and defense), while in others only 1.43% (other services, community, social and individual). In 2011, while there were some major differences with the increase in average gross wages by a total of 18.43% in public administration and national defense, they increased by 31.17% and other service activities, communal, social and individual only 4.73%. Definitely smaller differences were recorded in 2013. The average salary in the Czech Republic by sectors of national economy overall in 2013 increased by 43.24% in trade and repair of 60.73%, and in others increased by 25.54% (public administration and defense). In 2014, the average gross nominal wages in total increased by 23.10% in public administration and national defense by 33.62% and in hotels and restaurants by 13.27%.

Comparing the growth of average gross wages by sectors of national economy in 2010–2014 is not difficult to notice that in all divisions achieved growth in 2010 and 2011 was lower than in 2012–2014. The growth rate of average monthly gross wages in that period witnessed the fact that the Czech economy in the first years of grappling with the economic crisis, but quickly did an exceptional job as can be seen in the economic recovery and growth in wages.



## References

- Jacukowicz Z., *Differentiation of wages in Poland in the European Union and in the United States*, ILSS, Warsaw 2000. Jarmolowicz W., A. Strużyna, *Regional wage differentiation in labor market conditions, changes in the political system* ed. W. Jarmolowicz, Publishing House of the Academy of Economics in Poznan, Poznan 2003.
- Jarmolowicz W., Knapińska M., *Remuneration for the float and their role in motivating to work in management of work in the modern enterprise. Theory and Practice*, ed. W. Jarmolowicz, Publishing Science Forum, Poznan 2007. Karaszewska H., *Evolution of wages in Poland in the period of change of the economic system*, Publishing Nicolaus Copernicus University in Torun, Torun, 2003.