

Life Standards in Romania, Labour Costs and Productivity of Material Resources, In the European Context

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ABSTRACT: *This article focuses, from the standpoint of the local purchase power, on the life standards in Romania and across Europe, emphasizing that one problem in Romania is the productivity of the resources which decreased significantly during the economic boom. The trend of the labour cost per hour and the GDO/ per capita in Romania during the last four years show that the growth reserve of the labour cost per hour has disappeared.*

Key words: purchase power, productivity of resources, labour cost per hour, GDP/ per capita, foreign competitiveness

JEL Codes: E30, E60, O40

1. Introduction

The assessment of human action has been always needed in any field of economic and social activity. Efficiency is a characteristic of the human being, an organized factor who manages to make the difference among the multiple interdependencies which are essential, real and not apparent (Kant, 1981). The general criteria to assess the efficiency of any economic and social activity is how small is the amount of resources put in and spent to obtain effect. This is the solution to optimize development with efficiency, imposed by competitiveness. The two terms of the relation results – costs can be summarized in the following requirements for modern economy (Barbu, 2010, pp. 108-109): to maximize the population able to work in activities that is useful in social terms; to maximize the labour productivity; to maximize the use of all production capacities; to maximize the use of natural resources; to maximize the new effects in each effort unit spent; to minimize the resources expenditure in order to achieve the goals; to achieve an optimal amount of production for the domestic and foreign consumption and given the constraints in resource allocation; the comparative advantage is a subjective

criterion to judge efficiency: to follow the comparative advantage means to sacrifice what is less valuable for something else see as valuable.

During the last decades, economic growth in industrialized countries has seen a rising trend, in terms of deepening international division of labour, increased international economic circuit, thus enhancing the influence of the global market upon economic development. At the same time, we see the gap between developed countries and less developed countries is deepening, as well as the significant gap between population and natural resources, in social life environment, in the attitude towards labour and the degradation of the environment with major implications upon humans (Barbu, 2009, p. 109).

“The major factor in economic and financial development in any country is the human resources (population), that is the total population of the country at a certain moment” (Băcescu & Băcescu – Cărbunaru, 1998, p. 620). “Due to the role of labour in respect to resources and production factors, the population is the main component of any society, therefore economy” (Dobrotă & Aceleanu, 2007, pag. 23). „Labour means any activity that produces things or services that have a use value. Labour is therefore the totality of actions that man, with one’s brain, hands, tools and equipment, exercises upon matter, actions that in their turn, react upon man and change man” (Friedmann, 1970, p.76).

The economic prosperity of a nation is generated, according to many economists, by productivity, both in the sector of sellable and non-sellable goods. Economic productivity, measured as value of the production of goods and services made per resource unit (natural resources, human resources, capital and knowledge), determines the life standard of a nation. Consequently, productivity determines, through salaries, profit in capital or other resources, the life standard in a region or country (Porter, 1990).

2. Life standard in Romania, as against Europe

Romania ranks the 7th among 11 former Socialist countries, currently EU members, in terms of local purchase power, according to *Numbeo.com*¹. It falls after Slovakia and Croatia, surprisingly before Lithuania and Latvia, Bulgaria follows and the last is Hungary.

The ranking starts from real life costs of basic food, dwellings, rents, utilities, transport, clothing, entertainment etc., plus net salaries reported by a considerable number of contributors (1,400 for the last 18 months, with 22,234 entries from the main Romanian towns).

Although we may criticize representativeness, the weighted average formula and the fact that statistics is focused on the urban area, we’ll have a view which reflects closer the public opinion than we would have in a comprehensive analysis of all these countries. At least in densely populated countries, we do not live such a bad life as we may think, if we compare our country to Europe (see table).

¹ *Numbeo.com* is a site launched in April 2009, its research and data made available are not influenced by any NGO. Mladen Adamovic, Founder/CEO, was a software engineer with Google (2007-2009), where he developed internal applications. His site was mentioned as source by several prestigious international publications, such as Time, Forbes, The Economist, New York Times, The Telegraph, The Washington Post, USA Today, The Sydney Morning Herald, China Daily etc.

Table no. 1
Prices and purchase power in EU member states compared to Romania - %-

COUNTRY	Prices	Rents	Food items	Purchase power
Slovenia	+50.08	+61.52	+51.42	+44.52
Czech Republic	+16.57	+61.66	+2.,04	+44.10
Poland	+9.68	+53.97	+5.94	+32.79
Estonia	+37.43	+51.23	+28.42	+25.60
Slovakia	+26.84	+71.12	+39.76	+18.64
Croatia	+38.20	+11.53	+41.54	+11.74
Lithuania	+28.24	+37.06	+26.52	-0.15
Latvia	+32.51	+37.25	+23.70	-0.62
Bulgaria	+1.56	-5.24	+4.52	-5.42
Hungary	+19.57	+27.60	+16.41	-10.60
Germany	+85.70	+173.86	+82.75	+137.64
UK	+112.16	+279.20	+112.58	+91.46
France	+112.36	+193.04	+139.09	+82.72
Italy	+93.73	+140.39	+100.63	+79.95
Spain	+58.04	+111.64	+58.44	+66.02
Luxemburg	+127.98	+423.46	+133.67	+158.75
Denmark	+137.99	+254.94	+134.38	+122.98
Finland	+109,91	+201,48	+123,13	+116,84
The Netherlands	+104.26	+263.57	+93.26	+110.87
Sweden	+118.21	+194.77	+139.27	+104.59
Ireland	+118.44	+321.71	+124.22	+103.38
Austria	+95.67	+191.24	+119.57	+83.08
Belgium	+112.61	+235.15	+129.23	+70.75
Cyprus	+58.50	+48.74	+63.95	+56.66
Malta	+73.08	+133.52	+75.17	+32.36
Portugal	+39.64	+74.28	+38.40	+19.92
Greece	+54.11	+8.96	+52.88	+19.74

Source: Numbeo.com data processing – April 2016

We have presented separately the cases of the 5 world's biggest economies, ranked according to the local purchase power, that is taking into account not only the income or the GDP/per capita, but also the prices and tariffs per person that have the same needs in all the states. The cases are very different due to the traditional indicators. Germany is a leader as it preserves low prices, compared to its advanced economy. Luxemburg, with its special position, exceeds the "European engine". The Netherlands and Ireland are in between the Scandinavian

countries (including Denmark), all having a local purchase power that is double compared to Romania.

Surprisingly, Portugal and Greece, countries with problems in terms of the average income per capita, that are stagnating or regressing in development, are less than 20% above Romania in purchase power. Despite appearances, Romania is closer than Estonia, Poland or the Czech Republic, countries whose advantage is not the high income but the low prices.

Here is the domestic situation in the main Romanian towns, as perceived from abroad (compared to New York), based on the available data, most probably with a high level of uncertainty.

Contrary to the data reflecting salaries and the GDP/per capita, Bucharest ranks the 5th in top 10 of the purchase power, after Arad, Cluj-Napoca, Braşov and Timişoara.

Table no. 2

Prices and purchase power in the main Romanian towns (New-York = 100%)

TOWN	PRICES	RENTS	FOOD ITEMS	PURCHASE POWER
Arad	36.03	8.19	30.30	66.10
Cluj-Napoca	38.46	11.07	32.58	65.47
Braşov	37.95	9.21	30.70	60.13
Timişoara	36.81	9.33	29.76	59.96
Bucureşti	40.28	12.59	31.99	55.59
Craiova	34.41	5.69	27.47	53.66
Iaşi	37.01	10.13	29.38	50.47
Oradea	36.83	6.27	31.67	49.63
Sibiu	37.25	8.02	30.47	48.73
Constanţa	41.13	7.37	35.29	48.08

Source: Numbeo.com data processing – April 2016

The reason for this rank is the high prices, 2nd place after Constanţa (which hold 10th place). By contrast, the last but one town in the top in terms of relative price index goes to 1st place, which tells us a lot, namely, to pay attention to the German experience, in Transylvania and Banat. Inevitably, as income rises, the life cost, rents and prices in food items will rise, because not only salaries and pensions will tend to converge towards the European values, but also the power purchase, based on the simple law of demand and supply. This income should not enter a loser's race with the prices, given the lack of improved productivity and lack of organization of the European budget.

The trends in dwellings, food and purchase power, as we present personal welfare, remain essential for the development strategy in our country, including at territorial level.

At least from the standpoint of the youth who want to create their own life, and they want to know the limits, we should carefully analyze the available data.

3. Labour cost in the GDP per capita

Labour cost in Romania was in 2015 30% higher than in Bulgaria and approx 30% lower than in Hungary and Poland, according to Eurostat.

A comparison with the European states in terms of possibilities generated by the development expressed in GDP/ per capita is useful to place Romania accurately on the labour market in the EU and to know what measures to take.

We have used the most recent data available and we compared the labour cost per hour with the average hourly labour cost in the EU, measured in euro (not in terms of parity of the purchase powers that takes into account the prices, but from the standpoint of an investor who wants to do business locally and keeps the bookkeeping in euro).

Table no. 3

Hourly labour cost in the EU

Country	GDP/per capita		Hourly labour cost		Cost vs. GDP (%)
	EURO	% average EU	EURO	% average UE	
EU 28	27,500*	100	25.0	100	0
EA 19	29,900*	109	29.5	118	+9
Belgium	36,500	133	39.1	156	+17
Bulgaria	6,100	22	4.1	16	-27
Czech Republic	14,700*	53	9.9	40	-25
Denmark	46,900	171	41.3	165	-4
Germany	37,100	135	31.4	129	-4
Estonia	15,600	57	9.8	42	-26
Ireland	46,200	168	30.0	120	-28
Greece	16,200	59	14.5*	41	-31
Spain	23,300	85	21,1	85	0
France	32,200	117	35.1	140	+20
Croatia	10,400	38	9.6	38	0
Italy	26,900	98	28.1	112	+14
Cyprus	20,600	75	15.6	62	-17
Latvia	12,300	45	7.1	28	-37
Lithuania	12,800	46	6.8	27	-42
Luxemburg	91,600	333	36.2	145	-56
Hungary	11,100	40	7.5	30	-25
Malta	20,400	74	13.0	52	-30
The Netherlands	40,100	146	34.1	136	-7
Austria	39,100	142	32.4	130	-8
Poland	11,100	40	8.6	34	-14
Portugal	17,300	63	13.2	53	-16

Romania	8,000	29	5.0	20	-31
Slovenia	18,700	68	15.8	63	-7
Slovakia	14,400	52	10.1	40	-23
Finland	37,800	137	33.0	132	-4
Sweden	45,300	165	37.4	150	-9
UK	39,500	144	25.7	103	-28

Source: Eurostat data processing

* Data for 2014

We can see an interesting distribution of the EU member states, with clear excess of costs that shows productivity problems for the adjacent and Latin countries - France (+20% additional salary cost compared to the economic capacity), Belgium (+17%) and Italy (+14%). The data is less accurate but they however allow certain qualitative estimations.

Geography and the socio-cultural model also have major importance as well to define the labour market costs.

Germany, Denmark, The Netherlands, Austria, Finland and Sweden have their labour costs compared to the GDP per capita (as against the average in the EU) similar and slightly negative, which look at their best in terms of external competitiveness, on a domestic market that should stimulate the development of social services at reasonable level.

Spain, ranking between France and Portugal, has zero, the average of its neighbours. So does Croatia, ranking among the Balkanic states, with strong negative values, and Italy, with a significant positive value.

In this table, the former socialist countries have 30% below the hypothesis generated by the GDP per capita, with Romania ranking better than the Baltic states (except for Estonia, "neighbour" to Finland rather than Lithuania and Latvia), but lower than Bulgaria, Hungary, Czech Republic and Slovakia.

Interestingly, Romania ranks pretty similar to the UK, Ireland and Malta. We have not taken into account the gross data for Luxemburg, because this small country has a special situation - it reports high production generated by labour force that is taken from other countries, and it has a low number of resident population.

Given this context of clear cut blocks, defined according to development and geography criteria, the best solution in the East seems to be held by Poland, champion of the economic crisis. With -14%, it makes the average between the East that wants a Western life standard and the advanced countries, which should make us think what exactly is the maximal level to raise salaries.

The data about hourly labour cost and the GDP/per capita in Romania during the last 4 years show that the reserve to increase the hourly labour cost based on economic growth (out of which a part was obtained due to the diminished population, not development of national economy) has almost ended.

Table no. 4

Evolution of hourly labour cost and of the GDP/per capita in Romania

Year	2008	2012	2013	2014	2015	2015/2008
Cost/hour (Euro)	4.2	4.1	4.4	4.6	5.0	+19%
GDP/per capita (Euro)	6,900	6,700	7,200	7,500	8,000	+16%

Source: Eurostat and National Institute of Statistics

Especially if we take into account the exceptional growth of labour force costs between 2004 - 2008. Due to the enthusiasm after the EU accession, despite the flat rate tax and successive tax decreases, the hourly labour cost increased from 1.9 euro/hour to 4.2 euro/hour, a value of reference for 2012 – 2015.

The question is more complex than the data in tables, especially if we take into account that this labour costs presented in tables, especially if we take into account that this labour cost includes also non-salary costs or it is indirectly determined by the level of pensions paid from the taxes applied to the labour force.

These findings should make the decision takers (technocrats) and politicians think (if this phrase is not an oxymoron).

4. Productivity of the material resources

The productivity of resources in a country is measured by dividing the GDP with the domestic consumption of material (generated by the internal production, plus the difference between the imported raw materials and the exported materials). To ensure comparability among various countries, we use the GDP/per capita, and we take the standard purchase powers, and in order to follow accurately the trend in time, we use the GDP/per capita in real terms, adjusted according to the volume of prices for a year of reference.

The trends of productivity in European countries during the last years did not help Romania too much. Our country ranks the last but one among the EU member states in productivity of resources, after Bulgaria.

With 0.7 equivalent of euro per kilo of raw material used in 2014, we have only a third of the average in the EU28, and far from the Netherlands (3.5 euro/kg), UK (3.4 euro/kg), Italy (3 euro/kg) or Spain (3 euro/kg).

The capacity to efficiently use the raw materials depends on technology and the products that are being produced, and influences appear in the labour productivity and pollution of the environment (pollution not only in terms of amount of waste resulted from manufacturing, but also, in terms of technology – read investment in clean environment).

In this respect, Romania is no longer above the half average of the EU, like for the GDP/per capita, but it has less than a third of the average of the EU and a sixth of the value of the champion, the Netherlands (see the table).

Table no. 5

Productivity of resources in the EU countries (2014)

Country	GDP/per capita (PPPs - purchasing power parity standard) (Euro)	DMC - domestic material consumption (tons / per capita)	Productivity of resurces (Euro PPPs /kg)	GDP/DMC (EU28=100)
UE28	27,486	13.1	2.1	100
Luxemburg	73,265	20.6	3.6	169.3
The Netherlands	35,906	10.3	3.5	166.2
UK	29,926	8.7	3.4	163.4
Italy	26,356	8.3	3.2	151.5
Spain	25,021	8.3	3.0	143.1
France	29,245	12.0	2.4	116.4
Belgium	32,320	14.3	2.3	107.9
Germany	34,522	16.1	2.1	102.0
Malta	23,563	12.3	1.9	91.3
Cyprus	22,398	12.3	1.8	86.4
Croatia	16,108	9.3	1.7	82.3
Slovenia	22,623	13.1	1.7	82.2
Ireland	36,742	21.5	1.7	81.2
Denmark	34,226	20.1	1.7	81.1
Austria	35,499	21.0	1.7	80.3
Slovakia	21,078	12.6	1.7	79.8
Greece	19,938	12.4	1.6	76.8
Hungary	18,648	11.8	1.6	75.1
Czech Republic	23,206	15.2	1.5	72.7
Portugal	21,401	14.3	1.5	71.2
Sweden	33,707	23.1	1.5	69.6
Lithuania	20,602	14.8	1.4	66.1
Poland	18,797	17.2	1.1	52.0
Finland	30,281	31.1	1.0	46.4
Latvia	17,522	20.5	0.9	40.7
Estonia	20,939	29.3	0.7	34.0
Romania	15,159	21.3	0.7	33.8
Bulgaria	12,804	19.4	0.7	31.3

Source: Eurostat data processing

In terms of productivity of resources, the EU has a wide variation in life standards – UK, Italy and Spain are champions, followed at a long distance by the rest, with Germany at the average of the EU28 and Sweden and Finland low in the top.

Table no. 6

**Trend of productivity of resources in the EU countries between 2000-2014
(2000 = 100)**

Country	2000	2004	2008	2011	2014
Spain	100	93.4	109.2	163.3	213.4
Cyprus	100	107.8	72.7	100.9	194.4
Ireland	100	96.8	113.5	177.3	192.7
Italy	100	117.8	126.4	148.8	186.0
UK	100	109.6	131.8	151.6	166.6
Slovenia	100	102.8	113.3	151.3	164.3
Czech Republic	100	110.0	132.7	144.0	160.4
Latvia	100	121.2	146.5	130.3	143.5
Luxemburg	100	103.1	131.3	137.6	140.6
Slovakia	100	92.2	105.9	120.8	139.2
Portugal	100	105.6	93.1	116.3	136.4
Hungary	100	87.7	116.6	154.0	136.1
Poland	100	111.7	115.5	104.1	134.9
The Netherlands	100	113.3	113.7	124.3	134.6
France	100	106.8	112.9	126.2	129.8
Germany	100	110.4	121.9	120.5	129.4
Austria	100	102.3	111.7	114.7	124.7
Denmark	100	101.9	101.3	110.4	121.5
Finland	100	102.2	105.4	113.6	121.3
Lithuania	100	98.9	99.6	113.4	120.5
Belgium	100	106.8	99.1	105.3	115.8
Greece	100	102.2	86.7	104.3	111.3
Bulgaria	100	100.0	106.2	118.5	116.3
Sweden	100	106.9	107.1	107.5	104.5
Croatia	100	70.7	70.0	96.7	104.4
Malta	100	95.8	140.3	120.8	96.3
Estonia	100	76.0	78.0	72.8	73.8
<i>Romania</i>	<i>100</i>	<i>71.6</i>	<i>51.8</i>	<i>59.2</i>	<i>67.3</i>

Source: Eurostat data processing

The productivity of resources increased in the EU28 with 27% between 2000-2014. Before 2008, the progress was slow, but continuous, except for 2004. Starting with 2009, the

increase was quick, when efforts were made to cut costs, and material consumption, and highest levels in 2009 and 2012, and a slow decrease in 2011.

The champion of improved use of resources starting with 2005 has been Spain, which has managed improved use of resources, followed by Cyprus and Hungary.

Good performance has been achieved by former Communist countries, Slovakia, Slovenia and the Czech Republic, and big economies such as Italy and the UK.

5. Conclusions

The productivity of resources decreased in Romania between 2000 -2008, during the economic boom. Eurostat data show a development model with strong extensive accents, with care towards technology consumption and use of resources. Hence, a major cause of the small added value of the production process.

The recovery during the last 6 years has a remedial effect upon the disaster, but still keeps us on the last place in the EU. Development has not kept the pace of the consumption of materials and raw materials used to obtain development, it is atypical, in Europe and in the region, where Poland, Hungary and Bulgaria have managed to perform better.

Beyond economic results, that are quantitatively good, we should pay attention to quality increase, because this is where Romania lags behind the EU economies.

The shortages can be remedied through long term program that should be immediately launched if we want to see increased added value on long term, and to preserve competitiveness by gradually and partially replacing material consumption with salary rise.

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