HOW THE LAW OF PROFIT MAXIMIZATION MANIFESTS IN CONTEMPORARY ECONOMICS

Pavel Janíčko – Ilona Švihlíková

Abstract
The article deals with the topic of political economy: the development of ratio of profits (reflected as gross operating surplus) and compensation of employees. The situation in the Czech Republic is examined, also taking into account the structure of households’ incomes. The next part is devoted to comparisons in the EU, which show significant differences as to the ratio of gross operating surplus and compensation of employees. The difference indicates the division between the core countries (Germany, Netherlands), where the compensation of employees exceeds the gross operating surplus, and the countries of the periphery (Czech Republic, Poland, Greece), where the situation is the opposite. The data suggest further research into this topic is necessary.

Key words: profits, gross operating surplus, compensation of employees

JEL Code: E01, J30

Introduction
Profit viewed in the concept of mainstream economic theory is defined as the difference between income of the company and its costs. Revenues of the company are then defined as the monetary expression of the value of production used by the company at a specific time and costs as monetization of spending for so-called factors of production (labor, land and capital in the form of machinery, buildings and technology). Even this relatively superficial approach can easily deduce that there is a mutually contradictory and conflicting relationship between profit and cost, therefore the inverse relationship, when the growth of costs ceteris paribus leads to profit decrease and vice versa. Thus, if the main aim of company operations in a market capitalist society states the principle of profit maximization, it leads to an inevitable trend consisting of the pressure to reduce costs, including "labour", e.g. primarily payroll. This contradiction can be mitigated only in a situation where there is a considerable growth of the total product and therefore it is possible to simultaneously increase profit and the total amount of funds paid to employees. However, it is important to examine also ratios...
of these values, even in a situation where these variables grow absolutely, we may observe change in their relationship.

This mechanism is commented by the Czech economist and environmentalist Jan Zeman\textsuperscript{1}, in his analysis as follows:

Maximization profits can be achieved basically in five ways.

Positive ways of increasing profit are:
- reducing the cost of production of goods or services,
- increasing the value of produced goods or services.

Negative ways to increase profit are:
- robbing (cheating) of other entrepreneurs and consumers, including the less developed countries (including the imposition of their goods to the usefulness of low, zero or negative level)
- greater exploitation of workers,
- higher production externalities, including environmental and threatening thus the existence of further generations.

For our analysis the conclusion about the dichotomy between labour costs and profits is particularly important. It implies a pattern of deepening gap between the earnings of capital and labour. To find expression of this phenomenon, it is necessary to define some relative variables. Regarding the measurement of rates of profit, then the commonly used methodology are indicators measuring the company's ability to generate profit in relation to sales, assets and equity.

Various indicators of profitability provide a variety of useful information about the financial health and performance of the company. For example, gross profit and net profit levels reflect management of companies relative to the expenditure items. Return on equity illustrates what is the company's ability to generate revenues relation to the given capital. Return on investment gives us information on companies' ability to generate profits for its shareholders.

Marxism additionally describes and highlights another trend. As Jan Zeman writes in his analysis "the negative profit maximization strengthens the simultaneous operation of the law of natural accumulation of capital. The tendency of capital to accumulate wealth in one part of society results in poverty at the other part of society, always in relative terms and often even in absolute terms. Experience shows that the contradiction between labor and capital, the

direct consequence of the operation of the law of profit maximization and the law of natural accumulation of capital can be absorbed into politically acceptable limits only by systematic corruption, mostly in the form of purposeless consumer population consumption.

In statistical practice of the developed countries (and the Czech Republic) "profit" can be interpreted as so-called net operating surplus, which is calculated as companies operating profit (it means "before depreciation") minus the value of used fixed capital. Using this terminology, we can, on the basis of available statistical data test aforementioned trends in the Czech Republic (as the reference period we selected the years 2004 to 2014, a stage after joining the EU) and then provide comparison with other EU countries.

1 Development in the Czech Republic

We can use the overall level of GDP as the most complex indicator characterizing the product created in the economy and also describing the shares of individual participants in the production process on this product, expressed in the breakdown of GDP by the income approach. These values are the indicators of employee compensation including the item wages and salaries paid and then the net surplus of companies, as well as the indicator of fixed capital consumption. Based on these data, it is possible to perform an analysis of the development of the Czech economy in terms of the distribution of the total product formed between the main actors of economic activities, between the entrepreneur (owner of the means of production) on the one hand and employees on the other. At this level of analysis, we abstract from the role of the state, whose share in the total product is designed to the secondary distribution.

Fig. 1: Development of chosen indicators at market prices (CZK mil.)
Mentioned variables are documenting that the development in the period of economic crisis has significantly affected the Czech Republic and its impact was even more reinforced by restrictive government policy. Even the graph shows that the crisis development in the Czech Republic began in the year 2009, and was not overcome until 2014.

If we look at these developments from the perspective of the issue of distribution among the different classes (owners and non-owners of means of production), then we have not seen any significant change in this period. Development of profits matched rather the current phase of the economic cycle and was not continuously rising. Development of wages and other personnel costs was rather modest, but still showing growing tendency.

This becomes more evident if we look at following characteristics.

**Fig. 2: The share of compensation of employees in total GDP**
It is evident that this share increased relatively during the economic crisis, which had obviously more to do with the relative decline in profits than the growth in wages or employment levels. The same phenomenon is also reflected by the structure of household income.

**Tab. 1: Structure of household income in the Czech Republic (in %)**

<table>
<thead>
<tr>
<th>Income</th>
<th>2010</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incomes from employment</td>
<td>59,6</td>
<td>59,7</td>
</tr>
<tr>
<td>Business incomes</td>
<td>14,0</td>
<td>13,4</td>
</tr>
<tr>
<td>Social incomes</td>
<td>23,4</td>
<td>23,8</td>
</tr>
<tr>
<td>Other</td>
<td>3,0</td>
<td>3,1</td>
</tr>
</tbody>
</table>

During the crisis years the ratio of business incomes fell and the ratio of social income significantly increased, which again confirms the hypothesis of the relative decline in profits during this period in the Czech economy. Likewise, it does not show increase in income from capital assets, which is incorporated in the category of “other income”.

In the following text we can contemplate the possible trends that we indicated in previous passages. Regarding the share of profit (net surplus) on cost of living and costs of immortalized labour (profit rate), we can test whether we could find a tendency for a relative increase in the proportion of fixed capital and the consequent decline in profitability

**Fig. 3: The rate of profit and the rate of exploitation**
Again, we can observe that the development of these comparative values was rather dependent on the overall condition of the economy and its cyclical developments. We can examine, why the figures do not confirm tendencies of increase in the share of profits at the expense of working costs, therefore, in the abbreviated version trends of growth in product attributable to capital at the expense of the working income. As a probable explanation for this trend hypothesis, we can say that the wage level in the Czech Republic is relatively very low and cannot be squeezed more radically. The rate of exploitation is high, compared with the EU average.

2 EU comparison

Let us now have a look at the comparison in EU countries, for which data will be delivered by Eurostat. If we compare the latest data for the year 2013, we will see at once that the gross operating surplus to GDP is higher (sometimes in a dramatic way) rather in the new EU member countries, e.g. in the transforming economies and lower in countries of Western Europe. The following table offers a good overview of this.

Tab.2: Gross operating surplus to GDP in %, selected countries, 2013

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP %</th>
<th>Country</th>
<th>GDP %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>38,2</td>
<td>Czech Republic</td>
<td>47,6</td>
</tr>
<tr>
<td>Finland</td>
<td>34,6</td>
<td>Slovakia</td>
<td>54,0</td>
</tr>
<tr>
<td>UK</td>
<td>33,1</td>
<td>Poland</td>
<td>51,4*</td>
</tr>
<tr>
<td>France</td>
<td>32,7</td>
<td>Lithuania</td>
<td>50,1</td>
</tr>
<tr>
<td>EU 28 average</td>
<td>38,6</td>
<td>Romania</td>
<td>55,1</td>
</tr>
</tbody>
</table>

Source: Eurostat
- year 2012

We may also find economies that stand out in their categories. The highest ratio of gross operating surplus to GDP can be observed in Greece (57,2%). There is a steady rise in this category in Greece. Very high levels can be seen also in Ireland, where the ratio of gross operating surplus to GDP fluctuates between 47-49% in the long term. The value of year 2013 reaches 49,1%.

Data for the last ten years, which include also the beginning and impacts of the so-called Great Recession, have not shown many fluctuations in the gross operating surplus. In the ten years’ time we can observe more significant changes in Bulgaria (decline of about 4 p.p.) and
in Finland (almost 5 p.p.), smaller decline in the Czech Republic, Estonia and Italy, rise in Greece, Spain and Cyprus (e.g. by countries hit by the debt crisis), and also rise in Romania and Slovakia.

However, average ratios for the whole of EU, or Euro area remain very stable.

To summarize the data of gross operating surplus to GDP in ten years’ time, which included both the boom period as well as the Great Recession and following also debt crises in some countries, we will come to following conclusions:

- So-called transforming economies, e.g. countries of middle and eastern Europe show above average ratios.
- Above average ratios can be also seen in countries of the European South (Spain, Italy, Greece), but also Ireland. These are the countries that were hit by the debt crises, or the crisis was only closely fended off (Italy). In a number of debt crises stricken countries the ratio of gross operating surplus has increased.
- Average and below average ratios are to be observed by the most developed countries in the EU. These are Germany, France, Netherlands, UK, Finland. The absolutely lowest value has Sweden (29%), which is almost half of the Greek value.

**Fig. 4: Countries comparison according to gross operating surplus**

Source: Eurostat
Let us now observe the category compensation of employees to GDP. Compensation of employees is as a ratio to GDP higher than the gross operating surplus for EU as a whole. However, there are significant differences among member states.

**Tab. 3: Compensation of employees to GDP in %, selected countries ***

<table>
<thead>
<tr>
<th>Germany</th>
<th>50,6</th>
<th>Czech Republic</th>
<th>41,1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland</td>
<td>49,8</td>
<td>Slovakia</td>
<td>37,1</td>
</tr>
<tr>
<td>UK</td>
<td>50,3</td>
<td>Poland</td>
<td>37,4</td>
</tr>
<tr>
<td>France</td>
<td>52,3</td>
<td>Lithuania</td>
<td>39,3</td>
</tr>
<tr>
<td>EU28 average</td>
<td>47,7</td>
<td>Romania</td>
<td>31,7</td>
</tr>
</tbody>
</table>

Source: Eurostat

- data for 2014 are available, however for comparison data for 2013 are used

We can mark Greece as the country showing the highest ratios of gross operating surplus to GDP. Compensation of employees makes only 32,9% to GDP. However, it is possible to find even lower ratio, by Romania (31,7%). Also Ireland shows a low ratio – 38,1%.

**Fig. 5: Compensation of employees to GDP in %, 2013**

Source: Eurostat

In comparison with the EU countries, the Czech Republic belongs to those states, where the gross operating surplus exceeds the compensation of employees. As for trends, the ratio of
gross operating surplus to GDP declines slowly, whereas the compensation of employees has been developing rather unevenly and has been de facto stagnating.

**Conclusion**

Summarizing the main conclusions, we can observe the following:

- The development of profits and labour incomes was in given period rather dependent on the overall condition of the economy and its cyclical developments.

- We cannot seriously speak about a tendency of the profit rate to decrease, increase in the share of fixed capital or a rise in the share of profits on totally consumed personnel costs, which in Marxist economic theory indicate the rate of exploitation.

- It is necessary to further examine, why the figures do not confirm trends to increase the share of profits at the expense of working costs. A probable explanation for this trend hypothesis, we can assume that the wage level in the Czech Republic is relatively very low and can no longer be squeezed more radically.

- For EU as a whole, the compensation of employees makes bigger part of GDP than the gross operating surplus. However, this average distorts the situation in individual countries.

- In developed countries, which may be considered “the core”, the ratio of compensation of employees to GDP is higher than the gross operating surplus to GDP. To these countries belong Germany, France, Netherlands, UK, Finland, Sweden.

- There is also a category of countries, which have high ratio of gross operating surplus to GDP, which is however almost the same as compensation of employees to GDP. These countries are Cyprus and Spain.

- The next is a group of countries, which have ratio of compensation of employees to GDP lower than the gross operating surplus to GDP. These are not only transforming countries, as e.g. Estonia or Hungary and Slovenia have higher compensation of employees, although the difference is rather small. More significant difference can be observed by the Czech Republic, Ireland, Greece, Lithuania, Latvia, Poland and Slovakia.

**References**


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