

## UNIT LABOUR COST AS AN INDICATOR OF THE COMPETITIVENESS OF THE ECONOMY

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*Unit labour cost can be considered an indicator describing competitiveness. In order to maintain a high level of competitiveness, labour costs should not increase faster than labour productivity on a permanent basis. In the context of domestic prices, unit labour cost can also influence inflation. As Estonia's economy depends greatly on the foreign market, our domestic market prices are influenced not only by unit labour cost, but also by the price of imported goods and services.*

### The meaning of unit labour cost

Unit labour cost is calculated as the ratio of labour costs to labour productivity. On the one hand, the ratio shows the amount of labour costs needed to produce one unit of GDP. On the other hand, unit labour cost indicates the ratio of labour costs to productivity in the production of GDP. Labour costs are, in turn, calculated as the ratio of employees' compensations to the number of employees. Labour productivity is the ratio of real GDP to the number of employed persons<sup>a</sup>. In order to eliminate periodic fluctuations, seasonally and working-day adjusted unit labour cost is usually analysed.

$$\text{Nominal unit labour cost} = \frac{\frac{\text{employees' compensations}}{\text{number of employees}}}{\frac{\text{real GDP}}{\text{employed persons total}}}$$

It is generally believed that unit labour cost should not increase rapidly and that the changes in productivity have to be in line with the changes in labour costs in order to maintain competitiveness. If labour costs grow faster than labour productivity, the cost competitiveness of the economy could suffer, unless this is compensated for by simultaneously reducing other costs.

Labour costs and productivity are generally in balance if there is sufficient demand in the labour market. If labour costs grow slower than productivity, an employer can recruit employees for slightly higher wages and still make a profit. If labour costs grow faster than productivity, employers will let employees go. Therefore, changes in labour costs follow changes in productivity. However, in some countries, labour costs may grow much faster than productivity simply because these were at a very low level to begin with (Labor costs 2001).

In general, countries with a relatively low level of unit labour cost (compared to other countries) may be regarded as competitive. Unit labour cost shows that a country can improve its cost competitiveness by either decreasing labour costs or increasing productivity. Different countries choose different strategies to improve cost competitiveness. In the short run, an improvement in cost competitiveness may lead to employment losses in some economic activities. But in the long run, countries may be able to improve their position on the global market and thereby create more jobs (Ark et al 2005).

Nevertheless, unit labour cost should not be interpreted as the general indicator of an economy's competitiveness. Instead, it should be analysed from the point of view of cost competitiveness. Unit labour cost describes cost competitiveness with respect to labour costs. At the same time,

<sup>a</sup> The number of employees and employed persons is calculated according to the domestic concept used in national accounts.

capital costs (which are not taken into account in unit labour cost), for instance, are also relevant when it comes to cost competitiveness, especially in developed countries.

On the level of enterprises, an increase in unit labour cost would cut profits, if enterprises did not shift the burden of growing labour costs onto consumers or, in other words, if they did not raise the prices of goods and services. Therefore, increase in unit labour cost can be considered an important factor of accelerating inflation. This article analyses, among other things, the connection between unit labour cost and the growth of prices in Estonia.

## **Unit labour cost in Estonia in the last decade**

As the growth of labour productivity was relatively stable (5–7% per year) in 2002–2007, there was a correlation between the growth rates of unit labour cost and labour costs (Figure 1, p. 44). In 2006 the growth of wages – and hence the growth of labour costs – accelerated, which meant that unit labour cost also grew more rapidly. In the last ten years, the growth rate of employees' compensations and labour costs reached its peak in 2007 (both 25%). The fastest growth of employees' compensations occurred in construction and in financial and insurance activities.

In the observed period, there were two crucial turning points in the development of unit labour cost – in 2007 and 2010. In 2007, before the recession, unit labour cost showed the highest growth rate (17%) within the last ten years. The growth of unit labour cost was the fastest in construction and the slowest in mining and quarrying (Table 1, p. 45). After that, the growth of unit labour cost and the growth of labour costs started to decelerate, as the slowdown in the growth of labour costs was greater than the decrease in labour productivity.

In 2010, i.e. the year following the recession, labour productivity increased significantly faster than labour costs, which resulted in a decrease in unit labour cost (-6%). The most significant growth in labour productivity occurred in manufacturing, in construction and in water supply, sewerage, waste management and remediation activities. In 2010 the slowest growth in unit labour cost was recorded in water supply, sewerage, waste management and remediation activities, whereas the growth was the fastest in agriculture, forestry and fishing. In general, a slowdown in the growth of or a decrease in unit labour cost indicates that the production process in the given period was organised more efficiently in terms of labour costs, compared to the preceding period.

Despite the fast growth rate of GDP in 2011 (8.3%), the growth of productivity decelerated due to the fast increase in the number of employed persons (7%), which caused unit labour cost to grow again. The number of employed persons grew the most in water supply, sewerage, waste management and remediation activities, in information and communication, and in construction. The growth of unit labour cost was the biggest in real estate activities and the smallest in manufacturing.

## **Comparison of unit labour cost in Estonia and nearby countries**

In the analysis of the development of unit labour cost, international comparison, especially with Estonia's main trade partners, is of great importance. In the nearby Finland and Sweden unit labour cost has grown at a moderate pace in the last ten years (Figure 2, p. 46).

The growth of unit labour cost accelerated in Sweden in 2007–2009 and in Finland in 2008–2009, due to the fact that employees' compensations grew faster than GDP. In Latvia, on the other hand, the growth of unit labour cost was significantly faster than in Estonia both in the pre-crisis years (2005–2007) and in 2008. In 2007, the growth rate of unit labour cost in Latvia reached 28%, mostly because of the fast growth of labour costs<sup>a</sup> (Figure 3, p. 46). Even though Estonia

<sup>a</sup> Labour costs in Latvia are calculated on the basis of employees' compensations (wages, social contributions etc). Labour costs in Estonia are calculated as the ratio of employees' compensations to the number of employees.

also experienced a rapid growth in labour costs in that year, the growth of unit labour cost was still lower than in Latvia, as labour costs grew less in Estonia while productivity increased faster.

In general, the development of unit labour cost in Latvia and Estonia has been quite similar, while the growth of unit labour cost in Finland and Sweden has been significantly more moderate and similar in both of those countries.

### **The connection between unit labour cost and prices on the domestic and foreign market**

As mentioned above, the growth of unit labour cost can be considered an important indicator of accelerating inflation. Indeed, at least until 2009, a relatively strong correlation existed between unit labour cost and consumer and producer prices (Figure 4, p. 47). Unit labour cost has had an especially strong connection with producer prices, as on the level of enterprises any changes in labour costs and productivity are first reflected in producer prices.

Apart from unit labour cost, changes in domestic consumer and producer prices are also influenced by changes in the prices of goods and services imported into Estonia. For example, in 2010 consumer and producer prices increased despite the decrease in unit labour cost. The growth of consumer and producer prices was then driven by the faster growth of the import price index. The growth of the import price index was most of all influenced by the increased prices of fuels on the global market, which influenced domestic prices. In 2010, the consumer price index was mainly influenced by the price increase of motor fuel and electricity, heat energy and fuels.

Approximately 60% of imported goods and services are used for intermediate consumption in the production process. The remaining goods and services are mainly used for final consumption and investments. In the last ten years, import of goods and services has accounted for 73 to 88 percent of Estonia's gross domestic product, whereas import of goods has held a share of 58–71% (except in 2009, when the respective values were 59% and 46%). Thus, in addition to unit labour cost, the prices of goods and services on the Estonian domestic market are significantly influenced by the prices of imported goods and services. **It can be concluded that the cost competitiveness of Estonia in relation to foreign countries depends on both domestic and import prices.**