

# THE PATH TO AND LESSONS FROM THE ECONOMIC CRISIS IN ESTONIA: EMPLOYEE COMPENSATION DEVELOPMENT<sup>1</sup>

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## Abstract

The aim of this article is to describe Estonia's economic development strategy in the Baltic Sea region primarily from the perspective of labour costs as a factor in international competitiveness. Estonia's position in the international division of economic activities will be explored based on expert assessments in the context of a study of theoretical literature about labour compensation as a factor in international competitiveness. The differences between the impact of the economic boom and crisis periods on the level and dynamics of employee compensation (labour related expenditures), and gross and net salary in Estonia at the national level will be empirically analysed. An empirical analysis will also be performed to describe the changes in the structure of economic activities (NACE-classification) in Estonia.

**Keywords:** development strategy, international division of economic activities, Baltic Sea region, economic crisis, compensation of employees, gross and net salary, economic activities structure

**JEL Classification:** E24, J31, O18

## 1. Introduction

For a long time, the cornerstones of Estonian economic policy were considered to be: the currency board system, the absence of barriers (import taxes/tariffs and export subsidies) in foreign trade, advantageous entrepreneurial taxation for foreign capital, the constantly low level of salaries partly due to the low level of the nationally fixed minimum wage and the overall low tax burden. At first, these factors seemed to enhance and ensure Estonia's economic development. Estonia was considered the most successful amongst the "Baltic tigers". In addition, during the period from 2000 to 2007 Estonia belonged to the group of countries in the EU with the highest economic growth rates (Levasseur 2011: 3; Brixiova et al. 2010: 57).

In 2008, the economic crisis hit most EU countries, but the impact of the crisis was the strongest and most devastating in Estonia and in the other Baltic countries. Researchers from the Kiel Institute for the World Economy have raised an intriguing question: have the "tigers" become the "carpets in front of the bed (Bettvorlage)"

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(Schrader, Laaser 2010). The crisis clearly demonstrated that the comparison (with Estonia being the Baltic tiger) was merely a fictional exaggeration. A more realistic comparison would have seen Estonia as a diligent “mouse catcher”. To be precise, Estonia is an assiduous apprentice who takes all the advice of the master as pure gold ignoring the fact that the master himself does not always follow his own words.

The Estonian government has consistently tried to design a good environment for attracting foreign investment in the hope of securing jobs and income for its people. Simultaneously, financial capital gained most of the attention and the status of a god for which the people and the rest of the economy had to work and serve. On the other hand, financial capital (during the new formation of market sharing by the banks) created the spectacular illusion for society (individuals and businesses) that it is possible to boost the economy and achieve the desired welfare thanks to an unstoppable inflow of foreign credit and without saving (for example, in order to invest). The majority of the people and businesses were (and still are) debt trapped. The final effects are yet to be seen. The economic boom induced by foreign credit followed by the economic downturn and deep recession provided the arguments for reassessing the fundamentals and the sustainability of Estonian economic policy; and hence, the development perspective.

Households and enterprises are closely related through income. Changes in the structure and size of income send signals about general developments (positive and negative) in the economy. Beyond doubt, the welfare of households is directly influenced by the size of their income. Another important and sensitive area that is influenced by income size (and the development of it) is social security expenditure that is usually financed through income taxation. Social tax (computed on the basis of gross wage) is divided between the current pensions (16% of the gross wage) and health insurance (13%) for health related expenditures. In addition, the Estonian Unemployment Insurance Fund receives 1.4% of total gross wages. Income tax has an important role to play in the budgets of local governments because local governments are the public institutions that provide the inhabitants with public services and promote regional development. In 2009, the amount of income tax allotted to local government budgets was reduced by a central government decision from 11.93% to 11.4% of total gross wages. The average amount of income tax revenue in the budget of local governments exceeded 50% in 2008 and dropped to just under 50% in 2009 (Estonian ... 2011). In light of this, the author will empirically analyse, on the basis of gross wage developments, the path to the economic crisis and the consequences of the crisis in Estonia for general economic policy.

The aim of this article is to assess the fundamentals of Estonian economic policy against the background of the economic crisis and the development of gross wages before and during the crisis generally and also between economic activities. The following research questions have been considered:

- To analyze the alleged economic and political reasons behind Estonia’s economic success story

- To analyze Estonian economic policy in light of the economic crisis and to assess its actual prospects
- To analyze the general developments in gross wage and the differences between economic activities before and during the crisis

The discussion is based on various economic experts' assessments of economic development in the Baltics. The empirical analysis uses data from Eurostat and Statistics Estonia online databases. The data allows the author to analyse the development of the gross wage generally and also between various economic activities.

### **1. Expectations of catching up with advanced economies**

Like some other countries, Estonia must develop an economic growth and welfare strategy to overcome the economic gap with the economically more advanced EU countries. In a situation where people can freely move between countries, the difference in economic development may induce an emigration wave of young and more sophisticated (educated) people. They look for prosperous work opportunities, better living conditions and a safer social environment outside their home country where the general chances of finding “a better life” are more likely. The emigration of young people may in turn further hinder the economic development of the home country and even perpetuate and deepen its economic backwardness.

After Estonia joined the EU in 2004, it seemed that Estonia had found and implemented its economic success strategy. During the period from 1995 to 2004 the average (yearly) real GDP growth rate was 6.1%, and for 2000–2004, 7.2%. The liberal political parties assumed that long-term, consistent, diligent and prudent monetary, budgetary and economic policy were behind this development (Paet 2005). From the outside this assumption seemed to be well-grounded:

- Compared to when the Estonian kroon was introduced, the inflation rate dropped from 90% in 1993 to 1.4% in 2003, presumably due to the implementation of the currency board system or fixed exchange rate system (Laurson, Grawe 2004). Beyond doubt, the fixed exchange rate system reduces inflationary pressure due to decreasing export income if the currencies of export partners drop in value. The Estonian export sector has experienced these effects in trade with Russia and Sweden where the ruble and the crown were devalued. Regardless of the detrimental effects to Estonian exports, the governmental circuits found the currency board system to be justified and consider it one of the key elements of the Estonian economic success strategy. Joining the EU in 2004 would maintain and guarantee price stability and also provide a safe and smooth path to the euro zone.
- The rapid privatization of former state owned property brought a relatively large amount of foreign investments to Estonia. This was considered the direct consequence of liberal economic policy, and therefore, the privatization process of large public enterprises was called to continue (Laurson, Grawe 2004). The inflow of foreign direct investments was remarkable: from 1995 to 2003 the

amount of foreign direct investment grew more than 9.46 times (as a comparison, it was 3.43 times in the Baltic region as a whole) (Liuhto 2005). Foreign direct investment was therefore considered a prerequisite for the internationalization of Estonia and future foreign direct investments flows out of Estonia (Purju 2004). Accession to the EU was favourable for attracting foreign direct investments. Estonia became easily accessible and possessed a Western entrepreneurial regulatory system. Therefore, Estonia often became the platform for the first internationalization steps for many small and medium sized Finnish enterprises and for their further expansion to other Baltic countries (Kosonen, Heliste 2005; Heiskanen 2006). However, Estonian dependence on foreign direct investment was seen as a threat to Finnish enterprises already active in Estonia (Alho et al. 2004). On the other hand, a general euphoria prevailed among politicians (Parts 2007; Kauppi 2007; Ansip 2008).

- Although Estonia is generally characterized by a low tax burden, the government managed not only to balance the budget but also to achieve a budget surplus and therefore collect reserves. It seemed that there was a way to afford and guarantee education, healthcare and safety services to people with an acceptably low level of expenditure not only in absolute terms but also relatively as a percentage of GDP<sup>3</sup> compared to advanced EU member states. In reality this “low cost development” was possible only because of the amortization of human and infrastructure resources that had already been created in the past.
- The wage level in Estonia was relatively low compared to that of its Central European competitors. Therefore, remarkable growth was achieved in labour productivity, partly due to the flow of the labour force from low productivity economic sectors to high productivity ones (Laurson, Grawe 2004). A prognosis aimed at the entrepreneurs in advanced old EU member states forecast that despite this growth tendency, over 25 years the wage level in the new member states would only make up 75% of the old member states’ wage level, due to the very low initial level (Alho et al. 2004). The cost level in Sweden is seven times higher than in Estonia and ten times higher than in Latvia. Furthermore, workers in Estonia are not sufficiently organized. About 80% of the workers in the Nordic countries belong to unions, whereas only about 10% do in Estonia. Collective agreements in the Nordic countries cover more than 80–90% of workers and only 25% in Estonia (Sippola 2006). On the other hand, there were also sceptics who did not believe in the sustainability of the low wage based economic development strategy because economic growth inevitably brings pressure to increase wages (Ketels 2006).
- The level of social expenditure in Estonia as a ratio to GDP was 50% lower than the average in the EU – according to Eurostat, the ratio in Estonia was about 13% of GDP and approximately 26% in the EU. Assessed in purchasing power parity prices, the level of social expenditure per capita in Estonia constituted only 25–30% of the EU average level. Remarkably, the extremely

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<sup>3</sup> That means more efficiently in economic terms.

low level of social expenditure and social security did not cause any uprisings or public discontent. This seems to be in accordance with the individual responsibility approach compared to the welfare model (a policy approach based on high solidarity, implemented in Nordic and other EU countries). The economic reasoning supporting the development of the Baltic economic region was to move labour intensive production activities from countries with high wage and social cost levels to regions and peripheries where, in the medium term, the supply of all social protection services is not presumed (Akerholm 2005). The Nordic countries were conveniently looking for cheap labour, and therefore, their recommendations for the Baltic states were to reduce labour related taxes, which are the main funding source for social expenditure (Laurson, Grawe 2004).

Therefore, on the one hand, joining the EU was considered an acknowledgement of Estonia's successful economic policies (Lehtomäki 2005), and on the other hand, a guarantee of the further success of this policy. Although by 2004, the total current account deficit and the inflow of foreign credit were seen as "challenges" to sustainable economic development (Laurson, Grawe 2004), they were not treated as real threats. Therefore, no countermeasures were taken. The main weakness of and real threat to the Estonian entrepreneurial environment was considered to be the overall shoddy quality of public administration (Alho et al. 2004).

## **2. Fiction versus reality in the economic development potential of Estonia**

To assess the economic development perspectives, it is important to clarify which of Estonia's strategies guarantees it continuous economic development success within the EU framework. In the 1990s, endogenous growth theories were formulated (Romer 1990; Romer, Rivera-Batiz 1991) and gained popularity. These theories emphasize the importance of research and development (R&D) for achieving innovation-based economic growth. This approach also influenced Estonia's economic perspectives. In the 1997 development strategy (named "Estonia 2010") (Terk 2007), the main development determinant for Estonia was seen in the field of information and communication technology (ICT), in addition to bridging Russia and Western Europe. The aim was to gain a leading position in developing and applying new technical solutions for ICT. Of course, there was no real basis for such expectations and even less for setting such an ambitious strategic development aim, especially in the field of ICT. The objective lacked resources and capability, in addition to political will. The public sector was not ready to find the resources and to organize (and guide) the work for the declared objective.

Gaining a leading position in the ICT field did not correspond to Estonia's real position in the division of labour between EU member states. Finland has foreseen for Estonia and other Baltic countries a position of intermediate producer for international corporations that would act as final producers. When forming education, applied research, standards and other policies, the Estonian government has to consider its position within the EU's division of labour (Hyvärinen 2005). The advice given was to enhance the educational, scientific and communications

infrastructure in addition to the preparation (training) of a highly skilled labour force in order to satisfy the needs of international corporations for cheap outsourcing. Estonian enterprises should have constantly made an effort to find contracts and orders in advanced economies for outsourcing intermediate production. Estonia hoped to generate and benefit from spillover effects due to technological knowledge and experience transfer from more developed partner firms.

On the one hand this approach may be practical, but on the other hand, this is a very long route to building up an innovation and knowledge based economy. According to this approach, Estonia's position as the intermediate producer is not a make-do caused by Estonian backwardness in order to guarantee the mere existence of the Estonian economy, but a development strategy for the coming years. However, Estonian entrepreneurs should overcome this role as possibly quickly. This approach implies that Estonia's public sector should not support Estonian entrepreneurs in becoming final producers but instead help them step-by-step in becoming more developed intermediate producers. Although international final producers have high standards and requirements towards intermediate producers and learning effects occur between the final and the intermediate producer, the likely technological spillover from the final producer to the intermediate producer is not remarkable. An economic strategy built on intermediate production is not the best strategy for entering the innovation based "new economy" and catching up with advanced economies. Nevertheless earning the status and position of "developed intermediate producers" seems to be a logical step for the Baltic countries, assessed on the base of current R&D expenditures. In 2003, Estonia had a R&D expenditure to GDP ratio of 0.77%, whereas Sweden's was 4.27%, Finland 3.51% and Denmark 2.60% (Savo, Elo 2005). By 2009, Estonia's ratio had nearly doubled to 1.42% of GDP, which was still very low compared to the Nordic countries. According to Eurostat the ratio of R&D expenditure to GDP in 2009 was 3.96% in Finland, 3.6% in Sweden and 3.02% in Denmark.

A more sophisticated approach considered Estonia's chances of catching up with the more advanced economies by attracting foreign direct investment. At first the foreign direct investment based strategy seemed to work: the direct investment position grew from €9.56 billion in 2005 to €11.87 billion in 2008, the growth was more than €2.31 billion (24.2%) In 2009, the direct investment position decreased to €11.28 billion (Bank of Estonia online database). Nevertheless, the impact of EU accession may be assessed as positive.

On the other hand, a negative tendency has also developed: the amount of foreign direct investments leaving Estonia (outflow position) has also grown from €1.64 billion in 2005 to €4.76 billion in 2008; the increase amounts to €3.12 billion (192%). Although the outflow position decreased to €4.6 billion in 2009, the growth rate of Estonian direct investment abroad has been about 10 times faster than the growth rate of foreign direct investment in Estonia. The ratio of the direct investment position abroad to the direct investment position in Estonia has grown from 17.2% in 2005 to 40.8% in 2009.

To sum up, Estonia seems to be less attractive to foreign capital since EU accession than before – capital outflow has exceeded capital inflow. The reasons behind this are:

- The tax system in Estonia is attractive to investors who are trying to employ cheap labour and serve the Estonian (local) market. The current tax system is not beneficial to capital that produces innovative export goods. Only 15% of foreign direct investment is directed to the manufacturing industry (Bank of Estonia data 2010); a remarkable part is invested in the local food industry.
- A large number of businesses that run on foreign capital use a low-skilled and low-paid labour force for labour intensive intermediate operations (the quality control and assembly of details). This kind of work raises (of course artificially) the volume of export-import transactions, but consequently local value added is deplorably small.
- Foreign investors oriented towards satisfying the needs of the local market have already made the necessary investments in some business fields (e.g. financial, communication and trade). But there are only limited opportunities for using earned profits in the country. Investors who made profits in Estonia are looking to invest these profits in countries with developing markets outside Estonia.
- In Estonia distributed profit is taxed (e.g. when dividends are paid). Businesses that run on foreign capital have found various ways of distributing profit tax-free. Examples are: investment in subsidiaries acting abroad until 2009, loans to parent companies or subsidiaries until 2009 and after. Therefore, the outflow of foreign direct investment exceeds the inflow from 2005 to 2008.

To conclude, the inflow and outflow of foreign direct investment and its dynamics (in addition to structure and volume) show that an economic development strategy founded primarily on foreign direct investment does not make catching up with the more advanced economies possible. Foreign capital targeted at servicing the local market and employing a low-skilled labour force preserves Estonia's economic backwardness. There are no relevant arguments for establishing innovative and export-oriented production or the research and development phases involved to Estonia. In the structure of current foreign capital there is little hope for technological spillover effects to the Estonian export sector.

From a broader and global perspective, when accepted by the inhabitants, maintaining a low tax burden is essential for economic success. But focusing on this element (as a key element in the strategy) may develop into a problem. The tax burden is an important issue influencing the international competitiveness of a country, especially in an environment where the free movement of goods, services, capital and people is applied. The Nordic countries declared the necessity to harmonize corporate taxes as the most important factor for successful economic development in the Baltic region (Svedberg 2006). Tax harmonization in Europe has evolved into a political issue, and the debate is currently being led by Germany. Although there are no reasonable grounds (neither social nor political) for raising the general tax burden in Estonia, the pressure coming from the advanced economies for corporate tax harmonization is considerable.

Low wage levels are undoubtedly attractive to businesses that exploit a low-skilled and low-paid labour force, but unions abroad tolerate outsourcing of intermediate production only so long as it does not become a threat and compete with the high-skilled and high-paid labour force at home. Therefore, in developing the Baltic economy, another precondition is often mentioned: the prevention of any kind of “friction” in the labour market (Svedberg 2005). Assuming low wages and price stability in the long run is not realistic in the process of catching up with the more advanced economies. Niels Mygind (2006) reasonably explained that in a country with a currency board system (fixed exchange rate), growth in productivity induces the appreciation of its currency, which in turn manifests itself in a general rise in wages and prices. He forecasted that by 2025 in an environment of fast economic growth, Estonia would have reached the general average level of GDP per capita and prices in the EU. Only a slowdown of economic growth would have obstructed the general rise of prices and wages. The economic crisis in 2009 and the recovery in 2010 confirmed the validity of the previous statement.

Paavo Okko (2007) has explained that the convergence between the new EU countries with low wages and the old EU countries is a long term and arduous process. At first the new EU countries are able to achieve quicker growth rates in wages ( $\beta$ -convergence), but the overall absolute differences in nominal wages remain ( $\sigma$ -convergence will not be achieved). If Estonia could have maintained an average 6.6% yearly growth in real GDP from 2008 to 2015 against Finland’s 3.8% (average growth rates for these countries for 2000–2005), then the real GDP per capita in Estonia would have doubled while Finland’s would have grown 1.5 times. At the same time, the difference in the level of nominal wages would rise by 70%. When the differences in wages between the Baltic states and highly developed countries is 5–10 times, then a 10% rise in wages does not cause irreversible damage to the international competitiveness of the Baltic states. A relatively low level of average wages (in 2006 the average Estonian wage was only 25% of Germany’s) is still (even after the economic crisis) an important factor of international competitiveness, although a high level of unemployment will characterize the Estonian economy for a while (Wiegert 2009).

In the case of low wages, another negative tendency often develops. Low wages negatively influence the labour force’s qualifications, especially in technical fields, which are important for innovation-based development. Young people are not motivated to learn sophisticated technical subjects when finding a job in these fields is difficult and the wages are low in Estonia. Therefore, working abroad becomes an attractive opportunity for highly qualified young people.

In addition to the growing differences in average wages between countries (despite the higher growth rates in low wage countries), there are also growing differences between regions within the countries, reflected in the growth of cities and the decline of rural areas, together with the loss of population there (Damsgaard 2008). As a result, land prices in the city rise while general living conditions deteriorate, if the city cannot offer necessary public infrastructure and social services. This becomes a serious threat to the development of quick growing cities or parishes.

Undoubtedly the low level of social expenditure can also be seen as a factor raising overall economic competitiveness. This is possible when the interests of foreign investors who do not have to consider the long-term economic and social needs of the destination country dominate. Estonia has joined the European Social Charter, which sets relatively high standards for the social protection of people. As a result of the lack of public pressure, the obligations accepted when joining the Charter have become a secondary consideration. They have been left to the conscience and morals of the ruling elite. At the moment, perspectives on social policies built on low costs are not that clear: especially France, Germany and Austria have raised the question and problem of “social dumping”, which is a complex and serious hindrance to the economic integration process of the EU (Terk 2006).

The government strategy approach to “not interfere” in market processes seems reasonable as long as the functioning of the economy is based on low wages and intermediate production. In a situation of growing pressure to increase wage levels and social expenditure, this approach is no longer adequate. The focus should be switched to achieving productivity growth, which is only possible through innovation. For a transition to an innovation-based economic development strategy, consistent, systematic and long-term measures to build up various components of innovation systems become necessary. They refer to education, R&D, the protection of intellectual property and others. Moreover, strengthening the relationships between the components of the nation innovation system becomes important. Additionally, firms must be included in the innovation system. This comprises the development of clusters, the establishment of cooperation networks and the generation of development and innovation projects (Ketels 2006). The government’s fiscal and tax policy have an important role to play in promoting innovation. Today the trivial liberal economic policy adopted by the Estonian government does not support innovation.

In conclusion, the current Estonian economic policy is not effective in strengthening international competition in the Baltic Sea region, or for catching up with the old (more advanced) EU countries. The economic growth in last decades was primarily based on the increasing volume of foreign capital serving Estonia’s internal market and on the production and supply of unsophisticated low-price intermediate production. The economic boom was derived from the massive inflow of foreign credit, which fed an expansion in local (internal) demand. It is clearly stated in the Baltic region economic development report that the crisis ended the remarkable economic growth because of its unsustainability (in the long run economic development cannot be based on foreign credit inflows). Therefore, economic differences started to grow once again during the economic crisis. The differences in capability for sustained innovation based development and high productivity will increase between highly developed and emerging countries (State ... 2009). Brixiova et al. (2010) analyzed the boom and the recession in Estonia and concluded that countries functioning under currency board systems and with a liberal foreign economic policy should learn from history: from a macroeconomic perspective, flexibility is a necessity and the free movement of capital should be treated with caution.

### **3. The importance of labour compensation for international competitiveness**

International competitiveness is a sophisticated phenomenon, especially at the country level. Nowadays, Boltho's (1996: 1-2) assessment of 15 years ago is still relevant: there are no consistent definitions of competitiveness and the term seems to mean different things to different people. But at the same time most researchers evidently do not share Paul Krugman's (1994: 44) pessimistic view that the application of the term "competitiveness" at the country level is meaningless, wrong and dangerous. Attempts to understand the nature of "competitiveness" and quantitatively measure it have continued in various countries. Zanakis and Becerra-Fernandez (2005: 186) distinguish between cost-competitiveness, price-competitiveness and non-price competitiveness. A survey presented by Eckhard Siggel (2007) points out that different researchers accentuate different facets of competitiveness; for example, size and increase of market share, export performance, price ratios, cost competitiveness and so on. One of the most widespread approaches pointed out in the literature is the concept of unit labour costs (ULC) as the product of wage rate, labour productivity and exchange rate. (Siggel 2007: 8).

ULC as a part of total unit costs in production largely determine international price competitiveness, especially for less developed countries exporting labour intensive products. This article emphasises a contradictory aspect of ULC: while the producer wants to decrease the ULC as an influential factor of price competition, the employee wants to achieve a rise in real income as the basis of living standards. That means a decrease in ULC has to be achieved through raising labour productivity and not through the reduction of real income. The rise in a country's competitiveness is often described through improved trade balance together with a rise in living standards (real income) (Global ... 1985; Hatsopoulos et al. 1988)

Fagerberg (1988: 355) takes the need to raise the real income of employees and adds the need to guarantee general employment: a country's international competitiveness refers to the ability to implement central economic policy goals, especially achieving growth in real income and general employment levels, without causing problems to the balance of payments. "High wage countries are often concerned about the relatively high level of their labour costs in the production of particular goods and services compared to low wage countries, in particular to the extent that such lower labour costs are the result of lower taxation, smaller social security payments, lower expenses on high-skilled labour for R&D and innovation, and in some cases, lower labour standards" (van Ark et al. 2005: 3). Labour standards are seen as being one of the most important factors for a country's international competitiveness (Flanagan 2003), but these costs are difficult to point out and compare, leading to the frequent discussion of whether the WTO could introduce common labour standards in order to avoid distortions in the measurement of international competitiveness.

ULC integrates the income of employees with the expenditure of producers. Buckley et al. (1988: 186) emphasise the paradox that the countries with the fastest growth in exports and in GDP have at the same time experienced much quicker growth in unit

labour costs than other countries. That means that in developed countries with advanced economies, price competitiveness depends primarily on introducing qualitatively new (innovative) products and not on ULC. These innovative products are the logical and expected side effects of investments in product R&D and technological change. Therefore, the indicators of innovativeness of a country have mostly been assessed through factors of international competitiveness (Buckley et al. 1988: 189).

In the Ricardian two-country two-product international trade model only the labour costs are considered a factor that determines the comparative advantage of a country. Dornbusch et al. (1977) developed this model of the continuum of goods, which means to n-product model but the labour costs remained the factor determining the international/relative competitiveness. The production of a product in one country is internationally competitive if the ratio of the domestic wage rate to the competitors' wage rate is lower in comparison to the ratio of domestic labour productivity to the competitors'. In reality, the production of goods incorporates many more factors besides ULC; therefore, other models have been developed, for example, the model of domestic resources costs and total unit costs (see Siggel 2007), but in this case the analysis will be limited to labour costs.

Michael E. Porter (1990: 73) emphasizes that a country's competitiveness determines its prosperity, created through its industry's capacity to innovate and upgrade. He is critical of the prevailing thinking that labour costs, interest rates, exchange rates and economies of scale are the most powerful determinants of competitiveness (Porter 1990: 74). Porter developed what is referred to as the "diamond" of national competitive advantage as a comprehensive new approach for the comparative analysis of competitiveness, comprising four parts: factor conditions, demand conditions, related and supporting industries, and firm strategy, structure and rivalry (Porter 1990: 77). Under factor conditions the first named is skilled labour. So the "diamond" of competitive advantage is directly related to classical approaches, insisting on the importance of labour costs for ensuring international competitiveness. Especially less developed countries have to compensate for disadvantages in other facets of the economic competitiveness "diamond" through lower labour costs. Low unit labour costs (ULC) are frequently seen as the most important current and future comparative advantage of Central and Eastern European countries (Havlik 1998: 13).

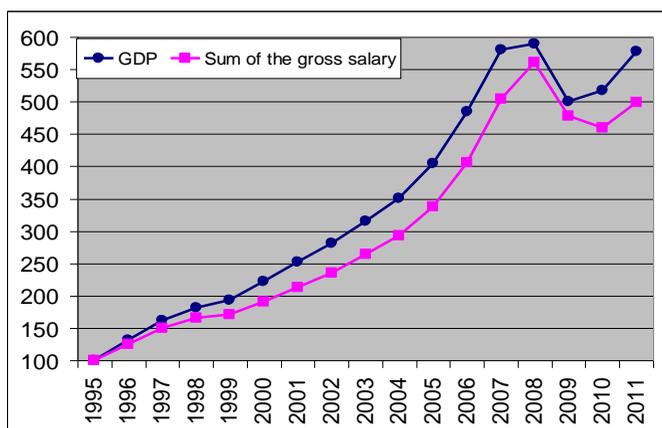
Porter's "competitiveness diamond" (1990) model emphasizes that at the firm level, a firm's strategy for ensuring competitiveness through the systematic and long-term planning of investments is receiving more and more importance. Buckley et al. (1988: 194) have pointed out the same aspect at country level: "The quality, effectiveness and management of government policies are analogous at the macro-level to the strategy of the firm at the micro-level. Efficacious government policies can help to realise the potential competitive ability of a nation..." Governments must invest systematically and effectively in the development of the country's innovation systems and innovation activities.

A country can apply different strategies to improve its international competitiveness (van Ark et al. 2005: 3). We have to distinguish short-run and long-run policies. In the short run a country can achieve success in the export sector by decreasing the labour costs per employee (the living standard of the population) but in an open economy this strategy is not effective. In the long run it is necessary to achieve growth in productivity (as the basis for the improvement of living standards), but this strategy can be developed only through a rise in investments.

At the country level, welfare is characterised by GDP. A country's GDP per person is the major determinant of the living standards in this country (Smith et al. 1982: 13). We can measure labour productivity at the country level by GDP per employee and ULC; therefore, through the ratio of total gross salary to GDP.

#### 4. The general and sector development tendencies of gross wage in Estonia

Development tendencies of the total sum of gross wages and nominal GDP show (chart 1) that from 1995 to 2003 the growth rate of nominal GDP exceeded the growth rate of the sum of gross wages.

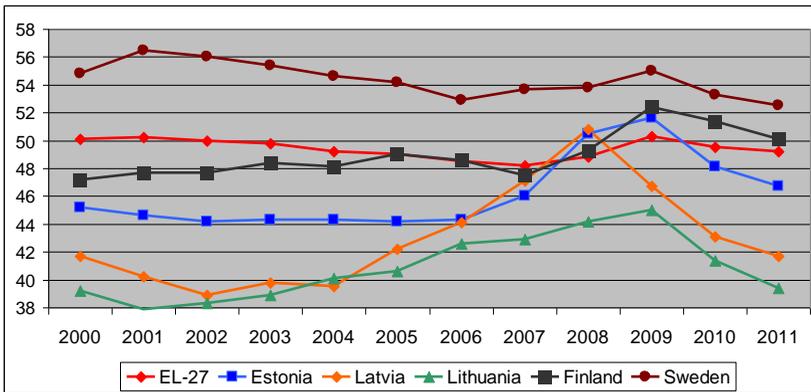


**Chart 1.** The dynamics of the Estonian nominal GDP and the total sum of gross salaries from 1995 to 2011 (value of 1995 = 100), in % (Statistics Estonia online database 2012, compiled and drafted by author).

Thereafter, for a couple of years the growth rates of both were equivalent. After Estonia's accession to the EU, the huge inflow of credit money sharply expanded demand for labour. As a result, the average level of gross wages climbed, while on the other hand, the minimum level of employee qualifications, skills and knowledge diminished (low-qualified people found employment). In 2008, real GDP decreased and increased slightly nominally (only due to inflation). At the same time the growth in the sum of gross wages continued and outperformed nominal GDP's growth rate. As a general result by 2008 compared to 1995, nominal GDP had grown 5.89 times

and the sum of gross salaries 5.6 times. That means the ratio of the gross wage sum to GDP in 2008 was nearly the same as in 1995. The economic crisis arrived unexpectedly and the labour policy of firms was not properly adapted. The continuing recession in 2009 has not changed the ratio of the sum of gross wages to nominal GDP: by 2009 compared to 1995, the nominal GDP had grown 5.0 times and the sum of gross wages 4.78 times. In 2010 the sum of gross salaries continued to fall, meanwhile the GDP increased. In 2011, after rapid increase of GDP and modest increase of gross salaries, the proportion between these indicators is about the same as in 2007.

Chart 2 shows the total ULC of nominal GDP in Estonia, the EU (average), Latvia, Lithuania, Finland and Sweden.



**Chart 2.** The total ULC of the nominal GDP in Estonia compared to the EU average and neighbouring countries for 2000–2011, in % (Eurostat online database 2012, compiled and drafted by author).

The period examined can be divided into four sub-periods:

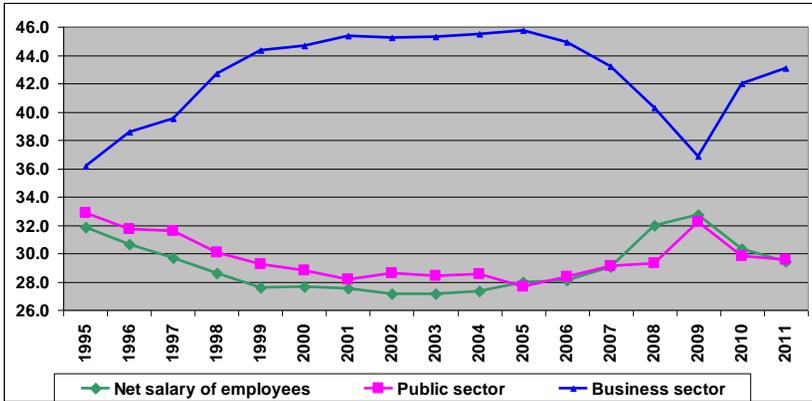
- Until 2006, countries show various tendencies. In the EU on average and in Sweden the total ULC decreased; in Finland and Estonia the total ULC was stable; in Latvia and Lithuania the total ULC rose.
- 2007–2009, the economic boom and the crisis generally raised the total ULC of nominal GDP: in Estonia and in Latvia very sharply (in 2008 the total ULC even exceeded the level of this indicator in Finland), moderately in Finland and Sweden, and relatively modestly in Lithuania. After the crisis the total ULC has decreased. It is generally to see that the previous proportions across countries will be restored (although in Finland the total ULC has exceeded the EU average). Unusually, only Latvia managed to achieve a turnaround in the total ULC trend earlier than other countries, due to general wage reductions in 2009. Generally, in the EU (based on the average) and other countries the total ULC has shown a slight tendency to decrease during the previous years.

The changes in unit labour cost levels during the economic boom and crisis have influenced Estonia's international competitiveness more than neighbouring countries. In 2006, the ratio of employee compensation costs to GDP in Estonia was 2% down on Finland's and the EU average and 4% down on Sweden. Latvia and Lithuania came closer to the level of the total ULC in Estonia. In 2009, the examined ratio in Estonia was almost equal to the ratio in Finland and 2% higher than the EU average. Although Estonia was 4% lower than Sweden, the ratio in Estonia was 4% higher than in Latvia and 7% higher than in Lithuania. During the last years, Estonia has restored its competitiveness position on the basis of total ULC compared to Finland and Sweden, but differences with Latvia and Lithuania have increased slightly. Obviously, Latvia and Lithuania are trying to maintain their reputation for being countries with low labour costs, meaning Estonia will have difficulties with its Baltic neighbours in the fierce competition for lower labour costs. Of course, nominal GDP and nominal labour expenditure are significantly lower than the EU average and especially in Finland and Sweden. According to Eurostat, the added value in market prices per person in 2011 was €8,400 in Estonia, €30,400 in Sweden and €28,000 in Finland. Therefore, compared to the Nordic countries, Estonia remains a source of cheap labour force and intermediate production. Compared to Latvia and Lithuania, Estonia has to work harder; this means being more productive and supplying higher quality service in order to compensate for its relatively higher wage levels compared to these countries.

In addition to total ULC, the international competitiveness of firms is also strongly influenced by other taxes and the overall tax burden. Chart 3 shows the development of GDP in terms of income approach and its distribution between the business sector, households and the public sector. The net salary of the employees is their disposable income. Businesses earn gross operating surplus and mixed income, the amortization of basic production investments and subsidies from government. The public sector earns social taxes, production and import taxes (from which subsidies have to be subtracted).

Chart 3 demonstrates that the business sector has expanded its share of GDP from 36% in 1995 to more than 45% in 2001. After this rise came a period of stability until 2005. The economic boom and crisis reduced the share of the business sector nearly back to the level prevailing in 1995. During last two years the business sector has achieved over 6% increase in the share of GDP to 43.1%. Sandrine Levasseur (2001) has summarised the policy methods in Estonia that have helped to restore the position of business sector's share of GDP. The share of households reached a minimum level of 27% in 2002/03. The reduction of the income tax rate followed by general economic environment changes in the labour market raised this share in the following period. It exceeded the 1995 level again in 2008–2009. In 2010–2011 the share of households has decreased – from 32.2% of GDP in 2009 to 29.5% of GDP in 2011. The public sector's share of GDP decreased from 33% in 1995 to 28% in 2005 – this later rose to 32.7% in 2009 and fell to 29.4% in 2011. Real employee income levels have more than doubled in the same time. To conclude, the public sector's share of GDP in 2009 was similar to that in 1995, when Estonia experienced real economic growth for the first time since separating from the Soviet Union and

embarking on the transition to a market economy. The advantages for the business sector have vanished during the economic boom and crisis periods, but recovered in relative terms during last years. In spite of the free movement of labour in the EU and very modest decrease in average wage level, the previous favourable entrepreneurship environment seems to be recovered in Estonia. The crisis has not remarkably changed Estonian position in the international division of economic activities. Estonia continues to be the intermediate producer with low total ULC.



**Chart 3.** Share of value added in Estonian GDP (income approach) between the business sector, households and public sector for 1995–2011, in % (Statistics Estonia online database 2012, compiled and drafted by author).

Table 1 characterises the current labour market situation, showing the development of sum of gross salaries across different economic activities (NACE-classification) compared to sum of gross salaries in 1995.

The growth rate of administrative and support service activities in 2011 (1668%) is more than three times higher than the average growth rate (499%). The growth of information and communication activities that has the second place in ranking with 853% in 2011 is 813% lower. In 2011 the growth rates of the sum of gross salaries in both previously mentioned sectors exceeded the growth level in 2008. Professional, scientific and technical activities have the third position in the growth rate ranking with 724% in 2011; however the 2008 position (787%) is still not recovered. The biggest downfall in the crisis was in construction (from 870% in 2008 to 529% in 2011) and wholesale and retail trade (from 713% in 2008 to 577% in 2011), but also in accommodation and food service activities (from 734% in 2008 to 619% in 2011). The growth in the real estate sector (613% in 2011) and in financial intermediation sector (601% in 2011) has also been remarkable. These sectors produce products that cannot be traded internationally to satisfy the needs of the local market. Also showing faster than average growth are public administration,

defence and compulsory social security sectors, while the growth rate in the education sector is less than average.

**Table 1.** Dynamics of the sum of gross salary in different areas of economic activities (NACE-classification) for 1995-2011 (sum of the year 1995 = 100), in %

	2000	2005	2008	2009	2010	2011
Economic activities total	191	337	560	478	460	499
Agriculture, forestry and fishing	129	185	278	229	240	268
Mining and quarrying	136	146	230	214	241	267
Manufacturing	181	318	469	375	383	429
Electricity, gas, steam and air conditioning supply	151	172	239	238	253	264
Water supply; sewerage, waste management and remediation activities	155	249	432	361	355	380
Construction	152	399	870	580	477	529
Wholesale and retail trade; repair of motor vehicles and motorcycles	231	414	713	602	562	577
Transportation and storage	163	253	361	308	307	334
Accommodation and food service activities	203	428	734	576	552	619
Information and communication	245	415	756	755	742	853
Financial and insurance activities	240	396	658	636	570	601
Real estate activities	236	386	603	550	505	613
Professional, scientific and technical activity	197	432	787	704	697	724
Administrative and support service activities	327	914	1649	1414	1352	1668
Public administration and defence; compulsory social security	220	352	587	537	506	535
Education	200	325	499	472	452	466
Human health and social work activities	199	350	612	581	562	602
Arts, entertainment and recreation	210	370	606	524	495	509
Other service activities	155	250	432	418	425	450

Source: Statistics Estonia online database 2012, compiled by author.

The average growth rate in primary and manufacturing sectors fell seriously behind the overall average growth rate. These trends do not indicate a successful government policy in order to create an innovation and knowledge based economy to produce high quality goods with high value added. Unfortunately, Estonia has specialised in cheap and debilitating intermediate production and the simple servicing of tourists. The low growth rate in salaries in the education sector leads to a deficit of qualified workers required for an R&D-rich and versatile production.

## Summary

Since 1995, after Estonia had experienced its first year of economic growth, a liberal and extremely open economic policy has prevailed. This liberal economic policy was thought to be the reason for the economic success achieved. In reality, the remarkable economic growth was achieved through an extensive inflow of foreign capital and not via qualitative development driven by an expansion of innovative export production. Foreign direct investments served mainly to conquer the internal market. Unfortunately, the Nordic countries see Estonia only as an intermediate producer with cheap and low-skilled labour. The vast inflow of foreign credit was the result of ruthless competition for market share among the banks. The money served the interests of real estate and property developers and not that of export producers.

EU accession did not stabilize Estonia's economic development. On the contrary, it initiated various destabilizing processes. Since 2005, the direct investment outflow position of Estonian residents moving abroad has risen quickly and has exceeded the direct investment position growth from abroad to Estonia. The economic crisis resulted in a finance account deficit and balance of payment problems. The processes that at first supported Estonia's economic development have now reversed and will lead to serious hindrances. The deepness of the crisis highlighted and proved the unsustainability of the chosen economic development strategy.

The remarkable backwardness of salaries compared to the general positive economic growth was concealed during the ten year period due to the relatively high inflation rate. As a result the share of business sector in GDP increased strongly. The massive inflow of foreign credit induced growth in labour force demand. The wage level increase at the start of the crisis re-established the 1995 proportions of GDP share between the business sector, households and public sector. Under the free movement of people in the EU, the business sector will probably not be able to re-establish the advantageous position in GDP share it experienced at the beginning of the ten-year period at the start of the new millennium. Fifteen years have changed the economic structure of Estonia. Unfortunately, this was designed to serve the interests of large multinationals and their policy of outsourcing cheap intermediate production to the Baltic states. During the same period, the level of real income in Estonia has doubled. The low wage competition from Latvia and Lithuania has risen significantly due to Estonia's fast wage level increases. It is unreasonable to believe that economic success can be achieved after the crisis and in a changed economic environment by applying the same economic development policy and strategy. The essential assumption (condition) for achieving economic success lies in the development and application of knowledge and innovative spheres of society. This concerns education, R&D and other components of the national innovation systems. Innovation has to be directed to the spheres of economic activity appropriate for a small and not highly developed country on the basis of the path-dependency principle, which means new areas of economic development (biotechnology, information and communication, software development etc) to the traditional fields of activity (agriculture, forestry, aqua-farming etc.) Even if we start now, it might

take more than ten years to develop a sustainable basis for long-term economic success.

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## EESTI MAJANDUSKRIISI BRUTOPALGA DÜNAAMIKA ASPEKTIST HINNATUNA

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Kuni majanduskriisini näis, et Eesti majanduspoliitika tagab kiire arengu. Eesti kuulus EL kõige kiiremini kasvavate majanduste hulka. Majanduskriis tabas aga Eestit väga raskelt, mis sunnib majanduspoliitikat veidi laiemalt käsitlema. Eestis tõsteti esiplaanile finantskapital, mida peavad teenima nii inimesed kui ka kogu ülejäänud majandus. Finantskapital lõi omaltpoolt inimestele ja ettevõtetele sissetoodud laenu rahaga abil illusiooni majanduskasvu ja heaolu saavutamise võimalusest ilma investeringuteks sääste kogumata. Laenu rahaga ülespuhutud buum koos sellele järgnenud majanduslanguse sügavusega sunnivad Eesti majanduspoliitika aluseid ja neist tulenevaid arenguperspektiive uuesti hindama.

Inimesi seob majandusega nende poolt teenitav palk, mille muutused annavad inimestele vahetult märku nii majanduse positiivsetest kui ka negatiivsetest arengutest. Palgal on kahtlemata tähtis vahetu mõju majapidamiste heaolule. Vähem tähtsad ei ole aga ka palgaga seotud maksudest rahastatavad sotsiaalkaitse kulud. Avalike teenuste pakkumise ja regionaalse arengu seisukohalt on aga suur tähtsus kohalike omavalitsuste eelarvesse suunataval üksikisiku tulumaksu osal, mis moodustab Eestis keskmiselt ca 50% kohalike omavalitsuste eelarvetuludest. Eeltoodust tulenevalt analüüsitakse käesolevas artiklis Eesti teed majanduskriisi ja selle tagajärgi empiiriliselt brutopalga arengute alusel.

Artikli eesmärgiks on hinnata Eesti majanduspoliitika aluseid majanduskriisi kontekstis ja brutopalga arengut kriisi eel ja ajal nii üldiselt kui ka tegevusalade lõikes. Eesmärgi saavutamiseks püstitatakse järgmised uurimisülesanded:

- analüüsida Eesti arengu eduloo väidetavaid majanduspoliitilisi põhjusi;
- analüüsida Eesti majanduspoliitikat majanduskriisi kontekstis ja hinnata selle tegelikke väljavaateid;
- tuua teoreetiliselt välja tööjõukulude koht rahvusvahelise kaubanduse mudelites;
- analüüsida brutopalgaga seotud üldisi arenguid ja sektoraalseid erinevusi Eesti majanduses kuni majanduskriisini ja kriisi ajal.

Eestil nagu teistelgi EL keskmisest arengutasemest kaugemale maha jäänud riikidel tuleb leida arengustrateegia mahajäämuse vähendamiseks ja kõrgelt arenenud riikide "kinnipüüdmiseks". Majanduse areng näiski selleks lootust andvat. Majanduskasv oligi terve aastakümne Eestis EL keskmisest kiirem: aastatel 1995-2004 oli SKP aasta keskmine reaalkasv 6,1% ja aastatel 2000-2004 koguni 7,2%. Inflatsioon oli langenud 1993. a ligi 90%-lt 1,4%-ni 2003. a. Kiire riigivara erastamine tõi Eestisse märgatava hulga välisinvesteeringuid. Madalale maksukoormusele vaatamata suudeti Eestis riigieelarve ülejääk saavutada ja keskvalitsusele reserve koguda. Kesk-Euroopa konkurentriikidest oluliselt madalama palga algtaseme tõttu suudeti saavutada oluline tööviljakuse tõus. Eesti poole võrra EL keskmisest tasemest

(suhtena SKP-sse) väiksemad sotsiaalkulutused ei kutsunud ühiskonnas esile märkimisväärset rahulolematust.

Endogeensed kasvuteooriad rõhutavad teadus- ja arendustööle (T&A) rajanevat innovatsiooni kui põhilist majanduskasvu allikat. See lähenemine kujundas riigi arengu perspektiivide käsitlust ka Eestis. Innovatsiooniveduriks kujunemise eesmärk ei vastanud aga Eestis ei reaalsele arengupositsioonile ega kohale süvenevas integratsioonis EL-ga. Arenenud riikide poolt vaadatuna pidi Eesti kujunema allhangete tegijaks rahvusvahelistele suurettevõtetele.

Välisinvesteeringud on Eestisse tulnud eelkõige siseturgu teenindavatesse valdkondadesse, mitte eksportkaupu loovasse tootmissektorisse. Tagajärjeks on Eestis teenitud tulu üha suurem väljavool. Põhjuseks on järgmised asjaolud:

- Eesti väga lihtne kõigile sektoritele ühetaoline maksusüsteem on atraktiivne eelkõige Eesti turgu hõivavatele ja teenindavatele rahvusvaheliselt mittekaubeldavate kaupade ja teenuste pakkumisele suunatud investeeringutele. Innovaatilisi eksportkaupu tootvale kapitalile selline maksusüsteem atraktiivne ei ole.
- Eesti väikese turu teenindamiseks vajalikud investeeringud on väliskapitalil paljudes valdkondades (finantsvahendus, kommunikatsioon, kaubandus jt) suures osas tehtud ja nii puudub teenitud kasumile Eestis rakendus. Eestis teenitud kasumid otsivad üha enam rakendusala Eestist väljaspool asuvatel uutel turgudel.
- Kuna Eestis maksustatakse ainult dividendidena jaotatud kasum ja väliskapitalil rajanevad ettevõtted on leidnud Eestis teenitud kasumi maksuvaba väljaviimise kanalid, siis voolabki Eestis teenitud kasum maksuvabalt välja.
- Ei ole leitud ühtki olulist argumenti innovaatilise eksporttootmise või koguni rahvusvaheliste suurfirmade T&A Eestisse ületoomiseks. Praeguse väliskapitali struktuuri juures ei ole loota märkimisväärset tehnoloogilist ja teadmiste ülekandumist Eesti eksportivatele ettevõtetele.

Madal palgatase on kahtlemata atraktiivne lihttööjõudu vajavatele ettevõtjatele, kuid välismaised ametiühingud sallivad seda hädapärast ainult valdkondades (allhangetes), milles odav tööjõud ei konkureeri otseselt arenenud riikide kõrgepalgalise ja kõrgelt kvalifitseeritud tööjõuga. Sotsiaalkulude madalat taset võib teatud piirides käsitleda majanduslikku konkurentsivõimet tõstva tegurina. Samas on Eesti ühinenud Euroopa Sotsiaalharta, mis esitab inimeste sotsiaalse kaitse tagamisele küllaltki kõrged nõuded. Samuti on mitmed „vanad“ EL liikmed teravalt tõstatanud nn sotsiaalse dumpingu probleemi, mis takistavat EL majandusliku integratsiooni süvenemist.

Palkade ja sotsiaalse kaitse kulude kasvu surve olukorras tuleb arengu jätkusuutlikkuse tagamiseks saavutada produktiivsuse kiirem kasv. See on võimalik ainult innovatsioonile toetudes. Innovatsioonile toetuvale arengustrateegiale üleminekuks on aga vaja sihipärast, süsteemset ja pikaajalist meetmete kompleksi nii innovatsioonisüsteemi komponentide (haridus, teadus, arengustegevus,

intellektuaalse omandi kaitse jms) ja nende sisemiste seoste arendamiseks kui ka ettevõtete innovatsioonistrateegiasse (klastrite väljaarendamine, koostöövõrgustike loomine, arendusprojektide initsieerimine, innovatsiooniprojektide toetamiseks jms) kaasamiseks.

Riigi arenguperspektiivi hindamisel on oluline roll täita riigi konkurentsivõimel. Konkurentsivõime üheks tähtsamaks aspektiks on töövõiljakus või selle pöördväärtusena tööjõu kulu toodanguühiku kohta. Tööjõukulu on määrava tähtsusega just rahvusvahelises hinnakonkurentsisis, milles Eesti töömahukas toodang põhiosas osaleb. Samas ei tohiks riik hinnakonkurentsisis edu saavutada madalate palkase ja sotsiaalse kaitse kulude ning halbade töötingimuse arvel. Seega ei peitu konkurentsivõime allikas mitte tööjõukulude vähendamises, vaid tööjõu rakendamises innovatiivsete kõrge kapitali- ja kasumimahukusega toodete ja teenuste tootmisel.

Rahvusvahelise kaubanduse mudelites oli tööjõukulu algselt ainsaks konkurentsivõimet määravaks teguriks. Vaatlusaluse riigi toodang on nende mudelite kohaselt rahvusvaheliselt konkurentsivõimeline juhul, kui selle riigi palgataseme suhe konkurentide palgatasemega on madalam selle riigi tööjõu tootlikkuse suhtest konkurentide tööjõu tootlikkusega. Tootmises rakendatakse tööjõu kõrval ka teisi sisendeid ja käesolevaks ajaks on välja arendatud mitmetegurilised rahvusvahelise kaubanduse mudelid (nt Porteri loodud riigi konkurentsiseelise "teemant"), et arvesse võtta tooteühiku kogukulud. Samas on tööjõukulu ka mitmetegurilistes rahvusvahelise konkurentsivõime mudelites ikka tähtsaimal kohal. Käesolevas artiklis käsitletaksegi Eesti rahvusvahelist konkurentsivõimet tööjõukulude aspektist.

Eestis loodud nominaalne SKP (jooksvates turuhindades) ja töötajatele makstud brutopalka kogusumma dünaamikast ilmneb, et aastast 1995 kuni 2003. aastani edestas SKP kasvutempo brutopalka kogusumma kasvutempot. Seejärel paaris aastaks mõlema kasvutempo võrdsustus. Eestisse EL-ga liitumise järel tulvanud laenuvahast tingitult kasvas aga järsult nõudlus tööjõu järele, mille tulemusena tõusis üheltpoolt kiirenevas tempos töötajate palgatase ja teiselt poolt võeti tööle üha madalama töövõiljakusega töötajaid. 2008. aastal SKP reaalselt juba kahanes ja ainult inflatsiooni tõttu nominaalselt veel veidi kasvas. Samal ajal jätkus brutopalka kogusumma kasv endises tempos ja edestas vaatlusaluse perioodi kokkuvõttes SKP kasvu: 2008. aastaks oli nominaalne SKP võrreldes 1995. aastaga kasvanud 5,82 korda, brutopalka summa aga 5,93 korda. Majanduskriisile ei suudetud adekvaatselt tööjõu rakendamise ja palgapoliitikaga reageerida. 2009. aasta majanduslangus SKP ja brutopalka proportsiooni ei muutnud: SKP oli võrreldes 1995. aastaga 5,01 korda suurem, brutopalka summa aga 5,16 korda suurem.

Kõrge inflatsioonitaseme tingimustes (kuni aastani 2002) jäi tööjõukulu (töötajate brutopalka ja sotsiaalmaksude) kasvutempo pidevalt maha SKP kasvutempost ja tööjõukulu kogumahu suhe SKP suhtes pidevalt langes. Tööjõuga seotud kulutuste osa SKP-s langes väga oluliselt: 1995. aasta 52,4%-lt 44,2%-ni 2002. aastal, st seitsme aastaga enam kui 8 protsendipunkti võrra. Tööjõuga seotud kulude

osatähtsus stabiliseerus sellel madalal tasemel kuni 2006. aastani. Buumist tingitud suur nõudlus tööjõu järele tõstis aga tööjõuga seotud kogukulutuste taseme 51,2%-ni SKP-st, st kahe aastaga 7 protsendipunkti võrra. 2009. aasta järsus majanduslanguses jõudis tööjõukulu suhe SKP-s 51,6%-ni – sellest aspektist jõudis Eesti tagasi 1990. aastate keskaasta olukorda.

Brutopalgaga suhe SKP-ga tegi läbi sisuliselt ülalooduga sarnase arengu: 40,3%-lt 1995. aastal jõuti 2005. aastaks 33,5%-ni ja 2009. aastal 38,4%-ni. Kuna sotsiaalkindlustuse maksetele lisandus viimastel aastatel töötuskindlustusmaks (1,4%), siis kujunes brutopalgaga suhte osas SKP-ga vahe 2008. ja 1995. aasta tasemete vahel suuremaks võrreldes vahega tööjõuga seotud kogukulude taseme näitaja tasemetes. Netopalgaga kogusumma suhe SKP-ga arenes aga veidi teistmoodi: 31,8%-lt SKP-s langes see suhe 27,1%-ni SKP-s 2002.-2003. aastal, kuid 2009. aastal moodustas see 32,7%, st ligi protsendipunkti võrra enam kui 1995. aastal. Põhjuseks oli üksikisiku tulumaksumäära alandamine 26% 21%-ni.

Tööjõuga seotud kogukulutuste osatähtsust SKP-s võib pidada küllaltki oluliseks rahvusvahelise konkurentsivõime teguriks. Seejuures tuleb aga arvestada riigi arengutasemest tulenevat toodetavate kaupade ja teenuste iseloomu. Kapitali- ja teadusmahukate kaupade tootmisel on tööjõukulude osatähtsus väiksem, töömahukate lihtsate kaupade tootmisel peaks aga tööjõukulude osatähtsus olema suurem. Eesti kuulub rahvusvahelises tööjaotuses peamiselt tööjõumahukate odavate allhangete pakkujate hulka, mistõttu muudel võrdsetel asjaoludel peaks siin tööjõuga seotud kulude suhe SKP-ga olema EL keskmisest suurem.

Võrreldes Eesti tööjõuga seotud kulutuste suhet SKP-ga EL keskmisega ja lähimate naabritega kui partnerite ja konkurentidega võib vaatlusaluse perioodi tinglikult jaotada kolmeks:

- Kuni 2006. aastani valitsesid suhteliselt stabiilsed, kuigi riigiti erinevad tendentsid. EL-s tervikuna ja vaatlusalustest riikidest Rootsis toimus tööjõuga seotud kulutuste ja SKP suhte langus, Soomet ja Eestit iseloomustab selle näitaja stabiilsus ning Lätis ja Leedus valitses tõusutendents.
- 2007.-2009. aastate buum ja kriis üldjuhul tõstsid tööjõukulude suhet SKP-ga: Eestis ja Lätis järsult (need riigid jõudsid 2008. aastal Soome tasemest kõrgemale), Soomes mõõdukalt ja Rootsis ning eriti Leedus suhteliselt tagasihoidlikult.
- Kriisi järel prognoositakse üldise arengutendentsina tööjõuga seotud kulude ja SKP suhte langust. Sisuliselt oodatakse teatud mõttes varasemate riikidevaheliste proportsioonide taastumist. Erandlikult suutis ainult Läti saavutada oluliste palgamäärade kärbetega kriisiaastal 2009 tööjõuga seotud kulude ja SKP suhte olulise languse. EL-s tervikuna ja ka vaatlusalustes riikides valitses aga selle näitaja osas tõusutendents või stabiliseerumine.

Kõige enam on buumi-kriisi tulemusena tööjõuga seotud kogukulutuste osas muutunud Eesti rahvusvaheline konkurentsipositsioon. 2006. aastal oli Eesti EL keskmisel tasemel olevast Soomest 2 protsendipunkti ja Rootsist 4 protsendipunkti

madalamal tasemel, Läti ja Leedu lähenesid aga jõudsalt Eesti tasemele. 2009. aastal oli aga Eestis tööjõuga seotud kulutuste suhe SKP-ga sisuliselt Soomega võrdne ja EL keskmisest tasemest ligi 2 protsendipunkti kõrgemal. Rootsist jääb Eesti küll ligi 4 protsendipunkti madalamale, kuid Lätist on Eesti 4 ja Leedust koguni 7 protsendipunkti kõrgemal. Läti ja Leedu püüavad ilmselt säilitada madalate tööjõukuludega riigi staatust, Eestil muutub see aga vahetus konkurentsisis oma Balti naabritega üha raskemaks. Loomulikult on Eesti SKP ja seega ka tööjõukulud inimese kohta nominaalselt EL keskmisest ja eriti Rootsist ja Soomest oluliselt madalamal (Eurostat andmetel oli lisandväärtus turuhindades inimese kohta 2009. aastal Eestis 8900 Eurot, Rootsis 27100 Eurot ja Soomes 27900 Eurot), seega jääb Eesti Põhjamaadega võrreldes ikkagi odavate allhangete pakkujaks. Läti ja Leeduga võrreldes peab Eesti aga pakkuma kõrgemale palgatasele vastavat oluliselt suuremat tootlikkust ja/või kvaliteetsemat teenust.

Ettevõtete rahvusvahelist konkurentsivõimet ei mõjuta ainult töötasude ja sellega seotud sotsiaalmaksete tase, vaid ka muudest maksudest tulenev koormus. Sellest aspektist vaadeldakse SKP kujunemist sissetulekumeetodil ja ettevõtete, majapidamiste ja avaliku sektori osa selles. Töötajate sissetulekuks on nende netopalk. Ettevõtete osaks on tootmise ülejääk ja segatulud, põhivahendite amortisatsioon ja riigilt saadud subsiidiumid. Avalikule sektorile laekuvad peale sotsiaalmaksete ka tootmis- ja impordimaksud, millest tuleb maha arvata ettevõtetele suunatud subsiidiumid. Ettevõtete osa SKP-s kasvas 36%-lt 1995. aastal üle 45% 2001. aastaks ja stabiliseerus sellel tasemel 2005. aastani. Boom ja kriis langetasid ettevõtete osa SKP-s sisuliselt tagasi 1995. aasta tasemele. Majapidamiste (töötajate) osa SKP-s langes miinimumini (ca 27%) 2002-2003. aastaks, aga hakkas seejärel (alguses tulumaksumäära alanemise ja hiljem majanduskeskkonna ja tööturu olukorra muutuste mõjul) suurenema, jõudes 2008.-2009. aastaks kõrgemale 1995. aasta tasemest. Avaliku sektori osa SKP-s langes 1995. aasta ligi 33%-lt 2005. aastaks 28%-ni, misjärel tõusis 2009. aastaks 32%-ni. Kokkuvõttes on SKP jaotuses ettevõtlussektori, majapidamiste ja avaliku sektori vahel taastunud ligikaudselt 1995. aasta olukord. Reaalsissetulekute tase on aga sel perioodil Eestis kasvanud enam kui kaks korda. Ettevõtlusele mõneks ajaks kujunenud erakordselt soodsad tingimused on boomis-kriisil kaotsi läinud ja nende taastamine on EL avatud tööjõuturu tingimustes vähetõenäoline. Seda näitab Eesti kogemus majanduskriisil: kadusid peamiselt töökohad, kuid keskmise palga langus oli tagasihoidlik. Majanduskasvu saavutamiseks on ilmselt vaja leida sisuliselt uus strateegia, mis võimaldaks rahvusvahelises konkurentsisis edu saavutada töötajate oluliselt kasvanud sissetulekute tingimustes.

Eestis on aastatel 1995 – 2009 teistest tegevusaladest kiiremini arenenud kinnisvaraarendus ja sellega seotud äritegevused, ehitusvaldkond, hotellid ja restoranid, hulgi- ja jaekaubandus, aga samuti finantsvahendus. Need on tegevusalad, mis loovad rahvusvaheliselt mittekaubeldavaidprodukte siseturule. Keskmisest kiiremini on brutopalka summa kasvanud ka avalikus halduse, riigikaitse ja kohustusliku sotsiaalkindlustuse valdkonnas, samas kui palgasumma kasvutempo hariduses jääb alla keskmise. Keskmisest kasvutempost kaugele maha jääb aga palgasumma kasv primaarsektoris, aga ka töötlevas tööstuses.

Teadmispõhisest innovaatsilisest üha kõrgema lisandväärtusega toodete rahvusvaheliselt konkurentsivõimelisest pakkumisest kui riiklikust prioriteedist selliste arengutendentside puhul küll rääkida ei saa. Eesti on spetsialiseerunud odavale allhankete ja turistidele lihtsate teenuste pakkumisele. Hariduse palgakulude keskmisest madalam kasvutempo tähendab aga, et teadusmahuka innovaatsilise tootmise arendamiseks ei suudeta piisava kvalifikatsiooniga töötajaid vajalikul hulgal ette valmistada.

Analüüsidest andmeid Eestis loodud lisandväärtuse struktuuri kohta tegevusalade lõikes saame ettekujutuse rahvusvahelise konkurentsivõime arengust. Töötlev tööstus on 15 aastaga kaotanud kolmandiku oma osatähtsusest ja langenud lisandväärtuse loomisel veidi enam kui 14 protsendiga 2009. aastal kinnisvaraarenduse ja sellega seotud äritegevuse (enam kui 21%) järel teisele kohale. Sellega edestab töötlev tööstus ainult napilt hulgi- ja jaekaubandust ning veanduse, laanduse ja side valdkonda. Primaarsektori harud on kaotanud keskeltläbi poole oma niigi tagasihoidlikust osatähtsusest lisandväärtuse loomisel. Ainult monopoolsed elektrienergia-, gaasi- ja veevarustus on hinnatõusu abil oma osatähtsuse säilitanud. Kokkuvõttes ei saa Eestit enam tööstusriigiks nimetada, sest teenindussektor on selges ülekaalus. Paraku ei ole need teenused kõrget lisandväärtust loovad. Seega on Eesti tõepoolest võtnud sisse meile arenenud riikide firmade poolt ette nähtud vaheprodukti (allhange, teenus) tootja positsiooni. Eesti majanduskasvu perspektiivid sõltuvad seega eelkõige välisõudlusest allhangete ja teenuste järele, sest majapidamiste suure laenukoormuse tõttu ei suuda sisenõudlus olulist kasvu esile kutsuda. Välisõudluse osas tuleb Eesti ettevõtetele aga üha enam arvestada Läti ja Leedu konkurentsiga, sest neis riikides on hinnakonkurents oluline palgatase eelis.

Majanduskriisi vahetult peamiste tegevusalade osas mingeid olulisi tendentsimuutusi kaasa ei toonud, äramärkimist väärib ainult ehitussektori osatähtsuse märgatav langus. Buumi ajal kiirelt paisunud finantsvahendus pidi "laenumulli" lõhkemisel mõningast kahju kandma ja osatähtsus vastavalt langes. Avaliku sektori tegevusalade osatähtsus suurenes nii buumi kui ka kriisi ajal. Üheks põhjuseks on kindlasti asjaolu, et avalik sektor absorbeerib olulise osa EL toetussummadest, samas ei olnud majanduslanguse tingimustes võimalik kärpida haridus- ja tervishoiukulusid majanduslangusega samas proportsioonis. Kuna majanduskriis ei toonud kaasa hindade langust ja käivitunud on uus hinnataseme tõus, siis tähendavad kärped hariduses ja tervishoius paratamatult pakutava teenuse kvaliteedi langust, mis pikemas perspektiivis mõjaks negatiivselt rahvusvahelisele konkurentsivõimele. Lühiajaliselt tähendab aga avaliku sektori osatähtsuse tõus SKP kasutamisel Eesti positsiooni nõrgenemist odava allhanke ja teenuse pakujana. Ka sellest aspektist vaadatuna on arenguedu võimalik ainult uuele strateegiale üle minnes ja majanduspoliitikat oluliselt muutes.