ANNEX 2. Differences in average compensation for employees across the Baltic States

Economic development levels of the Baltic countries are very much alike, however, significant differences can be observed in the average compensation of employees at current prices. Different structure of the disposable income of households is one of the factors that explain these differences. It shows that compensation of employees, as a share of total disposable income, is lower in Lithuania than in other Baltic countries. This Annex presents a comparison between the ratio of Baltic countries’ labour productivity to compensation of employees, measured in purchasing power parity (PPP) terms, and the same ratio in other EU countries. The analysis reveals that the ratio is broadly in line with the EU underlying pattern.

1. Compensation of employees and disposable income

Since 2012, the average nominal compensation per employee9 which includes a wage and social contributions has been growing in Lithuania, on average, by 4.5 per cent a year. Such growth pace is slower than the growth of the average compensation per employee in Latvia and Estonia. In Lithuania, the average compensation per employee is not only growing at the slowest pace, but is also the lowest. For instance, in 2015, the average monthly compensation per employee in Lithuania was EUR 1,087, in Latvia it was EUR 1,137, and in Estonia — EUR 1,453. It means that Lithuania’s average compensation per employee was 5 per cent lower than compensation paid in Latvia, and even one third lower compared to the compensation in Estonia (see Chart A). However, compensation of employees makes up only a part of household income. Households also receive income from economic activity, accrued capital, government institutions, and remittances from family members abroad. All these and other income sources are classified under households’ disposable income10, i.e. all income received by households, which is available after compulsory liabilities are paid. As seen in Chart B, disposable income of households per capita in Lithuania and Estonia have been quite similar since 2010: in 2014, disposable income per capita in Lithuania was lower than disposable income per capita in Estonia by 5 per cent (and exceeded the respective indicator in Latvia by more than 10%).

The structure of households’ disposable income in the Baltic countries from 2012 to 2014 is presented in Chart C. As shown in the Chart, the share of the compensation paid to employees in Lithuania (62.4%) is significantly lower compared to the share in Latvia (73.5%) or Estonia (86.7%); yet, households’ capital income11 in Lithuania accounts for a substantially higher share (38.2%) of disposable income (in Latvia and Estonia, they make up respectively 27.7 and 21.4%). These structure differences can be partly explained by different systems of income taxation and social contributions. For instance, income taxes and social contributions in Lithuania make up 24.5 per cent of disposable income, of which income taxes account for 5.7 per cent and social contributions — for 18.8 per cent. In Estonia, income taxes and social contributions make up 34.6 per cent of disposable income — income taxes make up 10.5 per cent and social contributions — 24.1 per cent. In Latvia, income taxes and social contributions account for one fourth of disposable income, similar to Lithuania, though their structure is slightly different: in Latvia, income taxes make up 10.5 per cent and social contributions — 15.4 per cent.

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9 In this Annex, to compare country data, the average compensation per employee is defined as the ratio of two national account variables — compensation of employees and the number of the employees.
10 For more details about sources of households’ disposable income, see the Lithuanian Economic Review of December 2014.
11 In this Annex, capital income is defined as the sum of property income, mixed income and operating surplus.
To evaluate the structure of disposable income, which is not distorted by the taxation level, paid taxes and social contributions have to be subtracted from household income. Such estimates are possible by applying the implicit tax rate (ITR). It shows the actual amount of taxes and social contributions paid by agents of the economy on their income.

2. Disposable income and implicit tax rates

When assessing households’ income, two ITRs are calculated — one for labour income and one for capital income. The ITR on labour income is the ratio of the sum of all direct and indirect taxes and social contributions paid by employees and employers on employed labour to compensation of employees. This ITR should be viewed as an approximate tax burden on households’ labour income. The capital ITR is also the ratio of two sums, namely the sum of all direct and indirect taxes and social contributions paid on property income, mixed income and operating surplus, and the sum of property income, mixed income and operating surplus. This ITR should be treated as an approximate tax burden on households’ capital income. Chart D shows the ITR of labour income and the ITR of capital income in all three Baltic countries in 2012. As shown in the Chart, Lithuania’s ITR on labour income stood at 31.9 per cent and was the lowest among the Baltic countries: it was 33.0 per cent in Latvia and 35.0 per cent in Estonia. The situation is different in taxation of households’ capital income which was the highest in Lithuania in 2012. Lithuania’s ITR on household capital income accounted for 8.2 per cent and was almost two times higher than in Estonia (4.2%) and three times higher than in Latvia (3.0%).

Chart E shows the structure of household disposable income adjusted for ITR. There are no significant differences compared to that in Chart C. In Lithuania, compensation of employees accounts for the lowest share of disposable income, while the share of capital income is the highest among the Baltic countries. It should be noted that due to markedly higher taxes on labour income, compared to capital income, in all three Baltic States compensation of employees less taxes and social contributions makes up a lower share of disposable income than compensation of employees including taxes and social contributions: these shares make up respectively 41 and 62.4 per cent in Lithuania, 48.3 and 73.5 per cent in Latvia, and 53.0 and 86.7 per cent in Estonia. Amid low ITR, Baltic countries’ shares of household capital income excluding taxes and social contributions do not differ substantially from those including taxes and social contributions.

It is interesting to analyse the relationship between taxes on household labour and capital incomes and the structure of disposable income of households. Data for EU countries\(^1\) presented in Chart F reveals that there is quite clear connection (negative correlation) between relative labour and capital income taxation and relative labour and capital shares in disposable income, excluding taxes and social contributions, i.e. the decrease of relative taxation implies the increase of relative labour and capital shares in disposable income. In addition, the linear relationship shown in Chart shows that if labour and capital income taxation were equal, labour income would account for about two-thirds, while capital income a third of disposable income, excluding social benefits and net current transfers.

3. Compensation for labour and labour productivity\(^2\)

According to economic theory, the size of wage depends on labour productivity. This link is the result of the behaviour of profit maximising companies: companies earn highest profits when wages correspond to the marginal productivity of labour. In the absence of such correspondence, companies will have incentives to reconsider the number of employees so that wages would match again the productivity of labour and maximise their profits. If wages are lower than labour productivity, companies would be tempted to hire more employees. This could boost the demand for labour and build pressure on wage increase, while declining marginal income would have a negative impact on labour productivity. On the contrary, if wages are higher than labour productivity, companies would be tempted to reduce the number of employees. This would have a negative effect on wages and a positive impact on the productivity of labour.

Chart G shows the relationship between hourly labour productivity and hourly compensation of employees in EU countries. The Chart reveals that the ratio of hourly labour productivity to hourly compensation of employees in the Baltic countries is broadly in line with this correlation. One should note that, in 2014, labour productivity in Lithuania was higher than in Latvia and Estonia. As seen from Chart H, labour productivity in Lithuania has been no lower than that in other Baltic countries for some time already. Differences in Lithuania’s and Latvia’s labour productivity during the entire period under review remains rather substantial, while Estonia’s labour productivity is quite close to Lithuania’s indicator.

Sources: OECD, Eurostat and Bank of Lithuania calculations.

Labour productivity and hourly compensation of employees presented in Chart G and Chart H are adjusted for the PPP, since differences in currency and price level of different countries would be ignored, if they were calculated at

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\(^1\) Luxembourg, Malta and Portugal are omitted due to a lack of data.

\(^2\) In this Annex, labour productivity is calculated as the ratio of real GDP to hours worked.
current or constant prices. The PPP serves two main functions: first, national currencies are converted into one selected currency; second, countries’ purchasing power is equalised by excluding countries’ price level differences. It means that the comparison of indicators of various countries, which are calculated adjusted for PPP, reveals only real (quantitative) differences. This is quite important, since the analysis of the price level in the Baltic countries suggests that prices of nearly all major groups of goods and services in Lithuania are lower than those in Estonia and Latvia (see Chart I).

The smallest price level differences were found among prices for goods and services produced by the tradable sector, such as clothes and footwear, fuel, furnishings, household appliances, food, and beverages. Price differences of these goods and services make up about 0 to 15 per cent. Far higher differences emerge between prices for goods and services produced by the non-tradable sector, with prices for some goods and services, such as healthcare, education or those related to housing services, being up to 45 per cent lower in Lithuania than in Latvia or Estonia.