

Republic of Estonia Stability Programme 2016

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TABLE OF CONTENTS

INTRODUCTION.		2
1. ECONOMIC PO	LICY GOALS	3
2. ESTONIAN ECC	DNOMIC DEVELOPMENT AND OUTLOOK	5
2.1. Developm	ents of the external environment and assumptions	5
2.2. Economic	forecast	9
2.3. Compariso	on with the forecasts of other forecasters	13
2.4. Preparation	on and assessment of the economic forecast	14
2.5. Macroeco	nomic policy in coming years	16
3. FISCAL FRAME	WORK	21
3.1. Objectives	s of the fiscal policy of the Government of the Republic	21
3.2. Budgetary	position of the general government	23
3.3. General go	overnment revenue and expenditure	36
3.4. General go	overnment financing	48
4. SENSITIVITY A	NALYSIS AND COMPARISON WITH PREVIOUS PROGRAMME	52
4.1. Possible n	egative developments	52
4.2 Sensitivity	analysis of interest rates	54
4.3. Compariso	on with the forecast of Stability Programme 2015	54
5. LONG-TERM S	USTAINABILITY OF FISCAL POLICY	56
6. QUALITY OF P	UBLIC FINANCE	60
7. INSTITUTIONA	AL FUNCTIONS	64
APPENDICES		
Appendix 1.	Main indicators of Estonian economy in 2005–2015	
Appendix 2.	Comparison of Estonia with other EU member states (figures)	69
Appendix 3.	Effect of administrative price increases on CPI	72

INTRODUCTION

According to EU rules on the coordination of budgetary policies the Member States of the European Union must annually submit updated stability and convergence programmes (members of the eurozone and the Member States who are not using the euro, respectively). Estonia is a full member of the European Economic and Monetary Union (EMO) since 1 January 2012 and submits its Stability Programme to the European Commission and the Council of the European Union fifth time. This Stability Programme can therefore be regarded as the follow-up of the one submitted in the previous year. The purpose of the Stability Programme is to illustrate the Government's policy in the performance of the requirements arising from the Stability and Growth Pact (SGP). The current stability and convergence programmes submitted by the Member States will be assessed by the European Commission and the Council of the European Union in May and June 2016.

The submission and assessment of stability and convergence programmes is an important part of the coordination and monitoring of the economic policy of the European Semester. The Commission and the Council assess the stability and convergence programmes within the scope of the European Semester before the most important decisions are made in the preparation of the budgets of Member States in order to give policy recommendations on fiscal policy intentions if necessary.

Estonia's fiscal policy remains in line with the Stability and Growth Pact. The Stability Programme was prepared in parallel with the national State Budget Strategy in consideration of the Government's goals and policies, which are stipulated in the Coalition Programme and other strategic documents. Stability Programme 2016 is based on the economic forecast of the Ministry of Finance from spring 2016.

According to EU rules on the coordination of economic and budgetary policies of Member States, an independent Fiscal Council was formed under Bank of Estonia in 2014, having the task of providing assessments to economic forecasts which form the basis for Estonia's fiscal policy, and monitoring the compliance of national budgetary rules. Regarding the economic forecast of the Ministry of Finance from spring 2016, the Fiscal Council states that despite the spring forecast of the Ministry of Finance is similar to other forecasts, the Fiscal Council's opinion is that the forecast is based on rather optimistic assumptions. The Fiscal Council is also of the opinion that the future tax revenue will more likely amount to a possible under-receipt. That is why the Fiscal Council recommends the Government to set a slight surplus target for the structural budgetary position for all the years of the forecast period. At the usual forecast seminar preceding the publication of the economic forecast of the Ministry of Finance, economic experts of other general government and private sector agencies considered the economic forecast of the Ministry of Finance to be realistic.

The time horizon of Stability Programme 2016 reaches the year 2020, as required from the budget strategy by the State Budget Act (the next fiscal year and the following three years). The document consists of seven parts providing an overview of the economic policy objectives, the economic situation and future prospects, the fiscal framework, a comparison with the previous Stability Programme, improvement of the quality of public finance, the long-term sustainability of the fiscal policy and institutional functions.

1. ECONOMIC POLICY GOALS

The goal of the economic policy of the Government is to create conditions for sustainable economic growth, which will result in increased welfare and real convergence with developed countries. A pre-condition for stable economic development is to ensure macroeconomic stability and flexibility, which supports internal and external balance. The speed of Estonia's real convergence has been fast and we are approaching the EU average. The risks and imbalances that increased during the period of rapid credit-fuelled economic growth have decreased rapidly in the adjustment process that followed the crisis and reduced the further vulnerabilities of our economy. The sudden contraction in global economic activity and trade that was caused by the global credit crisis had a significant impact on Estonia's open economy, and our economy demonstrated remarkable flexibility in coping with this. The reliability of the fiscal policy was maintained in the changed economic conditions and the support it offered to economic development allowed the state to overcome the crisis without increasing its financial obligations considerably. Increasing economic flexibility, supporting the business environment and improving the efficiency of the labour market have become the key issues that help guarantee sustainable economic development.

One of the main goals of the fiscal policy is to support macroeconomic stability via the flexibility and efficiency of markets, to manage the risks that threaten the balanced development of economy, and to improve the economy's growth potential and employment. This is particularly important for securing the effective functioning of the economy in the single currency zone. The impact of the tax system and the expenditure side of the budget to the economy must be considered when they are planned, especially when changes are made. In addition, the long-term sustainability of the fiscal policy given an ageing population must be ensured. Ensuring a stable economic environment, channelling budget funds to foster of economic growth and employment, and ensuring long-term sustainability are the three areas which Estonia will focus on in its economic policy in the coming years.

The Government's goal is to proceed with a sustainable fiscal policy. **The medium-term budgetary objective (MTO) of the Government is a general government structural surplus.** A strict fiscal policy will ensure that a low level of government debt is maintained, which is a prerequisite for ensuring the long-term sustainability of public finance.

In order to focus its decisions and assess its activities, the Government has highlighted the priorities which it finds of utmost importance to implement. The priorities are based on the Coalition Programme and are one of the bases for setting the preferential order of actions planned and additional state budget applications filed.

The priorities of the Government and the policy initiatives and changes needed to implement them until the year 2020 are as follows:

- 1) 1) Increasing the national security of Estonia.
 - o Defence expenditure is retained at the level of 2% of the GDP.
 - Membership of the Defence League and its specialised organisations increases to 30 thousand.
- 2) Promoting economic growth and reducing labour taxes.
 - o Productivity per employed person as a ratio to the EU average increases to 80%.
 - o Employment rate in the 20–64 age group increases to 76%.
 - Effective tax rate on labour remains near the 2015 level of 34.3%.

- **3)** Increasing the coping of low income people.
 - o Absolute poverty rate decreases to 15%.
 - The proportion of adults (25–64 years) without specialised or vocational education decreases below 30%.
- **4)** Improving the coping of families with children, developing an environment supporting childbirth.
 - Absolute poverty rate among children aged 0–17 years decreases to 7%.
 - o Total fertility rate i.e. the number of children per woman increases to 1.67.
- **5)** Reforming public and local administration, alleviating peripheralisation.
 - The share of general government employees among working-age population does not increase.
 - o Employment rate in rural areas (15–64 age group) does not decrease.
 - o By the end of 2017, at least 95% of residents are living under local governments complying with the capability and sustainability criteria approved in the Government.

90
80
70
60
40
30
1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014
GDP per capita (PPS*)
Labour productivity per employee
Price level**

Figure 1. Real Convergence with the EU (% of EU28)

Source: Eurostat.

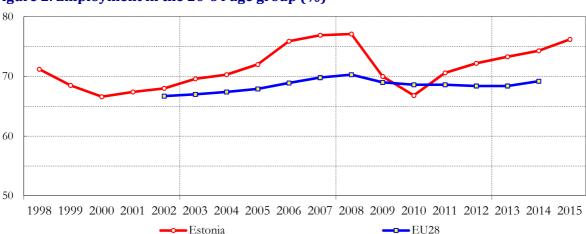


Figure 2. Employment in the 20-64 age group (%)

Source: Statistics Estonia, Eurostat.

^{*} PPS – GDP calculated on the basis of purchasing power parity.

^{**} Price level of final consumption expenditure for households.

2. ESTONIAN ECONOMIC DEVELOPMENT AND OUTLOOK

2.1. Developments of the external environment and assumptions

Global economy grew by 3.0% last year, which is the slowest of the recent years. No pick up of the growth is expected in 2016 either, due to the cut of the forecasts of developed countries and the negative risks in the growth outlooks of developing markets. The eurozone's economic growth is expected to slow down somewhat in this year, but the coming years' growth outlook of the eurozone should improve as the external environment becomes stronger.

The weighted average economic growth of Estonia's **main trade partners** was comparable to the previous years, while their import growth stopped. Estonia's foreign demand i.e. the import of our trade partners did not increase in 2015 (0.0%), mainly due to Russia's deep import decline. But this year, the foreign demand can be expected to strengthen again to 2.9%, mostly as a result of the more modest decline of Russia's import volumes and the gradual recovery of Finland's economy. More support to the foreign demand is provided by broad-based growth of Sweden's economy. In the coming years, the global economic activity should improve, increasing in turn the growth of trade partners and thus creating good opportunities for a faster growth of our export as well.

Due to the decline in energy prices, the eurozone's prices remained at the previous year's level. The inflation is expected to pick up again at the end of 2016. In the subsequent years, the **inflation** will pick up because the foreign environment's negative effect will recede and domestic demand will liven up. The eurozone's **interest rates** will remain at the current extremely low level for the next few years as the restoration of the eurozone's inflation is slower than expected and European Central Bank is implementing a wide-scale package of monetary policy incentives. The impact of this, expected by the markets, is that the short-term interest rates of the money market will remain negative in the near future as well.

In 2015, the exchange rate of **euro** to US dollars depreciated nearly 20% due to the eurozone's monetary policy measures to restore the inflation and to increase the economic activity, while the strengthening economy of the US enabled an increase of interest rates. At the beginning of March 2016, the **EUR/USD exchange rate** was fixed at 1.087 for the entire forecast period.

Oil price declined by 47% in 2015 due to both demand and supply side factors and dropped below 30 USD/barrel for a short period at the beginning of 2016, which is the lowest level of the past 12 years. After that, the oil price has been increased by agreements to freeze the production volumes, signed between some oil-producing countries. During spring, the price of oil has stabilised at 40 USD. The spring forecast takes into account the oil prices of 37.3 and 43.2 USD in 2016 - 2017.

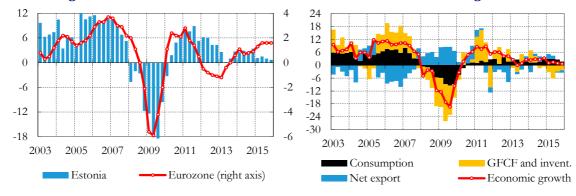
Table 1. Most important foreign assumptions of the forecast (%)

	Assu	Assumptions in the Ministry's forecast for spring 2016						European Commission		
	2015	2016*	2017*	2018*	2019*	2020*	2015	2016*	2017*	
1. Euribor, 3 months (annual average)	0.0	-0.2	-0.3	-0.2	0.0	0.1	0.0	-0.2	-0.2	
2. Eurozone's long-term interest rate (annual average)	0.5	0.3	0.4	0.8	1.2	1.5	0.5	0.6	0.9	
3. USD/EUR exchange rate (annual average)	1.11	1.09	1.09	1.09	1.09	1.09	1.11	1.08	1.08	
4. Nominal effective exchange rate	-1.1	0.6	0.0	0.0	0.0	0.0	-1.1	0.6	0.0	
5. World GDP growth (excluding EU)	3.2	3.3	3.6	4.0	4.3	4.3	3.2	3.6	3.8	
6. EU28 GDP growth	1.9	1.8	1.9	2.0	1.9	1.8	1.9	1.9	2.0	
7. Import growth of Estonia's export markets	0.0	2.9	3.8	4.4	4.7	4.7	0.2	3.1	4.1	
8. World import growth (excluding EU)	0.8	2.7	3.5	4.4	5.3	5.3	0.8	2.9	3.7	
9. Oil prices (Brent, USD/barrel)	52.4	37.3	43.2	46.0	48.0	49.6	53.4	35.8	42.5	

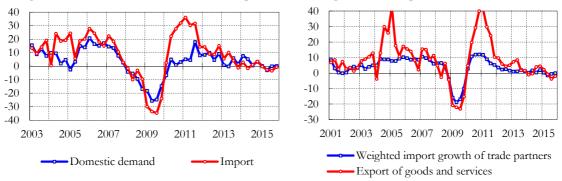
Sources: Historical data was obtained from Eurostat, Bank of Estonia, the U.S. Energy Information Administration (EIA); forecasts are based on the European Commission (COM), Consensus Economics (CF), IMF and NYMEX Brent futures, if possible, which have been adjusted according to the most recent developments and the expert opinions of the Ministry of Finance.

Figure 3. Development of Main Indicators of Estonian Economy (%)

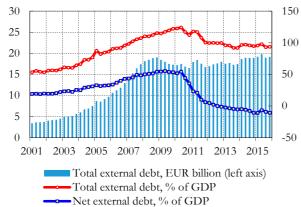




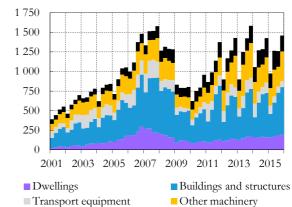
C. Real growth of domestic demand and imports D. Real growth of exports



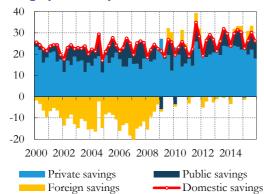
E. Total external debt and net external debt



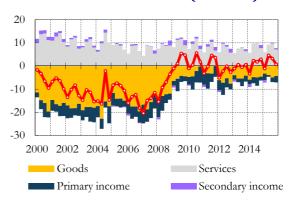
F. Structure of investments (€ million)



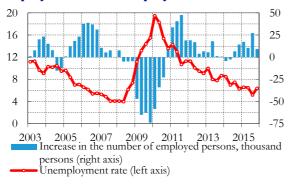
G. Savings (% of GDP)



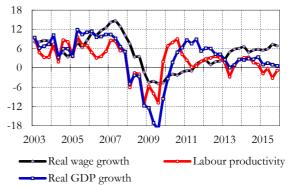
H. Current account structure (% of GDP)



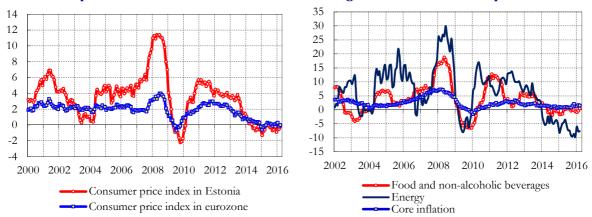
I. Employment and unemployment



J. Labour productivity



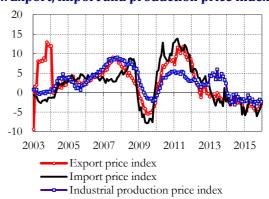
K. Consumer price index in Estonia and eurozone L. Change in main inflation components



M. Interest rates



N. Export, import and production price index



Sources: Statistics Estonia, Bank of Estonia, Eurostat.

2.2. Economic forecast

In the recent months, the recovery of the global economy has become uncertain again, mainly on developing markets. The economic growth of the eurozone quickened to 1.6% in 2015, which is the fastest in the past four years. Yet the indicators of economic activity (the PMI index) show a slight slowing down of the eurozone's growth at the start of this year. The economic sentiment in Estonian business sector has improved somewhat in the recent months and there is a chance of faster growth of export orders in the coming quarters. Yet, the overall economic sentiment remains relatively weak in most of the sectors and growth outlook have been adjusted down when compared with the previous forecast. In 2015, Estonian foreign demand was at a low point and the import of our trade partners did not increase. In 2016, the foreign demand will strengthen and its growth will quicken to 2.9%, mainly supported by the slowing of Russia's import decline. In 2017, the growth of foreign demand will be 3.8%. In the recent years, the Estonian economic growth has been based on consumption, supported by the quick growth of wage income. The purchasing power of households has been increased by prices declining for the second year in a row, mainly due to the decrease of the prices for energy and foodstuffs. The employment indicators continue to improve, although part of that stems from the effect of the Employment Register implemented in July 2014, which has reduced undeclared work. The wage growth is slowing down, but less sharply than expected, so the profits in 2/3 of the sectors were falling. Due to low demand and free production capacities, the investment activity of enterprises remains low. The assumptions of this forecast are set as of the beginning of March 2016.

According to the forecast's base scenario, **Estonian gross domestic product** will grow by 2% in 2016 and by 3% in 2017. The Ministry of Finance has revised the economic growth forecast for the coming years downwards, mainly due to the deterioration of the growth outlooks of Finland and Russia as Estonia's important trade partners. The export growth will be restored this year and will gradually quicken in the coming years, in line with the economic growth of export partners. The main driver of economic growth in 2016 will again be domestic demand, but the effect of export should increase in the future. In 2019–2020, Estonia's economy should grow by an average of 3% per annum, on account of both export and domestic demand.

The growth of **domestic demand** in 2016 will again be supported the most by **private consumption**, but its growth speed will decrease when compared to the previous year. In 2017, the real growth of private consumption should slow down even more, due to slower wage growth and inflation picking up, but a slight increase of the consumption's growth speed can be expected further on. The slowing of the consumption's growth is due to the slowing of the growth of disposable income. In 2015, the purchasing power of residents was supported by not only a quick growth of gross wages but also the increase of basic exemption, the reduction in income tax rate and the significant increase in family benefits. Additionally the decline of motor fuel prices continued, enabling people to spend more on other goods and services. The consumption courage of Estonian residents may have declined somewhat over the past year, apparently driven by the frightening news of the continued migration crisis and terror attacks that have become everyday occurrences. The real growth of private consumption is forecasted to slow down to 3.4% in 2016 and to 2.5% in 2017.

The decrease of **investments** continued at a quickening pace in 2015. In the year 2015, the business sector contributed to the decline, while the investments of both the government sector and households increased. The government sector's investments turned to an increase last year, but their share in total investments is one third, so they were unable to reverse the overall trend. The last year's declining investments of the business sector could be explained by the

extraordinarily depressed external environment, which is clearly expected to improve starting with 2016. The continued increase of the government's investments is supported by taking into use the funds of the EU programming period of 2014-2020. Housing investments should have plenty of growth space due to the wish to improve the quality of dwellings, which can be hindered mainly by significant deterioration of the overall economic sentiment and related setbacks in the labour market. In 2016, the growth of investments could exceed 2% and could also quicken to 5% in a few years, but a prerequisite for that is the fulfilment of the current growth forecasts of Estonia's export partners.

Together with the strengthening of foreign demand, the **export of goods and services** can be expected to turn to growth in 2016. A dominant part of the pick up of the foreign demand's growth is made up by the slowing of the Russia's import decline; the contribution of other export partners is increasing to a more modest extent. Export will grow by 1.6% this year, which will be less than the increase of foreign demand. These are unfavourable global factors, independent from Estonian economic environment, and they also had a significant effect on the export of goods in the previous year. Starting with 2017, the global economic activity will start to improve, leading to a quicker economic growth of trade partners and the strengthening of import demand. The export growth will increase at a similar rate as foreign demand, reaching 3.8% in 2017 and 4.5% in 2018. Import growth will turn out markedly faster than that of export this year, because investments, having declined for the past two years, should be restored with the support of enterprises and government sector.

After the high level achieved last year, the **current account** surplus will start decreasing in the coming years. In 2016, the surplus will decrease to 0.6% of GDP, being mainly related to the recovery of investments of enterprises and government sector.

Due to low commodity prices, the growth of **consumer prices** (CPI) will be modest in 2016, reaching 0.3%. Thereafter, the CPI growth will quicken to 2.7% in 2017 and 2.9% in 2018. While the price decline is driven by energy products in the first half of this year, the negative contribution of the energy component will start to recede in the second half of the year, leading to the consumer prices turning to an increase. The effect of tax measures will increase this year, as a result of increasing the excise duties on fuel, alcohol and tobacco. The price increase of services will remain modest hindered by the cheapening of transport services entailed in the lowered fuel prices, as well as free higher education. In 2017, inflation will pick up due to the gradual increase of the contribution of foreign factors (oil and foodstuffs), the quickening of the price increase of services, and additional excise duty increases. Starting with next year, the gradual receding of the oversupply of oil and the strengthening of the global economy can be expected, due to which the effect of external factors on inflation will grow in the future. The effect of indirect taxes on the CPI will be the highest in 2017, reaching 0.9%.

The situation in the **labour market** will become ever tenser and wage pressures continue. In the second half of last year, **employment** grew faster than it was expected in the summer of that year, reaching 2.6% as the year's total. Part of that was due to the implementation of the Employment Register, which increased the number of people working legally. As a result of more modest economic developments than expected, the number of employed people started to decline at the end of last year (according to the Tax and Customs Board's data), which is why we are excepting **unemployment** to increase to 6.6% this year from 6.2% in 2015. Employment rate in Estonia is currently at its historical high (65.2%), that limits any further growth of the number of employed people. This is why we are expecting the number of employed people to decline due to the decrease of the population. This will be partly compensated by the implementation of the work ability reform, helping people with partial work capacity to return to the labour market, by offering them various activation measures. The skills of the incapacity for work pensioners returning to the labour market will probably not correspond to the labour market's needs and the capacity of enterprises to hire them will be low at first, so the reform will

first and foremost lead to an increase of unemployment starting with 2017. The positive effect of the work ability reform through the additional number of employed persons will grow gradually.

The growth speed of **average wage** has not yet changed significantly, regardless of the slowing of economic growth, and the growth remained at 6% in 2015. The wage growth is the quickest in sectors with below-average salaries, and differences between wage developments of various sectors have also increased during the year. Wage growth has clearly exceeded the productivity growth and had a negative effect on the price competitiveness of enterprises. Yet, no significant reduction in the wage pressure is to be expected, due to the declining population and the competition with neighbouring countries, mainly Finland. That is why we presume that the proportion of wage costs to GDP will remain at its current level this year but will start to decrease in longer term. The growth of real wage will slow down sharper than that of nominal wage this year, due to the restoration of inflation.

Table 2. Gross Domestic Product forecast for 2015-2020 (%)

	2015 level	2015	2016*	2017*	2018*	2019*	2020*
1. Real GDP growth	17,594	1.1	2.0	3.0	3.3	3.0	2.8
2. Nominal GDP growth	20,461	2.5	4.1	5.9	6.3	6.0	5.7
Sources of growth							
3. Private consumption expenditure							
(incl. NPISH)		4.8	3.4	2.5	2.8	3.2	3.0
4. Final consumption expenditure of							
general government		2.1	1.5	1.4	1.3	1.2	1.1
5. Gross fixed capital formation		-4.5	2.4	4.4	4.7	5.0	5.0
6. Changes in inventories (% of GDP)		0.3	1.1	1.3	1.3	1.3	1.3
7. Export of goods and services		-1.1	1.6	3.8	4.5	4.8	4.7
8. Import of goods and services		-1.8	3.7	3.8	4.3	5.0	5.0
Contribution to GDP growth ¹							
9. Domestic demand (excluding							
inventories)		1.8	2.7	2.7	2.9	3.2	3.1
10. Changes in inventories		-2.5	0.8	0.1	0.0	-0.1	-0.1
11. Balance of goods and services		0.5	-1.6	0.1	0.3	-0.1	-0.1
Added value growth							
12. Primary sector		14.1	-6.3	5.2	2.3	1.8	1.8
13. Manufacturing		-0.5	2.9	4.1	4.5	4.4	4.2
14. Construction		-4.9	-0.2	4.3	4.5	4.3	3.7
15. Other services		0.6	1.6	2.3	2.8	2.6	2.5

¹⁾ Contribution to GDP growth indicates the shares of specific sectors in economic growth. This is calculated by multiplying growth in the area by its share in GDP. The sum of the contributions of different sectors amounts to economic growth (the slight difference can be attributed to a statistical error – the part of GDP which cannot be divided between the areas).

Source: Ministry of Finance, Statistics Estonia.

Table 3. Prices' forecast for 2015-2020 (%)

	2015	2015	2016*	2017*	2018*	2019*	2020*
	2010=100	%	%	%	%	%	%
1. GDP deflator	116.3	1.4	2.1	2.9	3.0	2.9	2.8
2. Private consumption deflator	113.5	-0.1	0.4	2.5	3.0	2.9	2.9
3. Harmonised consumer price index	113.7	0.1	0.9	2.9	3.0	2.9	2.9
3a. Consumer price index	111.5	-0.5	0.3	2.7	2.9	2.8	2.8
4. General government consumption expenditure deflator	122.8	4.2	3.8	3.8	3.7	3.8	3.8
5. Investment deflator	115.8	3.1	2.6	2.4	2.3	2.3	2.3
6. Export deflator	106.3	-1.5	0.0	1.3	1.8	1.9	1.9
7. Import deflator	103.6	-1.8	-0.6	1.3	1.8	2.0	2.0

Source: Ministry of Finance, Statistics Estonia.

Table 4. Labour market forecast for 2014-2019 (15-74 age group) (%)

	2015 level	2015	2016*	2017*	2018*	2019*	2020*
		%	%	%	%	%	%
1. Employment, persons	640.9 ¹⁾	2.6	-0.9	-0.1	-0.3	-0.2	0.0
3. Unemployment rate		6.2	6.6	7.6	8.8	9.7	9.8
4. Labour productivity, persons	$27.5^{2)}$	-1.5	2.9	3.1	3.5	3.2	2.9
6. Compensation of employees	9 827.3 3)	6.6	4.2	4.5	5.7	5.7	5.6
7. Compensation per employee (6./1.)	15.3 ⁴⁾	3.9	5.1	4.5	6.0	5.9	5.7

¹⁾ Thousand persons.

Source: Ministry of Finance, Statistics Estonia.

Table 5. Balance of payments forecast for 2015-2020 (% of GDP)

	2005- 2014	2015	2016*	2017*	2018*	2019*	2020*
1. Net lending/borrowing vis-à-vis the rest of the world	-2.0	3.9	3.1	3.2	3.0	2.5	2.0
1a. Current account	-4.3	1.9	0.6	0.5	0.6	0.3	-0.1
2. Balance of goods and services	-0.4	4.0	2.8	2.8	3.0	2.7	2.3
3. Balance of primary and secondary income	-3.9	-2.1	-2.2	-2.3	-2.4	-2.4	-2.4
4. Capital account	2.4	2.0	2.5	2.7	2.4	2.2	2.1
5. Errors and omissions	0.0	0.7					

Source: Ministry of Finance, Bank of Estonia, Statistics Estonia.

²⁾ Thousand euros per employed person.

³⁾ Million euros.

⁴⁾ Thousand euros.

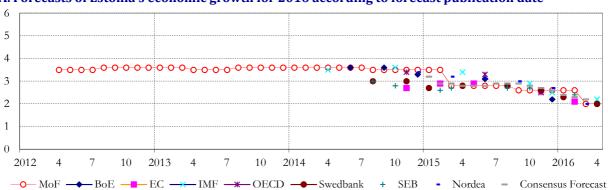
2.3. Comparison with the forecasts of other forecasters

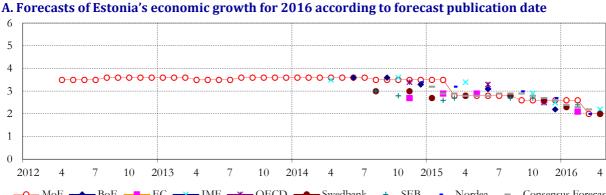
The differences between the economic forecast of the Ministry of Finance for spring 2016 and the most recent known growth expectations of the other institutions that prepare economic forecasts are indicated below. As these forecasts are compared, it must be kept in mind that they were made at different times and thus on the basis of different information, which is the cause of the differences in the assumptions and results of the forecast. Earlier forecasts must be regarded in light of the assumptions that prevailed at the time they were prepared, as the external environment (uncertainty, commodity prices, the exchange rate of euro) can change.

In the past six months, the economic growth expectations of various forecasters for the year 2016 have remained in the range of 2–2.5%. The discrepancy between the forecasts is partly due to the extent to which the forecasts take into account the cooling of the global economy that happened in the past few months. The spring forecast of the Ministry of Finance for this year is conservative, remaining at the lower end of the range of growth expectations.

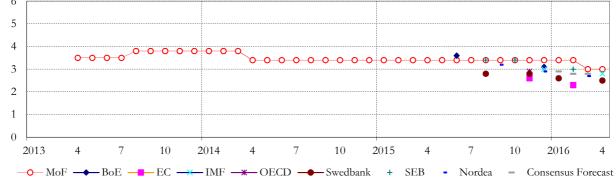
The institutions are expecting the economic growth to speed up in 2017, supported by foreign demand and the growth of investments becoming restored. Forecasts vary around 2.5-3% with a few exceptions, yet there is a general direction towards declining growth expectations. The reason for that is the probably already happened slowdown of Estonian economic growth, due to which our overall economic growth potential has been adjusted downwards. The Ministry of Finance expects the economic growth to pick up to 3% in 2017, which is broadly comparable with the forecasts of other institutions.

Figure 4. Change in Estonia's economic growth forecast (%)









Sources: Ministry of Finance, Bank of Estonia, European Commission, IMF, OECD, Swedbank, SEB, Nordea, Eastern Europe Consensus Forecasts.

Table 6. Comparison of economic forecasts

	Rea	l GDP growth	ı, %	Nomi	Nominal GDP growth, %				
	2016*	2017*	2018*	2016*	2017*	2018*			
Ministry of Finance	2.0	3.0	3.3	4.1	5.9	6.3			
European Commission	2.1	2.3	_	4.2	5.0	_			
Bank of Estonia	2.2	3.1	-	4.8**	5.6**	-			
IMF	2.2	2.8	3.2	4.9	5.4	6.0			
OECD	2.5	2.9	-	3.9	5.5	-			
SEB	2.4	3.0	_	_	_	_			
Swedbank	2.0	2.5	_	4.4**	5.6**	_			
Nordea	2.0	2.7	_	_	_	_			
Estonian Institute of	2.5	_	_	_	_	_			
Economic Research									
Consensus Forecasts	2.2	2.8	_	_	_	_			

	Consu	mer price ind	lex, %	General government position, % of				
				GDP				
	2016*	2017*	2018*	2016*	2017*	2018*		
Ministry of Finance	0.3 (0.9*)	2.7 (2.9*)	2.9 (3.0*)	-0.4	-0.5	-0.3		
European Commission	1.0*	2.5*	_	0.2	0.1	_		
Bank of Estonia	1.2 (1.5*)	2.9 (3.1*)	_	0.1	0.0	_		
IMF	2.0*	2.9*	2.8*	0.5	0.0	0.0		
OECD	1.3*	2.4*	_	0.4	0.5	_		
SEB	1.3*	2.7*	_	_	_	_		
Swedbank	0.5	2.6	_	-0.3	-0.4	_		
Nordea	0.2	2.6	_	-0.2	-0.1	_		
Estonian Institute of	1.0							
Economic Research	1.0	_	_	_	_	_		
Consensus Forecasts	0.9	2.2	_	_	_	_		

^{*} Harmonised Consumer Price Index (HICP).

Sources:

Ministry of Finance. Economic Forecast. Spring 2016. 05.04.2016.

European Commission. European Economic Forecast. Winter 2016. 04.02.2016.

IMF. World Economic Outlook. April 2016. 13.04.2016.

OECD Economic Outlook. No 98. November 2015, 02.12.2015

Bank of Estonia. Financial policy and economy. Current situation and outlook. 2/2015. 09.12.2015.

Estonian Institute of Economic Research. Quarterly Review of Estonian Economy 1 (196) 2016. 12.04.2016.

SEB. Nordic Outlook. February 2016. 09.02.2016.

Swedbank. Swedbank Economic Outlook. April 2016. 14.04.2016.

Nordea. Nordea Economic Outlook. 07.03.2016. Eastern Europe Consensus Forecasts. 14.03.2016

2.4. Preparation and assessment of the economic forecast

The economic forecast of the Ministry of Finance is prepared by analysts of the Ministry's Fiscal Policy Department, belonging to the Ministry's staff. The objectivity and independence of the forecast is ensured by a transparent forecasting process, involvement of various external forecasters, and ongoing comparison of forecast results. Before finalising the Ministry of Finance's forecast, its main assumptions and results are discussed at a joint seminar with all the most important Estonian forecasters working in the central bank, in commercial banks and in other organisations preparing economic analyses. There are a total of roughly ten organisations

^{**} Calculated on the basis of forecasted nominal GDP volume or the sum of real GDP growth and GDP deflator.

involved in that manner. Moreover, the explanatory memorandum of the Ministry of Finance's forecast includes comparison tables and figures detailing the forecast results of various independent forecasters, making it easy to notice a systematic bias of any forecaster.

At the usual forecast seminar preceding the publication of the economic forecast of the Ministry of Finance, economic experts of other general government and private sector agencies considered the economic forecast of the Ministry of Finance to be realistic.

According to amendments to EU framework for the coordination of economic and budgetary policies of Member States, an independent institution must be established in all Member States to monitor the budgetary policy's compliance to the fiscal rules and to assess the need to apply corrective measures described in the framework if necessary. Estonia's independent Fiscal Council was established under Bank of Estonia in 2014. Pursuant to its articles of association, the Fiscal Council's task is to provide assessments to the Government's macroeconomic and fiscal forecasts, budgetary strategies, and the achievement of the objective set for the general government's structural budgetary position.

The Fiscal Council's opinion dated **19 April 2016** about the economic forecast of the Ministry of Finance from spring 2016 states the following:¹

- The Fiscal Council's assessment is that the amendments made in the spring forecast of the Ministry of Finance compared with earlier forecasts correspond with the forecasts of several other forecasters. The growth of GDP, export and private consumption adjusted down for 2016 reflect adequately the recent changes taken place in Estonian economic environment. The expectations for the economic growth and the price growth of coming years are rather optimistic. According to the forecast of the Ministry of Finance, the nominal growth of GDP will stabilise at 6% and the real growth at 3% in average forecast. To achieve such a growth pace, the import demand of Estonia's main trade partners would have to increase significantly already in this year. It is also pointed out that the assumption of higher growth of foreign demand does correspond to the forecasts of other institutions, but the awaited enlivening of the global economy has been postponed repeatedly during the last couple of years.
- The Fiscal Council opines that in terms of the forecast of tax revenue, an under-receipt is more probable than an over-receipt. First, the expected restoration of foreign demand may not lead to higher tax revenue immediately. Second, the tax revenue collection in 2015 was supported by the taking of higher than average dividends in the private sector, and this is considered to continue in forecasts as well, regardless of the expected growth of investment activity. Therefore, the Fiscal Council considers that the Government should take into account the possibility of a slower growth of the tax revenue when planning the medium-term expenditure increase and the general government's budgetary position.
- O The Fiscal Council assesses it to be positive that the methodology of assessing the potential GDP level, used in the Ministry of Finance, has been brought closer to that of European Commission. According to the updated assessment, the potential GDP has been adjusted down both in retrospect and in forecast. The Fiscal Council assesses this to be a step in the right direction. With the negative developments having affected Estonian economy in the past couple of years, it is difficult to foresee the extent to which their effect is temporary or permanent. Therefore, the risk persists that the level of potential GDP for 2016 and 2017 is still overstated.
- Given this, the Fiscal Council recommends that the Government set the target of a small surplus in the structural budgetary position for all the years of the forecast period.

1 Read more on the Fiscal Council's website: http://eelarvenoukogu.ee/files/Opinion%20Spring%20Forecast%202016.pdf .

Ministry of Finance of Estonia

2.5. Macroeconomic policy in coming years

2.5.1. Guaranteeing macroeconomic stability

The primary objective of the macroeconomic policy of the Government of the Republic is to ensure macroeconomic stability, and internal and external balance. The imbalances and risks that appeared during the rapid potential-exceeding growth in the years preceding the economic crisis decreased quickly after the economic cycle turned. The focus of economic policy in the coming years should be on reducing the possibility of similar risks occurring in the new growth phase whilst increasing competitiveness at the same time. However, the risks of a credit-based and excessively fast economic growth are minimal in the medium term.

The economy of Estonia showed remarkable flexibility in both the private and public sectors during the recession. During the recession, the Government kept the budget deficit within the limits determined in the Treaty on European Union, giving the state a great starting position after the recovery of economic growth, as the general government debt did not increase significantly as a result of the crisis and most of the measures taken to improve the budget position have long-term impact.

In 2015, the general government's budgetary position was in a surplus of 0.4% of GDP, mainly thanks to better than expected tax revenue, primarily as corporate and personal income tax and social tax, and to lower than expected investments. All general government levels were in surplus. The position is expected to fall into deficit in 2016, while still remaining structurally in surplus. The structural position of the general government has been in surplus since the year 2009.

The changeover to the single European currency, the euro, and joining the eurozone on 1 January 2011 had a significant role in helping us overcome the crisis successfully. Irrespective of the turbulence in global developments, the single currency has increased confidence in Estonian economy and created good conditions for growth in the future. The continuing conservative stance in budgeting will provide a good basis on which to increase the confidence of economic agents also in the future. Its positive impact can be seen in economic developments after overcoming the crisis.

The economic policy of Estonia as a small and open economy is aimed at flexibility and adaptability. The Government intends to maintain the relatively low extent to which it currently interferes with economy also in the medium term and its goals are to create conditions for the development of the private sector and thereby stabilise economic development by keeping the budget in a structural surplus.

2.5.2. External and internal imbalances of economy

The external and internal imbalances of Estonian economy that appeared before the previous crisis have decreased significantly. Nevertheless, the latest scoreboard indicator table of macroeconomic imbalances indicated the possibility of new imbalances appearing, which is why European Commission prepared an in-depth analysis of Estonia, looking at the causes of the fast growth of labour costs and property prices. As a result of the analysis, the Commission found

that Estonia has no significant macroeconomic imbalances.² The increase of labour costs may decrease the competitiveness of enterprises, but its effect is presumed to decline with the increase of productivity and the slowing of the growth of real salaries. Property prices have gone up a lot, but it has been in line with the income growth and any further pressures will be alleviated by the increase of supply.

The current account deficit, which deepened to 16% (of GDP) during the years of fast economic growth, decreased rapidly in the economic recession and by the year 2009 the current account reached a surplus of 2.5%. This was backed by a significantly faster decrease of import than export, resulting from a sharp decline of consumption and investment activity. Due to low investments, the current account has remained in modest surplus in 2014-2015. Supported by the quickening of export, enterprises will incur a higher need to increase their production volumes, leading to increased investments which, according to the forecast, will reduce the current account surplus and its balance will be practically zero by the end of the forecast period, remaining within the sustainability threshold for Estonia as assessed by Bank of Estonia.3

The debt burden of the private sector in Estonia at the start of the 2000s was almost twice below the EU average and according to unconsolidated data amounted to 67% of GDP, and loans taken from commercial banks comprised approximately one half of this. Households were the ones that were prepared to increase their debt burden as a result of the activation of the property sector and raising confidence created by the accession to the EU, and they used the money to improve their living conditions and to increase the level of general consumption. The increase in the debt burden was supported by the credit policy and low interest rates of commercial banks. This caused a sudden increase in the debt burden of households. The debt burden of the private sector in Estonia has been higher than the eurozone average since 2006 (as % of GDP). The loan burden of the private sector started to decrease in early 2009 and that trend was reversed only at the middle of 2012 when the business sector's loan balance started to increase again, compared to the month before. The loan balance of private borrowers turned to an increase compared to the month before as soon as in spring 2013, backed by the already-growing lease balance and an increase of mortgages. In 2014-2015, the growth of the private sector's loan balance has gradually quickened, remaining in the range of 3-4%. In the first months of 2016, the growth of the private sector's loan balance has sped up to 6%, mainly due to the growth of the debt burden of enterprises oriented mostly towards domestic demand (property and trade). Also, the volume of car leases has quickly increased in the recent months. Still, the debt burden will probably remain low in the next couple of years and regardless of low interest rates, the occurrence of a new loan boom is not likely as of now, due to there being modest demand only.

The active offering of loan funds created the conditions for the property market to overheat from 2005 to 2007. Average transaction prices at the height of the property boom exceeded the price level of 2002 by more than three times. The trend on the property market changed in the middle of 2007: demand fell and pushed the market into a decline by the end of 2007. The global financial crisis that started in autumn 2008 deepened the decline even further. In March 2016, the weighted average price for a square metre of apartment ownership transactions in the biggest cities of Estonia was about one tenth lower than the previous peak4. Over the same course of time, consumer prices have increased by 27%, meaning an even lower level of the real price of dwellings when compared to eight years ago; as a result, the property purchasing power of the residents of major cities is at its historical speak⁵. Regardless of a modest loan growth, the

² European Commission, 2016. 2016 European Semester: Assessment of progress on structural reforms, prevention and correction of macroeconomic imbalances, and results of in-depth reviews under Regulation (EU) No 1176/2011. Strasbourg, 8.3.2016 COM(2016) 95 final.

³ Estonian Competitiveness Overview 2013, Bank of Estonia. [http://www.eestipank.ee/publikatsioon/eestikonkurentsivoime-ulevaade/2013/eesti-konkurentsivoime-ulevaade-2013].

⁴ http://www.pindi.ee/wp-content/uploads/2016/04/Turuylevaade_2016_03.pdf.

⁵ Real estate purchasing power by credit capacity calculated on the basis of salary (Pindi).

deflated house price index used as an indicator of internal macroeconomic imbalances grew to 12.8% in 2014, significantly exceeding the reference value. The development of property prices has corresponded to the growth of income, incl. wage income. Considering the real price of dwellings, which is still historically relatively low, as well as the very modest loan growth, the housing market cannot be said to have overheated again. The fast price increase was probably caused by low supply compared to demand but the latest building permit data and the increase of the number of dwellings permitted into use indicate an alleviation of supply problems.

Nominal unit labour costs⁶ increased consistently during the boom, when the average wages increased extremely rapidly and exceeded productivity. However, nominal unit labour costs increasing 4-5% may be considered acceptable for Estonian economy, as it does not suggest a decrease in competitiveness or emergence of an imbalance. The change in the real unit labour costs7 was close to zero until 2006, which suggested that the ratio of wage costs to GDP was stable and labour costs could be increased without damage to competitiveness. The labour market overheated from 2007 and 2008 as a result of excessive internal demand, which was followed by a strong correction whereby the salary increase turned to a decrease (-4.6% in 2009), unemployment increased and employment started to drop. The imbalance on the labour market created by the boom started decreasing fast during the crisis, which is also evidenced by the decrease in the nominal unit labour costs. After 2013, the growth of nominal unit labour costs quickened and the rate of change over three years used as a reference was 13% by 2014 and 15.7% by 2015, exceeding the threshold value of 12%. This stems from a fast growth of wages and employment, which have already exceeded the growth of operating surplus (profits) for three years according to the national accounts data. In 2015, the growth of unit labour cost was amplified by the sharp decrease of economic growth due to weak foreign demand, yet the labour market has not reacted to that as of now. The growth of official wage income was increased by excellent work done by the Tax and Customs Board in reducing the shadow economy, incl. by implementing the Employment Register in the middle of 2014, reducing the number of undeclared work.

The economy policy of the Government is aimed at promoting economic growth via supply-side factors within the context of a generally liberal economic policy. Promoting free competition and efficiently functioning markets also make it possible to reduce the probability of imbalances. The functioning of the labour market is supported by the Employment Contracts Act that has already been implemented and the expansion of the role of active labour market policy measures, which are aimed at reducing long-term unemployment by using in-service training and retraining for improving the qualification of the workforce and paying more attention to the needs of the labour market in designing the education policy.

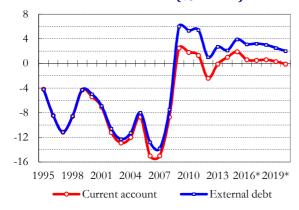
The Government and Bank of Estonia are constantly monitoring the situation and taking care to ensure macroeconomic stability. Additional measures will be applied if necessary.

⁶ Ratio of labour costs to value added created per employee.

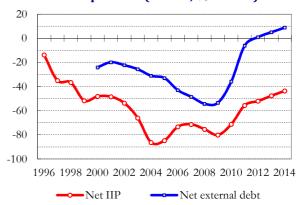
⁷ Ratio of labour costs to value added created.

Figure 5. Selected indicators from economic developments

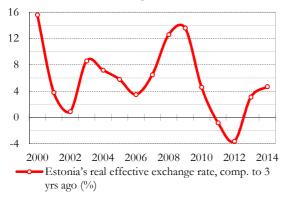
A. Current account balance (% of GDP)



B. Investment position (net IIP, % of GDP)



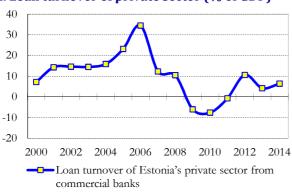
C. Real effective exchange rate⁸



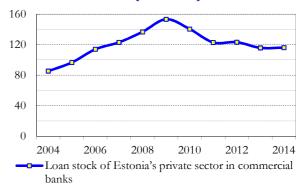
D. Share in world exports (%)



E. Loan turnover of private sector (% of GDP)



F. Private sector debt (% of GDP)

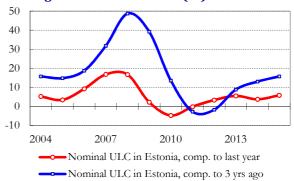


 $^{^8}$ Eurozone's HCI: Harmonised competitiveness indicators based on consumer price indices, vis-à-vis EER-42 group of trading partners.

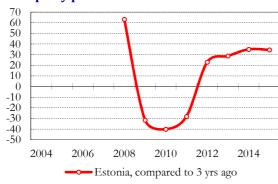
G. General government debt (% of GDP)



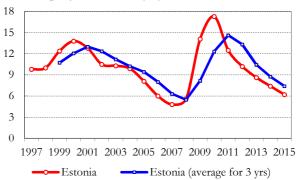
H. Change in unit labour costs (%)



I. Property prices



J. Unemployment rate (%)



Source: Ministry of Finance, Statistics Estonia, Bank of Estonia, European Central Bank, Eurostat, European Commission.

3. FISCAL FRAMEWORK

In March 2014, the new State Budget Base Act entered into force, with the purpose of establishing legal bases and principal requirements to ensure long-term economic and fiscal sustainability of Estonia. Simultaneously, the Council Directive 2011/85/EU on requirements for budgetary frameworks of the Member States was transposed into the national law. The Act established **budgetary position rules**, pursuant to which the state budget must be prepared so that the general government's **structural budgetary position would be at least balanced**. Requirements were prescribed for central government legal entities concerning their net debt burden and results of principal activities, in order to facilitate the achievement of structural balance of the general government⁹. In the next four years, the budget strategy is followed, continuing with a conservative fiscal policy compliant to the base act and planning the budgetary expenses according to possibilities.

3.1. Objectives of the fiscal policy of the Government of the Republic

The Government's objective is to guarantee a **sustainable budget policy that balances macroeconomy.** The goal is to make budget policy decisions that support maximum macroeconomic stability, manage the risks that threaten the balanced development of economy, and improve the economy's growth potential and increase employment. The **existence of adequate reserves** and **flexibility in the budget** for making changes in the structure of revenue and expenditure must be guaranteed in order to cope with future economic downturns.

Budget policy decisions are made **simultaneously** (i.e. only in the budget (strategy) process), decisions are **sustainable** (the long-term impact of the decisions is considered) and take account of area policies and the activities of the other levels of the government sector as much as possible; and all **sources of financing** (European Union grants, proceeds from sales of greenhouse gas emission quotas, etc. in addition to tax revenue) are **uniformly regarded.**

3.1.1. Medium-term budgetary objective of the Government

The Government continues with a strict fiscal policy and its **medium-term objective (MTO) is the general government structural surplus.**¹⁰ This objective complies with the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union and the new State Budget Base Act. Planning the budget position with at least balance enables to stimulate the economy at times of low economic growth.

The general government of Estonia has been back in structural surplus in 2009-2011. In the years 2012-2013, it turned to structural deficit caused by nominal deficit amplified by the GDP

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⁹ The general government covers public sector entities considered non-market producers and financed mainly via mandatory payments made by entities belonging to other sectors. General government is divided into three subsectors:

¹⁾ central government – institutions on state budget, and foundations, legal persons under the public law and companies founded by the state;

²⁾ local governments – institutions at the level of municipalities;

³⁾ social security funds – the Health Insurance Fund and the Unemployment Insurance Fund.

 $^{^{10}}$ The surplus target was set in Convergence Programme 2007. The Convergence Programmes of 2005 and 2006 set the objective to achieve a balanced budget.

volume increasing beyond capacity (i.e. a positive output gap). In 2014-2015, a structural surplus was achieved again with the help of a nominal surplus. The structural surplus is forecasted to be retained in 2016 as well, albeit in smaller extent. The next year's target is set to be the retaining of a 0.2% structural surplus and then structural budgetary balance until 2020. The Fiscal Council has recommended setting a slight surplus as the target for the structural budgetary position.

If the objectives are achieved, the general government's nominal budget will be nearly balanced (a deficit of 0.1% of GDP) in 2019 and in surplus (0.1% of GDP) in 2020, which will make it possible to restore the reserves that had decreased during the recession. No positive supplementary budgets will be prepared during the fiscal year and any extra tax revenue received in the budget will be placed into the reserves.

3.1.2. Medium-term tax burden objective of the Government

The Government's objective is to retain the tax burden at the level of 2015 (about 33.5% of GDP) and to reduce labour-related taxes.

In 2016, the excise duties of alcohol, tobacco and fuels as well as the basic tax-free allowance and the additional tax-free allowance of pensions were increased. Technically, in the period of 2014– 2017, increased state contributions into the mandatory funded pension for those who continued their own contributions will have an alleviating effect on the tax burden. Starting with 2017, the tax returns of low-income persons will be deducted from their personal income tax. In 2017-2020, an increase of the excise duties of alcohol, tobacco and fuels, the increase of value added tax rate from 9% to 14% for accommodation services, as well as the establishment of road use tax for heavy vehicles, planned changes in package excise, and changes in the taxation principles of foreign business travel pay will increase the tax burden. The tax burden will be reduced by the decrease of social tax rate to 32%, the increase of basic tax-free allowance to 205 euros per month, the increase of the additional tax-free allowance of pensions to 271 euros per month by 2020, the tax benefit of expenses related to health and sports (2018), and the increase of the value added tax payer's registration threshold to 40,000 euros (2018). In summary, the tax burden will remain at a level comparable with that of the year 2015, reaching 33.4% of GDP by **2020**. The future developments are discussed in detail in the chapter on tax policy and tax burden.

The Government's objective is to maintain the implicit tax rate on labour at the level of 2015 (about 34%).

The implicit tax rate on labour in 2016 is 34.2%. Higher contributions to the mandatory funded pension (2+6 and 3+6 contributions) will affect the indicator in 2014–2017. The implicit tax rate on labour will be reduced by a decrease of social tax rate (2017, 2018), by changes in the taxation principles of foreign business travel pay (2017), by an increase of basic exemption (2017-2019), by tax returns for person with low salary (2017-2020), and the indicator will remain at a level comparable with 2016 i.e. 34.3% **in 2020**.

3.2. Budgetary position of the general government

3.2.1. Nominal position of general government budget

In 2015, the general government's budget remained in surplus, making up 0.4% of GDP i.e. 91 million euros according to the initial data of Statistics Estonia. All government levels were in surplus – the central government and social security funds by 0.1% of GDP and local governments by 0.2% of GDP. The surplus of both the central government and local governments was achieved due to better than forecasted tax receipts, primarily in the part of corporate income tax and personal income tax, social tax, and lower than expected investments. The central government's surplus was also increased by lower than planned pension expenses. The result of social security funds was better than expected mainly due to less than forecasted funds being spent on active labour market measures. The general government's budgetary position of last year was in surplus by 1% of GDP.

The nominal structural deficit of 2016 is forecasted to be 0.4% of GDP. The main sector causing that deficit is general government, but local governments are also forecasted to remain in deficit for the entire forecast period. The nominal deficit of the central government is caused by lower dividend revenue and environmental charges due to difficulties in the oil shale sector. The deficit is reduced by the lowering of the forecast of pension expenditure and by a higher growth of tax revenue due to better receipt of direct taxes. Thanks to the Unemployment Insurance Fund, the social security funds continue to be in surplus (0.1% of GDP in 2016). In 2017, the general government's budgetary position will improve somewhat compared with the spring forecast, due to the revenue and expenditure measures approved in the Government of the Republic, but the deficit will still remain at the level of 0.5% of GDP. Those measures will have a positive effect on the position of the state budget; the rest of the government levels will remain at the spring forecast's level. In 2018, the general government's budgetary deficit is expected to decrease to 0.2% of GDP and the improvement of the nominal budgetary position will continue in 2019 and 2020.

Table 7. Budgetary position objective of the general government for 2015–2020

	2015	2016	2017	2018	2019	2020
Structurally adjusted budgetary position of general government (% of GDP)	1.0	0.3	0.2	0.0	0.0	0.0
Budgetary position of general government (% of GDP)	0.4	-0.4	-0.5	-0.2	-0.1	0.1
State budget	0.1*	-0.2	0.1	-0.4	0.0	0.1
Other central government		-0.1	-0.3	0.3	0.0	0.1
Social security funds	0.1	0.1	0.1	0.1	0.1	0.1
Local governments	0.2	-0.2	-0.3	-0.2	-0.2	-0.2
Budgetary position of general government (m EUR)	91	-81	-105	-51	-19	18
State budget	21*	-44	15	-104	4	17
Other central government		-27	-66	72	-5	18
Social security funds	24	29	23	22	25	27
Local governments	46	-38	-79	-41	-42	-43

^{*} The central government's position. Statistics Estonia publishes data by the central government's, social security funds' and local governments' level.

Source: Statistics Estonia, Ministry of Finance.

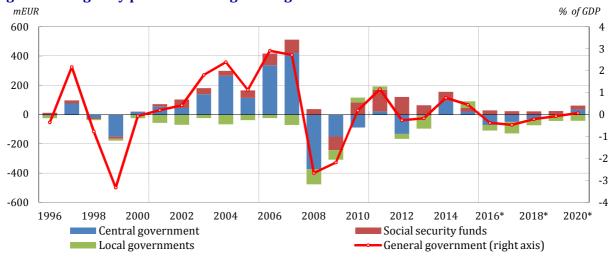


Figure 6. Budgetary position of the general government

Source: Statistics Estonia, Ministry of Finance.

The general government covers public sector entities that are financed mainly via mandatory payments made by entities belonging to other sectors, and whose main activity is the redistribution of national income (so-called non-market producers). The general government in Estonia consists of three sectors: the central government, local governments and social security funds.

Central government

The biggest part of the central government, which comprises about three-fourths of the general government, is agencies financed from the state budget (constitutional institutions and ministries with their areas of government). The central government also includes foundations established by the state (hospitals and the Environmental Investment Centre have the biggest impact), companies that mainly provide services to the state (e.g. AS Riigi Kinnisvara) and institutions governed by the public law (e.g. universities, Estonian Public Broadcasting).

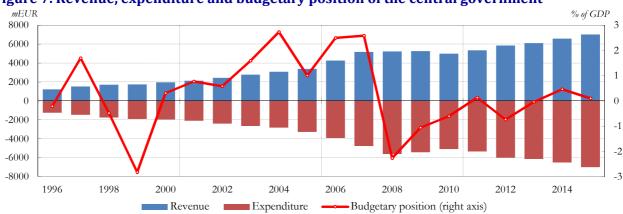


Figure 7. Revenue, expenditure and budgetary position of the central government

Source: Statistics Estonia.

The tax revenue of the state budget, which is the most sensitive to economic development, comprises the biggest part of the central government's revenue. This is why the biggest part of the budget deficit is coming from the state budget when the economic cycle is in a phase of decline. Therefore, the state budget contributed the most to the budgetary surplus during the pre-crisis years. Non-tax revenue, which mainly consists of external support received from the European Union, also comprises a large part of the central government's revenue in addition to tax revenue.

The majority of the central government's expenditure consists of state budget expenditure, about one-third¹¹ of which are social security expenses (incl. state pension insurance). These expenses are followed by expenditure on economy (incl. agriculture and road construction) and health (allocation to the Estonian Health Insurance Fund).

The budgetary position of other central government is the aggregate amount of foundations, commercial undertakings and agencies governed by the public law. Large investments that exceed the revenue of the current year are one of the main factors that influence the budgetary position. The impact on the budgetary position is negative irrespective of whether they are financed from the reserves collected in previous years or with loans.

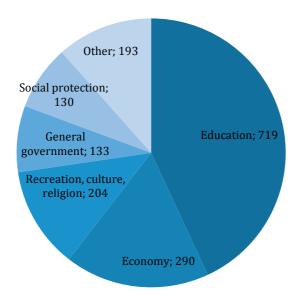
Local governments

Local governments (a total of 213) have an important role in the performance of public sector functions. They all perform the same functions irrespective of their size. General governance includes the upkeep costs of city governments and rural municipality governments and councils. Economic expenses (incl. housing and utilities) consist mainly of public transport within the rural municipality or city, road or street maintenance in the rural municipality or city, water supply organisation and street lighting. Social protection means upkeep of care homes, provision of social aid and welfare services and providing social protection for families. Upkeep of schools and kindergartens belongs to the area of education. Recreation, culture and religion include upkeep of hobby schools, cultural centres, libraries, museums and sports facilities and also youth work. Other areas make up a smaller part of a local government's expenditure which includes such activities as e.g. cleaning and organisation of waste management and effluent treatment. The total volume of those expenses on unconsolidated cash basis was 1,670 m EUR in 2015 (incl. 114 m EUR of liabilities). 67% of this was comprised of personnel and management expenditure.

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¹¹ Based on State Budget 2016.

Figure 8. Breakdown of expenses related to the main activities and investments of local governments in 2015, by areas of activity (m EUR)



Source: Ministry of Finance.

The budgets of local governments are independent, which means that they are responsible for preparing their budgets. The common purpose of tax revenue carried forward from the state budget (income tax and land tax) as well as the equalisation fund and the support fund is to ensure that local governments have sufficient funds to make independent decisions on local matters on the basis of laws. The equalisation fund is intended to equalise their budgetary possibilities. The support fund consists of various types of supports for different fields, making it possible to make labour expenses for teachers, ensure school lunches, pay subsistence allowances and needs-based family allowances, and maintain local roads. Local governments can also apply for project based support from several measures. Other own revenue of local governments include mainly receipts of land tax and environmental fees or revenue sales of goods and services.

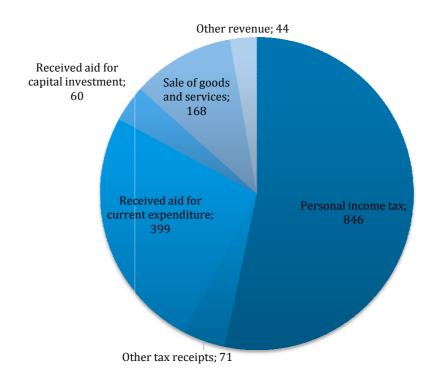


Figure 9. Breakdown of revenue of local governments in 2015 (m EUR)

Source: Ministry of Finance.

Local governments undertook an obligation to prepare a budget strategy for 2016–2019 by November 2015. The strategy has remained conservative when planning revenue and expenditure. For example, the assumed income tax receipt for the period is 95 m EUR less than the Ministry of Finance's forecast. Labour costs are planned to be increased by an average of 3% per annum, which is significantly below the forecasted growth of the country's average wage growth (an average of 5% per annum). The estimated increase of management expenditure is on average 1% per annum. It can be expected that these expenses will be adjusted upwards on-thego, due to wage increase and inflation pressure. Careful approach has also been used when planning investments for 2016–2019. On average, 160 m EUR of own funds per year are planned to be used; this is 12 m EUR more than in the period of 2012–2015. Surplus is planned to be attained starting with 2018, as a result of conservative planning. This provides a reserve for increasing their expenditure in the relevant budget year.

The breakdown of expenditure by areas of activity is mainly affected by changes in investments.

Table 8. Breakdown of expenditure of local governments (except funding transactions), by areas of activity¹², according to the budget strategies of local governments (m EUR)

Area of activity	2014	2015	2016*	2017*	2018*	2019*
01 General public services	137	139	150	152	154	157
02 National defence	0	0	0	0	0	0
03 Public order and security	5	5	5	5	6	6
04 Economy	237	224	319	310	272	260
05 Environment protection	52	52	57	54	54	56
06 Housing and utilities	83	77	83	91	93	88
07 Health care	12	16	17	20	15	15
08 Recreation, culture and religion	208	205	208	221	215	210
09 Education	664	721	755	771	766	772
10 Social protection	123	130	137	144	148	152
TOTAL	1,520	1,569	1,732	1,768	1,724	1,716

Source: Ministry of Finance.

The surplus of local governments and their dependant entities on accrual basis reached 38 m EUR in 2015. The surplus was mainly caused by the local governments refraining from investment decisions until the activities to be supported in the new period become clear. The Ministry of Finance forecasts that they will remain in deficit in the future, due to increased investment activity. Obligations will be increased to cover this.

The budgets of local governments and their fulfilment of those budgets can be monitored from data presented in the public money application.¹³

Table 9. Aggregate indicators of local governments, Ministry of Finance's forecast (m EUR)

Revenue and balance	2015	2016*	2017*	2018*	2019*	2020*
Revenue	1,598	1,646	1,711	1,801	1,877	1,940
- Income tax	853	889	931	986	1,043	1,100
- Land tax	58	59	59	59	59	59
- Equalisation fund	75	76	76	76	76	76
- Support fund	273	298	295	297	295	293
Budgetary position	38	-38	-79	-41	-42	-43
Budgetary position (% of	0.2%	-0.2%	-0.3%	-0.2%	-0.2%	-0.2%
GDP)						

Source: Ministry of Finance.

Social security funds

Estonian Health Insurance Fund providing health insurance and the Unemployment Insurance Fund providing unemployment insurance belong to the sector of social security funds. In Estonia, the national pension insurance system belongs to the central government.

¹³ http://riigiraha.fin.ee

¹² The classifier division fixed by State accounting general rules which are based on COFOG.

Table 10. Budgetary position forecast of social security funds for 2015–2020

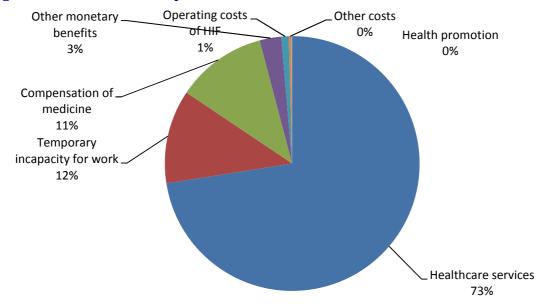
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	2015	Budget for 2016	2016*	2017*	2018*	2019*	2020*						
Social security funds (m EUR)	24	31	29	23	22	25	27						
Social security funds (% of GDP)	0.1	0.1	0.1	0.1	0.1	0.1	0.1						

* forecas

Source: Ministry of Finance.

The health insurance part of social tax comprises about 99% of the revenue of **Estonian Health Insurance Fund**. Health services (prevention of diseases, primary and specialised medical care, nursing care and dental treatment) constitute the dominating part of the benefits guaranteed to insured persons. These services are followed by compensation for medicines and benefits for temporary incapacity for work.

Figure 10. Breakdown of expenditure of Estonian Health Insurance Fund in 2015



Source: Estonian Health Insurance Fund.

In 2015, the budgetary position of Estonian Health Insurance Fund fared poorer than expected, due to expenditure (mainly expenditure on temporary incapacity for work) being higher than forecasted (deficit of 18 m EUR). A surplus of 1 m EUR is expected this year. The highest increase in 2016, yet still somewhat lower than the growth speed of total expenditure, will happen in expenditure on specialised medical care; this is also the largest type of expenditure. All other expenditure on healthcare services (prevention, general medical care, nursing, dental care) will increase faster than total expenditure. Expenditure on temporary incapacity for work will increase slower than other expenses. A nearly balanced budgetary position is expected in 2017–2020, reaching 5 m EUR of deficit by 2020. The forecast is based on the target position set out in the State Budget Act. The forecast also takes into account the reduction of social tax rate to 32.5% starting with 01.01.2017 and to 32% starting with 01.01.2018, which will be fully covered for Estonian Health Insurance Fund from the state budget.

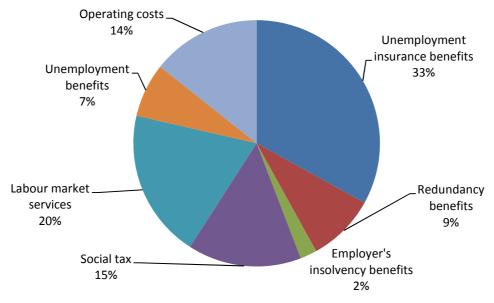
Table 11. Aggregate indicators of Estonian Health Insurance Fund, 2012-2020 (m EUR)**

							,		
	2012	2013	2014	2015	2016*	2017*	2018*	2019*	2020*
Total revenue	781.9	836.9	900.2	964.4	1,013.3	1,073.2	1,148.6	1,216.8	1,286.6
incl. social tax	776.9	829.7	893.8	958.6	1,007.1	1,024.1	1,052.1	1,114.3	1,177.8
incl. an allotment from						41.0	87.7	92.9	98.2
the state budget to cover									
the reduction in social tax									
revenue									
Total expenditure	780.9	838.4	916.7	982.9	1,012.5	1,074.4	1,149.2	1,217.0	1,291.1
Budgetary position	1.9	0.8	-16.5	-17.3	0.8	-1.2	-0.6	-0.2	-4.5
Budgetary position	0.0	0.0	-0.1	-0.1	0.0	-0.0	-0.0	-0.0	-0.0
(% of GDP)									

^{*} forecast

Unemployment insurance benefits comprise the biggest part of the expenditure of the **Unemployment Insurance Fund.** In 2015, the number of persons receiving the benefit decreased almost threefold compared to 2009 when the number of such persons was the highest. Yet, the decrease of unemployment has stopped and both the number of recipients of the benefits and the total number of unemployed persons will remain stable throughout the budget strategy's period. Still, the volume of expenditure is expected to grow because the payout amounts are related to wages, which will increase during the forecast period.

Figure 11. Breakdown of expenditure of Estonian Unemployment Insurance Fund, 2015



Source: Unemployment Insurance Fund.

The surplus of the Unemployment Insurance Fund in 2015 was 44 m EUR, which is significantly less than the surplus of 2014. The reason is the reduction in the unemployment insurance premium rate from 3% to 2.4% and an increase of expenditure. The expected surplus of 2016 is 29 m EUR. Similar to the previous year, the expenditure on active labour market measures will also be covered from unemployment insurance premiums in this year and the coming years. Also, the work capacity reform is expected to entail additional costs. The expected surplus of the Unemployment Insurance Fund will remain stable near the current level in the coming years.

^{**} Budgetary position in 2012-2015 according to data from the Ministry of Finance. Expenditure in 2016-2019 according to the position set out in the State Budget Act and the social tax receipt forecast of the Ministry of Finance. Expenditure of 2020 according to the forecast of the Ministry of Finance. Forecast of revenues in 2016-2020 according to the Ministry of Finance's spring 2015 economic forecast.

Table 12. Aggregate indicators of the Unemployment Insurance Fund, 2012-2020 (EUR million)***

	2012	2013	2014	2015	2016*	2017*	2018*	2019*	2020*
Total revenue	249.3	184.8	197.2	173.3	205.3	323.7	455.3	548.1	608.4
- unemployment insurance premiums	211.0	167.2	174.6	149.8	159.0	168.2	179.2	188.2	199.2
Total expenditure	126.5	126.7	116.0	131.2	177.3	299.1	432.0	523.6	577.4
- benefits**	48.7	54.4	50.4	57.9	67.8	66.8	69.5	73.7	76.9
Budgetary position	118.6	63.2	81.2	43.9	28.0	24.8	23.5	24.8	31.2
Budgetary position (% of GDP)	0.7	0.3	0.4	0.2	0.1	0.1	0.1	0.1	0.1

^{*} forecast

3.2.2. Cyclically adjusted position of general government budget

The methodology used by the Ministry of Finance to estimate the maximum possible gross domestic product (or the potential GDP¹⁴) is the production function method. Due to the development of methodologies to assess the potential growth and output gap¹⁵, we adopted the so called commonly agreed methodology between European Commission and EU Member States¹⁶, starting with this forecast. Compared with the previous method, additional information about capacity utilisation is used when assessing the cyclical component of total factor productivity; this enables to provide more reliable assessments to the economic cycle's developments that took place in the last couple of years.

According to assessments, before the economic crisis the GDP of Estonia increased considerably faster than it should have, considering the resources existing in economy at the time, which created significant imbalances. The economic growth that could be considered manageable for the economy of Estonia before the crisis was about 6%, but it actually reached 10% at times. The growth was based on the rapid inflow of foreign funds as well as the overall optimism of local economic agents, which made domestic demand considerably bigger than total production and income. This excessive demand resulted in a scale of the economy that was up to 15% larger than usual (i.e. a positive output gap) in 2007, which was accompanied by accelerating inflation, a strong deterioration of the trade balance and tension from the excessively intense and inefficient use of resources in the economy, which brought along an increase in their prices.

Demand for consumer and investment goods decreased sharply as the uncertainty that started to appear at the height of the boom continued to increase. The global financial crisis that started in autumn 2008 magnified the economic downturn caused by the cyclical behaviour of the economy even further. Global demand also decreased considerably as a result of the financial crisis and caused the scale of foreign trade to decrease by up to one third. The negative output gap of Estonia increased to 9% of GDP in 2009 as a result of this. When the cycle turned and

^{**} Unemployment insurance benefit, insurance benefit in case of redundancy and employer's insolvency benefit.

^{***} Budgetary position in 2012-2015 according to data from the Ministry of Finance; revenue and expenditure of the same years according to the annual accounts of the Unemployment Insurance Fund; forecast for 2016-2020 according to the Unemployment Insurance Fund's forecast of expenditure and the Ministry of Finance's forecast of revenue. As the Unemployment Insurance Fund's reports are prepared on cash basis and the Ministry of Finance's data are accrual-based, the difference between revenue and expenditure does not equal the budgetary position in 2012-2015.

¹⁴ Potential GDP –maximum GDP using the existing production input (workforce, capital, productivity/skills) without causing excess pressure for price increase. Potential economic growth –change in potential GDP over time. Depends on changes in production inputs.

¹⁵ Output gap -the difference between actual and potential GDP.

¹⁶ European Commission, 2014. The Production Function Methodology for Calculating Potential Growth Rates & Output Gaps, Economic Papers 535, November 2014.

economy started rapidly recovering from the crisis, the negative output gap started to decrease and closed at the end of 2011. In 2015, Estonian output gap was close to zero, meaning that the economy was functioning at a level near the potential GDP. As this year's forecasted economic growth has slowed down due to poor foreign demand, the GDP level will remain about 1% below the potential GDP, but will start to close again as the economic growth accelerates. The output gap will be near zero again in 2018-2020.

As the global financial crisis and its aftermaths have been considerably more serious than the usual cyclical volatility of the economy and the overall demand environment has not recovered, countries lost some of their production potential in the course of the crisis. The growth potential of the Estonian economy in the next few years will also be nearly two times lower than before the crisis due to the same reasons, remaining near 2.8% in the forecast period.

The estimates¹⁷ of the cyclically adjusted position of Estonia's general government budget found on the basis of the output gap indicate that the fiscal policy of Estonia will be countercyclical in 2015-2017. The fiscal policy of Estonia became stricter in 2015 in the conditions of a GDP level above the potential level and will become more lenient in 2016-2017 when the GDP level will be below the potential level. In the period of 2018-2020, the fiscal policy will be neutral. It should be kept in mind that the impact of a change in the use of external funds must also be assessed in addition to the change in the budgetary position when a final assessment is given to the fiscal policy. Since external funds are neutral with regard to the budgetary position – revenue always equals expenditure –, an increase in the use of funds, for example, is not reflected in changes that occur in the budgetary position. It does, however, provide extra stimulation to economic activities during an economic recess and is a countercyclical political measure in its nature.

Table 13. Cyclically adjusted budgetary position, 2015–2020 (%of GDP)

	2003- 2014	2015	2016*	2017*	2018*	2019*	2020*
1. Real GDP growth (%)	3.4	1.1	2.0	3.0	3.3	3.0	2.8
2. Budgetary position of the general government	-	0.4	-0.4	-0.5	-0.2	-0.1	0.1
3. Interest payments	-	0.1	0.1	0.1	0.1	0.1	0.1
4. Potential real GDP growth (%)	3.2	2.8	3.0	2.7	2.9	2.7	2.7
4.a Contribution of capital to potential growth (%)	2.2	1.0	1.0	1.0	1.1	1.1	1.2
4.b Contribution of labour to potential growth (%)	-0.3	0.6	0.6	0.2	0.2	-0.1	-0.2
4.c Contribution of productivity to potential growth (%)	1.3	1.2	1.4	1.5	1.6	1.7	1.7
5. Output gap	2.9	0.1	-0.9	-0.6	-0.2	0.0	0.2
6. Cyclical budget component	-	0.0	-0.4	-0.3	-0.1	0.0	0.1
7. Cyclically adjusted budgetary position (7)=(2)-(6)	-	0.4	0.0	-0.2	-0.1	-0.1	0.0
8. Cyclically adjusted primary	-						
position $(8)=(7)+(3)$		0.5	0.0	-0.1	0.0	0.0	0.1
9. Fiscal policy position	-	Coun- tercyc.	Coun- tercyc.	Coun- tercyc.	Neutr.	Neutr.	Neutr.

Source: Ministry of Finance, Statistics Estonia

¹⁷ According to the methodology renewed by the European Commission in 2014, the semi-elasticity applied to compute the cyclical component of the budget balance was 0.44 in the case of Estonia (see also http://ec.europa.eu/economy finance/publications/economic paper/2014/ecp536 en.htm).

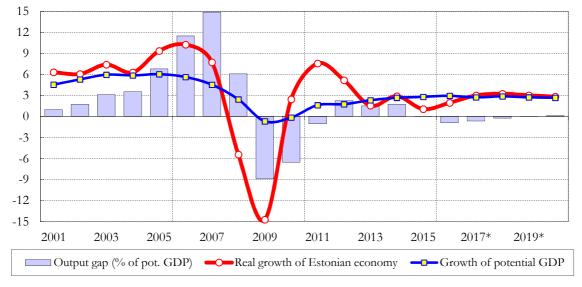


Figure 12. Development of potential GDP and output gap (%)

Source: Ministry of Finance, Statistics Estonia.

3.2.3. Structural position of general government budget

The structural budgetary position of general government is calculated by removing not only the impact of the economic cycle but also one-off and temporary measures, which may distort the budgetary position, from the nominal position. Measures that have a significant impact on the budget but only a temporary and non-recurring significant impact on the cyclically adjusted budgetary position (on the scale of at least 0.1% of GDP) are called one-off and temporary measures. Although general principles have been defined for classifying the impact of a measure as temporary, the consideration of each specific case is decided separately.

The Government's objective is to achieve a structural surplus of 0.2% of GDP in 2017 and structural balance in 2018-2020.

Suspension of funded pension payments in 2009–2011 and a higher contribution rate in 2014–2017

From 1 June 2009 to 31 December 2010, the state contributions to funded pension were suspended. Those who wished could file a petition to continue with their own contributions in 2010. As an exception, people born in 1954 and earlier retained the possibility to continue the contributions from 2010 pursuant to the 2%+4% system in force until then. Starting with 1 January 2012, the contributions to funded pension were restored in full.

Those who **continued** with voluntary contributions in 2010 are automatically subject to the contribution rates of 2%+6% in 2014-2017, where the person pays 2% and the state adds 6%. Such persons are also entitled to file a petition to increase their own contribution from 2% to 3% (in that case the scheme used will be 3%+6%). Those who **did not continue** with voluntary contributions in 2010 had also an opportunity to file a petition to make contributions according to the 3%+6% system in 2014-2017. The expenditure related to restoration of funded pension

contributions and a higher contribution rate in comparison with the previous year are stated in Table 14.

Table 14. Percentages of funded pension contributions, 2010-2018

	1942-1954	1942-1954	1955	1955
	continue	do not continue	continue	do not continue
2010	2+4	0	2+0	0
2011	2+4	1+2	2+2	1+2
2012-2013	2+4	2+4	2+4	2+4
2014-2017	2+4	2+4	2+6	2+4
2014-2017 if so wished	-	3+6	3+6	3+6
2018	2+4	2+4	2+4	2+4

Source: www.pensionikeskus.ee.

Table 15. Additional pension expenditure, 2011-2018 (%of GDP)

	2011	2012	2013	2014*	2015*	2016*	2017*	2018*
Added (incremental) pension expenditure	-0.4	-0.5	-0.1	-0.3	-0.1	-0.1	-0.1	0.0

Source: Ministry of Finance

Revenue from sales of AAUs and investment expenditure related to the revenue

The AAUs are accounted only as those assigned under the Kyoto Climate Treaty, the trading period of which lasted until the end of 2012. Revenue from sales of those AAUs was received in the period of 2010–2013 and investments will be in the period of 2011–2015.

Merger support for local governments

The merging of local governments will be supported by a forecasted total of 65 m EUR in 2017-2019. The expenditure of that administrative reform is temporary, larger-scale and profitable in long term.

Table 16. One-off measures and their impact, 2015–2020 (EUR million)

	2015	2016*	2017*	2018*	2019*	2020*
Revenue from sales of AAUs	-63	-3	-1			
Second pension pillar contributions, 2+6 and 3+6	-55	-59	-63			
Merger support for local governments			-14	-28	-23	
Total, EUR million	-119	-63	-77	-28	-23	0
Total, % of GDP	-0.6	-0.3	-0.3	-0.1	-0.1	0.0

Source: Ministry of Finance.

Table 17. Structurally adjusted budgetary position, 2015–2020 (% of GDP)

	2015	2016*	2017*	2018*	2019*	2020*
1. Cyclically adjusted budgetary position	0.4	0.0	-0.2	-0.1	-0.1	0.0
2. One-off measures	-0.6	-0.3	-0.3	-0.1	-0.1	0.0
3. Structurally adjusted budgetary position						
(3)=(1)-(2)	1.0	0.3	0.2	0.0	0.0	0.0

Source: Ministry of Finance, Statistics Estonia.

3.3. General government revenue and expenditure

Table 18. General government revenue and expenditure, 2015–2020

	2015	2015	2016*	2017*	2018*	2019*	2020*
	m €	% of	% of	% of	% of	% of	% of
		GDP	GDP	GDP	GDP	GDP	GDP
Budgetary positions by general gover							
1. General government	84.1	0.4	-0.4	-0.5	-0.2	-0.1	0.1
2. Central government	14.2	0.1	-0.3	-0.2	-0.1	0.0	0.1
4. Local governments	46.0	0.2	-0.2	-0.3	-0.2	-0.2	-0.2
5. Social security funds	23.9	0.1	0.1	0.1	0.1	0.1	0.1
General government							
6. Total revenue	8,179.7	40.0	40.4	40.2	39.5	39.5	39.0
7. Total expenditure	8,095.6	39.6	40.8	40.7	39.7	39.6	38.9
8. Budgetary position	84.1	0.4	-0.4	-0.5	-0.2	-0.1	0.1
9. Interest expenditure	19.4	0.1	0.1	0.1	0.1	0.1	0.1
10. Primary balance	103.5	0.5	-0.3	-0.4	-0.1	0.0	0.1
11. One-off and temporary measures	-118.5	-0.6	-0.3	-0.3	-0.1	-0.1	0.0
Revenue by components							
12. Tax revenue (12=12a+12b+12c)	4,534.6	22.2	22.7	22.4	22.2	22.4	22.1
12a. Taxes on production and imports	2,927.8	14.3	15.1	15.0	14.9	15.1	14.8
12b. Taxes on income and wealth	1,606.8	7.9	7.6	7.3	7.3	7.3	7.3
12c. Capital taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13. Social security contributions	2,339.1	11.4	11.6	11.3	11.3	11.3	11.3
14. Property income	233.7	1.1	0.9	1.0	0.7	0.6	0.7
15. Other revenue	1,072.3	5.2	5.3	5.6	5.2	5.2	4.9
16.=6. Total revenue	8,179.7	40.0	40.4	40.2	39.5	39.5	39.0
p.m.: Tax burden (D.2 (incl. taxes to the EU)+D.5+D.611+D.91-D.995)	6,858.9	33.5	34.2	33.6	33.5	33.6	33.4
Expenditure by components							
17. Benefits to employees +							
intermediate consumption	3,703.9	18.1	18.1	18.2	17.7	17.9	17.9
17a. Benefits to employees	2,322.1	11.3	11.3	11.2	11.0	10.9	10.9
17b. Intermediate consumption	1,381.8	6.8	6.8	7.0	6.7	7.0	7.0
18. Social transfers (18=18a+18b)	2,723.2	13.3	13.3	13.5	13.6	13.6	13.6
of this, unemployment benefits	73.0	0.4	0.3	0.3	0.3	0.3	0.3
18a. Non-monetary social transfers	379.5	1.9	1.9	1.9	1.9	1.9	1.9
18b. Monetary social transfers	2,343.7	11.5	11.4	11.6	11.7	11.6	11.6
19.=9. Interest expenditure	19.4	0.1	0.1	0.1	0.1	0.1	0.1
20. Subsidies	81.0	0.4	0.4	0.4	0.4	0.4	0.4
21. Gross capital formation	1,090.7	5.3	5.2	5.8	6.2	5.7	4.2
22. Capital transfers	70.1	0.3	0.7	0.7	0.7	0.7	0.7
23. Other expenditure	407.3	2.0	2.9	2.0	1.1	1.3	2.1
24.=7. Total expenditure	8,095.6	39.6	40.8	40.7	39.7	39.6	38.9
p.m. General government	4,072.9						
consumption	,-	19.9	20.2	20.0	19.8	19.6	19.4
•							

^{*} forecast

Source: Ministry of Finance, Statistics Estonia.

Table 19. Impact of fiscal policy decisions on general government revenue and expenditure

	2015 m EUR	2015 % of GDP	2016* % of GDP	2017* % of GDP	2018* % of GDP	2019* % of GDP	2020* % of GDP
General government revenue forecast	8,179.7	40.0	40.4	40.1	39.5	39.7	39.1
Revenue policy measures				0.5	0.3	0.1	0.2
General government expenditure forecast	8,095.6	39.6	40.8	40.7	39.7	39.6	38.9

Source: Ministry of Finance, Statistics Estonia.

Table 20 includes the revenue and expenditure forecast by the Ministry of Finance for spring 2016 and Table 19 includes the scope of the revenue policy measures required for the achievement of the objectives given in the Stability Programme.

Table 20. Revenue and expenditure according to the Ministry of Finance forecast of spring 2016, without budget policy decisions

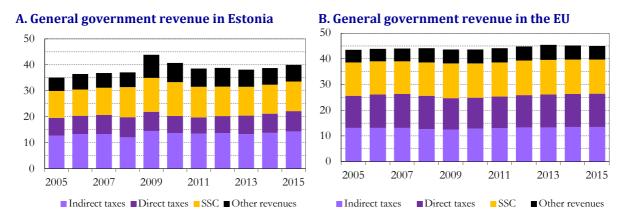
	2015	2015	2016*	2017*	2018*	2019*	2020*
	m EUR	% of GDP					
General government revenue forecast	8,179.7,	40.0	40.4	39.7	39.2	39.4	38.8
General government expenditure forecast	8,095.6,	39.6	40.8	40.2	39.6	38.8	38.1

Source: Ministry of Finance, Statistics Estonia.

3.3.1. Structure of general government revenue

In 2014, general government revenue increased the most as a result of an increase in direct taxes, primarily the financial sector's extraordinary dividend payment, which increased the receipt of corporate income tax. The receipt of personal income tax paid to the state budget declined due to the decrease of the tax rate. Indirect taxes also grew faster than average, primarily as value added tax (less fraud due to the implementation of the turnover declaration's annex) and fuel excise (due to an increase of excise rates). The proportion of social security contributions grew to 11.4% of GDP, regardless of decreasing the rate of unemployment insurance contributions. The reason for the growth was the faster than average increase of social tax receipts, primarily due to salary growth. Other revenue decreased due to a decline in external support; in summary, the ratio of revenue to GDP increased by 1.3%.

Figure 13. General government revenue and its structure (% of GDP)



Source: Eurostat, Statistics Estonia.

3.3.2. Future developments in tax policy and the tax burden

One of the tax policy goals of the Government is to shift the tax burden from the taxation of income to the taxation of consumption, use of natural resources and pollution of the environment, by partial reorientation of taxes. At the same time, the system will be kept **stable**, **simple and transparent** with as few exceptions and special cases as possible.

The Government's goal is to maintain the tax burden at the 2015 level (about 33.5% of GDP) by reducing labour-related taxes.

According to Eurostat, the tax burden in Estonia in 2014 was 32.2% of GDP, which is one of the lowest among all EU Member States (see Figure 14). Of Central and East European countries, Czech Republic, Croatia, Slovenia and Hungary have a bigger tax burden than Estonia.

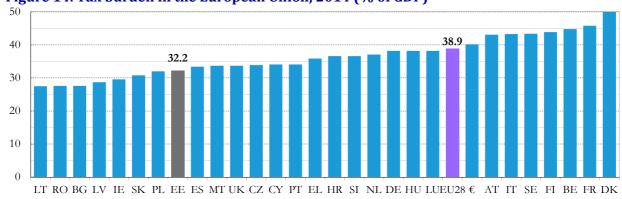


Figure 14. Tax burden in the European Union, 2014 (% of GDP)

Source: Eurostat.

In 2016, the excise duties of alcohol, tobacco and fuels as well as the basic tax-free allowance and the additional tax-free allowance of pensions were increased. Technically, in the period of 2014–2017, increased state contributions into the mandatory funded pension for those who continued their own contributions will have an alleviating effect on the tax burden. Starting with 2017, the

tax returns of low-income persons will be deducted from their personal income tax. In 2017–2020, an increase of the excise duties of alcohol, tobacco and fuels, the increase of value added tax rate from 9% to 14% for accommodation services, as well as the establishment of road use tax for heavy vehicles, planned changes in package excise, and changes in the taxation principles of foreign business travel pay will increase the tax burden. The tax burden will be reduced by the decrease of social tax rate to 32% (2017, 2018), the increase of basic tax-free allowance to 205 euros per month, the increase of the additional tax-free allowance of pensions to 271 euros per month by 2020, the tax benefit of expenses related to health (2018) and the increase of the value added tax payer's registration threshold to 40,000 euros (2018). The planned measures are described in more detail below. In summary, the tax burden will remain at a level comparable with that of the year 2015, reaching 33.4% of GDP by 2020.

Honest tax environment – equal competition and treatment

To tidy the rental market, 80% taxation of rental revenue will be implemented starting with 1 January 2016, i.e. up to 20% of rental revenue will be left tax-exempt, accounted as repair and upkeep costs and not subject to the obligatory submission of cost documents. The change of taxation principles for foreign business trip pays, starting with 1 January 2017, will increase the social guarantees of employees on business trips abroad. The real-time control measure concerning fuel will reduce the tax gap and will improve honest competition in the fuel market.

Increasing the value added tax payers' registration threshold to 40,000 euros in 2018 will reduce the administrative burden of small enterprises.

Fairer tax system – reducing differences in taxation

The reduction of inefficient tax incentives is intended to ensure equal treatment of taxpayers and the neutrality of the tax system. The plan is to critically inspect and abandon tax incentives that have diverged from their original objective and have, therefore, become unjustified. Each tax incentive will be analysed to ascertain whether it is proportional to the goal to be achieved, whether it meets the expectations and needs of society, and whether trying to achieve this goal via the tax incentive is the most expedient approach. If necessary, the incentive will be implemented for a specific period of time, which makes it possible to analyse the effectiveness of the incentive in the achievement of the goal and to decide, on the basis of the analysis, whether the incentive should be extended.

Starting with 1 January 2016, an additional tax-free allowance for children was fixed at 1,848 EUR per year, deductible training expenses were restricted and the upper limit of deduction was reduced from 1,920 EUR to 1,200 EUR.

Starting with 1 January 2017, the value added tax rate of accommodation services and of accommodation and breakfast services will be increased from 9% to 14%.

More growth-friendly tax structure – reducing the tax on labour, increasing the tax on consumption and environment exploitation

The tax burden on labour will be reduced by an increase of the basic tax-free allowance to 2,460 EUR (205 EUR per month) by 2019 and an increase of the tax exemption of pensioners so as to make the average pension untaxed. The tax burden on labour will also be significantly reduced by decreasing the social tax rate to 32.5% starting with 1 January 2017 and to 32% starting with 1 January 2018. The tax incentive on expenses related to health and sports will reduce the tax burden of employers.

The tax burden on consumption will be raised by increasing the excise duty rates. The rates of alcohol excise duty will increase by 15% in the coming year and subsequently by 10% per annum until 2020 (incl. the alcohol excise duty on wines over 6% alcohol content increasing by 20% in 2019 and 2020). The alcohol excise duty will be increased in compliance with the price and tax policy measure of the Green Paper on alcohol policy which prescribes the development of a long-term framework for alcohol taxation. The rates of tobacco excise duty will be increased by 8% per annum starting with 1 January 2016 and going until 2018, and then by 10% per annum until 2020. Pursuant to the tax policy measure, the price of tobacco products must increase with at least the same speed as the consumer price index, in order to avoid access to tobacco products becoming easier. The rates of both excise goods will increase more than the expected overall price growth, so as to increase tax revenue and restrict consumption. Starting with 1 February 2016, the rate of diesel fuel excise duty was increased by 14% and that of petrol by 10%, and both rates will be increased by 10% per annum in 2017-2018. Due to the intention of more equal taxation of the two most common motor fuels (diesel and petrol) and accounting for the energy content of those fuels, the rate of excise duty on diesel fuel increased more in 2016.

Environmental taxes will be raised by increasing the excise duty on natural gas. The Government plans to increase the excise duty on natural gas as a fossil fuel in 2018 and 2019, by 60% and 39% respectively. The planned changes in package excise duty and the establishment of road use tax for heavy vehicles will also increase the receipt of environmental taxes.

Figure 15. Development of tax burden in Estonia

A. Tax burden B. Tax revenue (%) 100% 36 35 80% 34 60% 33 40% 32 20% 31 Ω^{0}/a 30 2000 2006 2009 2012 2015 2018* RES 2017-2020 kevad 2016 ■ Labour taxes ■ Capital taxes ■ Consumption taxes

2006 2009 2012 2015 2018*

Sources: Ministry of Finance, Eurostat.

Compared with 2016, the share of labour taxes in tax receipts is forecasted to decrease by 0.2% to 49.4% **by 2020**. The share of **consumption taxes**¹⁹ in tax receipts will increase by 0.8% to 43.8% by 2019 due to the increase of excise duties, the establishment of road use tax and the change in package excise duty and will decline to 43.2% in 2020. The share of capital taxes²⁰ will decrease by 0.4% to 7.4% by 2020, mainly on account of a decrease of the dividends of state enterprises compared with 2016 (see Figure 15B).

¹⁸ Pursuant to the ESA2010 methodology, labour taxes include: social security payments, natural person income tax on wage income, natural person income tax on social transfers and pensions, natural person income tax on business activities.

¹⁹ Pursuant to the ESA2010 methodology, consumption taxes include: value-added tax, customs duties, excise duties, motor vehicle registration fee, sales tax, pollution fees, fee for fishing right, boat tax, AAU sales revenue.

²⁰ Pursuant to the ESA2010 methodology, capital taxes include: corporate income tax, natural person income tax on capital income, tax on gambling, tax on advertising, tax on land, tax on heavy vehicles, state fees on activity permits and professional licenses, fee on special use of water, tax on closing of roads and streets, other taxes and fees.

Environmental taxes²¹, being part of taxes on consumption, will make up 8.7% of all taxes in 2016, exceeding the European Union average (6.1% in 2012). The reduction of pollution charges will slow the growth of environmental taxes, while the change in package excise duty and the establishment of road use tax will increase the tax receipt and the share of environmental taxes will remain at 8.7% in 2020.

Table 21. Main changes in the tax policy in 2017²²

Changes in taxes	Entry into force	Impact 2017	
		EUR million	% of GDP
1. Reverse taxation of metal used in construction	1 July 2017	1.8	0.0
2. Changing the taxation principles of foreign business trip pay (the effect of labour taxes)	1 January 2017	5.5	0.0

Source: Ministry of Finance

Implicit tax rate on labour

In addition to the share of tax revenue in GDP, the level of tax burden is also characterised by the **implicit**²³ **tax rate**, being the ratio of received tax revenue to the tax base. Implicit tax rate on labour is calculated as the ratio of taxes on labour to labour expenditure. As the implicit tax rate includes factually received taxes, an international comparison must take into account the fact that the performance of tax administrators and the tax discipline of people varies across countries.

The Government's objective is to maintain the implicit tax rate on labour at the level of **2015** (about 34%). The implicit tax rate on labour (see Figure 16) dropped sharply until 2005 and remained below 34% until 2008, due to reduction in personal income tax rate and increase of basic tax-free allowance. In the period of 2009-2010 the unemployment insurance rate was increased and the state's contributions into the mandatory funded pension were suspended, therefore the implicit tax rate increased. In 2012 the implicit tax rate on labour was 35.0%, placing us at the 13th place in the European Union. Resuming the state's contributions into funded pension (2012) and decreasing the unemployment insurance rate (2013, 2015), reducing the income tax rate (2015) and raising the basic tax-free allowance (2015) will reduce this indicator to 34.2% by 2016. Higher contributions to funded pension (2+6 and 3+6 contributions) will influence the indicator in the period of 2014–2017. The implicit tax rate on labour will be reduced by a decrease of social tax rate (2017, 2018), an increase of basic tax-free allowance (2017-2019), and the repayment to low income taxpayers (2017-2020); the indicator will remain at a level comparable with that of 2016 i.e. 34.3% in 2020. At the same time, the implicit tax rate on consumption will increase to 27.2% due to increasing excise duties, the establishment of road use tax, and the change in package excise duty (see Figure 16B).

²¹ Environmental taxes are those levied on energy (fuel and electricity excise duties, AAU sales revenue), transport (heavy vehicle tax, vehicle registration fee, boat tax) and pollution (pollution charge, fee for the special use of water, package excise duty, fee for the right of fishery).

²² Accrual-based impact compared with the situation where the rates/situation provided for in the law at the time of the Ministry of Finance's spring forecast of 2016 still apply.

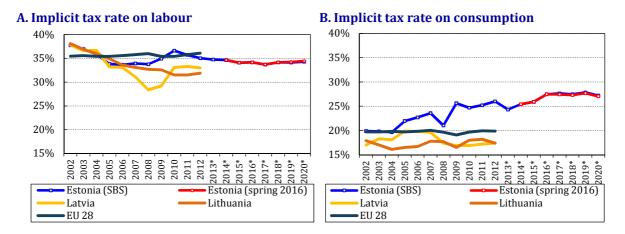
²³ Sometimes also translated into Estonian as actual or average tax rate. The preferred definition is still implicit tax rate, as its meaning is more precise compared with other variants.

Labour tax wedge is the difference between an employer's labour expenditure and an employee's net income, including monetary allowances (child allowance, needs-based family allowance, low-income allowance). Different family types may have significantly different tax wedges – e.g. for a married couple with two children where one parent earns 100% of the average wage, the tax wedge is much more dependent on basic tax-free allowance (additional for the stay-at-home spouse and the second child) than for someone living single. Pursuant to the OECD method, parental benefit is not accounted into this. An excessively high tax wedge may reduce the incentive to work and thus have a negative impact on the labour market's developments.

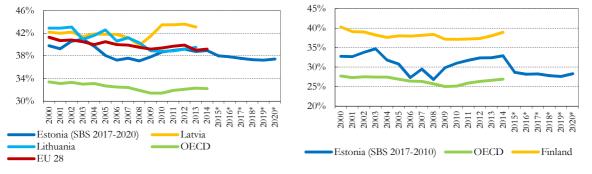
In 2015, the tax wedge of a single childless person earning 67% of the average wage was 38.0% and it will decrease to 37.4% by 2020 due to increasing the basic tax-free allowance and reducing the social tax rate (see Figure 16C). The repayment to low-income taxpayers is intended to those taxpayers earning lower income.

The tax wedge of a married couple with two children where one parent earns 100% of the average wage (see Figure 16D) depends significantly more on the basic tax-free allowance (additional for the non-working spouse and the second child). The tax wedge for families is reduced by child allowances, as well as needs-based family benefit (not applicable to this type of family, as it is intended for families with even lower income). Parental benefit is not taken into account pursuant to the OECD methodology. The tax changes of 2015 and the increase of child allowances to 45 EUR per month for the first and the second child reduced the tax wedge of such a family by 4.2% to 28.7% in 2015. As a result of the reduction of social tax rate and the increase of basic tax-free allowance and child allowances, the indicator will drop to 28.3% by 2020.

Figure 16. Implicit tax rate (%of tax base) and tax wedge (% of labour expenditure)



C. Tax wedge, single person without children, earns D. Tax wedge, married couple, 2 children, one 67% of average worker wage* parent earns 100% average worker wage*



Sources: OECD Taxing Wages 2015, Tax Reforms in EU Member States 2015, Eurostat, Ministry of Finance.

3.3.3. Tax expenditure

The tax expenditure contained in the state budget of Estonia for 2016-2017 are described below. Tax expenditure is set out in the taxation law and provides tax incentives for taxpayers with certain characteristics and not all taxpayers. Tax expenditure means the Government's instruments to promote certain social or economic policy. So that tax incentives would not diverge from their original objective or become unjustified, they must be constantly critically inspected. Each tax incentive should be analysed to ascertain whether it is proportional to the goal to be achieved, whether it meets the expectations and needs of society, and whether trying to achieve this goal via the tax incentive is the most expedient approach.

The monetary value of tax expenditure is calculated by using the revenue foregone method and cash basis accounting data and for each tax expenditure provision, the delay between the implementation of the provision and its actual application is taken into account. Only the socalled first round effects of the establishment of tax expenditure have been estimated. For example, in the event that an increased basic exemption is established, only the direct impact of the implementation of the provision has been assessed. However, the assessment does not include the fact that natural persons have more money in the case of increased basic exemption and more VAT is received if they use this money for consumption. The aggregate impact of the establishment of tax expenditure is regarded in the case of tax expenditure that is directly and clearly related to other taxes, e.g. the tax expenditure arising from the Alcohol, Tobacco, Fuel and Electricity Excise Duty Act influences the receipt of VAT to the extent of the final consumption rate. The different behavioural effects and budget restrictions have not been taken into account in the evaluation of tax expenditure due to the implementation of the method of revenue foregone.

In assessing the value of tax expenditure, it is important to understand that each individual provision of tax expenditure has been evaluated separately without considering the confluence of different provisions, which means that whilst finding the aggregate amount of tax expenditure by adding up different provisions is incorrect, it does make it possible to assess the overall trend.

The receipt of the state budgets for 2016 and 2017 is influenced by 20 different tax expenditure provisions in the Value Added Tax Act, the Income Tax Act and the Alcohol, Tobacco, Fuel and Electricity Excise Duty Act. The total scope of the main tax expenditure in 2016 comprises 346.9 million EUR or 1.6% of GDP. Additional basic exemption for pensions, lower VAT rates for medicines and medical devices, and more favourable rate of excise duty on diesel fuel for specific purposes remain the largest types of tax expenditure. The volume of the three largest types of tax expenditure constitutes 71% of the total tax expenditure in 2016. In 2017, tax expenditure will decrease by 0.7% to 344.5 million EUR. The next year's volume of tax expenditure is reduced by the increase of the VAT rate for accommodation services from 9% to 14% and the restriction of the deduction of training expenses, but the effect of the aforementioned tax expenditure is reduced by the increase of the diesel fuel excise duty rate, which increases the benefit promised to agriculture.

In order to analyse the dynamics of tax expenditure by government functions²⁴, the government function with which each specific type of tax expenditure is associated is determined for each tax

^{*} According to the Ministry of Finance's spring forecast, the gross average worker wage in 2020 will be 16,888 EUR per

Statistics Estonia. (2008d). Classification of functions. [WWW] government http://metaweb.stat.ee/view xml.htm?id=1129771&siteLanguage=ee.

expenditure provision. Table 22 indicates that **six of the ten government functions** (economic affairs; housing and utilities; healthcare; recreation, culture and religion; education; social protection) **are supported via tax expenditure in 2016–2017**. The government functions that form the biggest share in 2016 are social protection (193.4 m EUR or about 55.7% of tax expenditure), healthcare (48.8 m EUR or 14.1%) and economy (47.3 m EUR or 13.6%). The tax expenditure that falls into the remaining government functions comprises 57.5 million EUR or 16.6% of total tax expenditure.

Tax expenditure may also be analysed as a proportion of the receipt of the relevant tax. In the case of value added tax, tax expenditure (items 1–3 in the table) comprises 81 million EUR in 2016, which is 4% of the total VAT received. The relevant tax expenditure (items 4–12 in the table) comprises 218 million EUR or 65% of the personal income tax received into the state budget and the amount of excise duties (lines 12– 19 in the table) not received due to tax incentives is 37 million EUR or 5% of excise duties received.

Table 22. Tax expenditure in state budget, 2016–2017²⁵ (EUR million)

Tax expenditure	Provision	Government function ²⁶	2016	2017
1. 9% VAT on books, workbooks and periodicals	VATA, § 15 (2) 1) and 3)	9	9.6	10.1
2. 9% VAT on medicines and medical devices	VATA, § 15 (2) 2)	7	48.8	51.3
3. 9% VAT on accommodation services	VATA, § 15 (2) 4)	8	22.9	13.2
4. Exemption of deposit interest	ITA, § 17 (2)	10	2.5	2.6
4. Additional tax-free allowance from the second child	ITA, § 231	10	26.9	27.5
6. Additional tax-free allowance in the event of pension	ITA, § 232	10	159.9	161.4
7. Additional tax-free allowance in case of benefit for accident at work or occupational disease	ITA, § 233	10	0.2	0.2
8. Deduction of housing loan interest	ITA, § 25	6	10.9	10.9
9. Deduction of training expenses	ITA, § 26	9	13.2	8.7
10. Deduction of gifts and donations	ITA, § 27 (1)	8	0.9	0.9
11. Deduction of insurance payments and acquisition of pension fund shares	ITA, § 28	10	3.9	4.1
12. Additional tax-free allowance of self-employed persons upon sale of agricultural produce or timber	ITA, § 32 (4)	4	2.4	2.4
13. 50% excise duty rate for independent small breweries	ATFEEDA, § 46 (1)	4	0.3	0.3
14. Lower excise duty rate on diesel fuel for specific purposes in agriculture	ATFEEDA, § 66 (7)	4	36.0	42.0
15. Exemption of fishermen from fuel excise duty	ATFEEDA, § 27 (1) 222)	4	1.4	1.6
16. Electricity used for chemical reduction and in electrolytic, metallurgic and mineralogical processes	ATFEEDA, § 27 (1) 24), 284)	4	0.5	0.5
17. Electricity and fuel used to produce electricity and electricity used to maintain the ability to produce electricity	ATFEEDA, § 27 (1) 282)	4	6.1	6.2
18. Fuel used for mineralogical processes	ATFEEDA, § 27 (1) 282)	4	0.5	0.5
19. Natural gas used for the purpose of operating the natural gas network	ATFEEDA, § 27 (1) 286)	4	0.09	0.08
TOTAL			346.9	344.5

 $^{^{25}}$ Tax expenditure assessments have only been calculated for the provisions that are included in tax regulations as of January 1, 2016.

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²⁶ Government functions: 1. general public services; 2. defence; 3. public order and security; 4. economic affairs; 5. environmental protection; 6. housing and utilities; 7. healthcare; 8. recreation, culture and religion; 9. education; 10. social protection.

Source: Ministry of Finance.

3.3.3. Structure of general government expenditure²⁷

While general government expenditure comprised 34.8% of GDP on average in the period 2000-2007, its share increased to 39.8% of GDP in 2008 due to the economic crisis, and continued to increase to 46.1% of GDP in 2009. In the period of 2010-2015, the average share of expenditure in GDP was 38.8%, increasing to 39.6% of GDP in 2015.

The final consumption expenditure of general government comprised about 54% of general government expenditure in 2000-2005, and dropped to the level of 48% 2006–2009 in the period of 2006–2009; its proportion in all expenditure has increased to 50.4% by 2015. The final consumption expenditure of general government includes public consumption and individual consumption expenditure. Individual and social goods and services are differentiated in the case of goods and services offered by general government, based on the Classification of the Functions of Government (COFOG). Public consumption means services offered concurrently to all members of society or to the members of a part of society. They include, for instance, expenditure on environmental protection and on the organisation of the public sector's healthcare system. For example, expenditure on education and health care is considered individual expenditures. In the case of general government, individual consumption expenditure equals non-monetary social transfers.

Social benefits comprise the second largest part of general government expenditure. The largest types of expenditure among social expenditure are pension expenses and the disease treatment and prevention and health promotion expenses incurred by the Estonian Health Insurance Fund. The general government expenditure for the payment of social benefits in 2000-2007 comprised 8.9% of GDP on average. Its share increased to 13.8% of GDP by 2009, due to the increase of unemployment-related benefits and allowances because of the economic crisis, and then dropped to 10.6% by 2013 as the economy recuperated, thereafter increasing to 11.5% by 2015, primarily due to raised child allowances and family allowances.

1.0% of general government expenditure, i.e. 0.4% of GDP, was used for the payment of subsidies in 2015. Subsidies are unilateral payments that manufacturers receive from general government or the institutions of the European Union. The purpose of the payments is to influence the level of production or prices, or to compensate the costs relating to production.

Interest expenses account for the smallest share – in 2015, they amounted to just 0.2% of all general government expenditure, i.e. they comprised 0.1% of GDP. The low level of interest expenses is the result of Estonia's light debt burden.

The share of other expenditures decreased to 19.4% in 2015.

When we consider the expenditure by economic activity, we can see that the share of expenditure on social protection is always the largest. These expenditures accounted for 9.9% of GDP on average in the period 2000-2007. Their share increased to 15.4% of GDP by 2009 when the unemployment insurance benefit and unemployment benefit expenses increased considerably as a result of the deterioration of the situation in the labour market, in which the pension increase also played a role. By 2014, the share of such expenditure dropped to 11.8% of GDP because the expenditure on unemployment insurance benefits and unemployment benefits

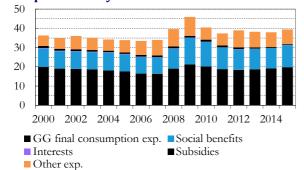
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²⁷ Does not include the money of the funds of the EU financial framework for 2014-2020 or the projected funds of the internal EU trading period with permitted AAUs from 2013 to 2020.

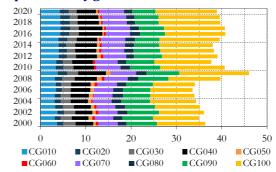
decreased. **The share of social protection is forecasted to increase to 3.3% of GDP by 2015.** Their share in total expenditure will increase to 33.6% of GDP by 2015.

Figure 17. General government expenditure and its structure (% of GDP)

A. Expenditure by economic content in Estonia



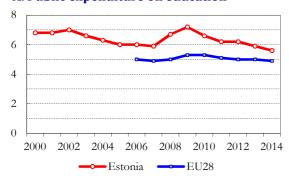
B. Expenditure by government function in Estonia²⁸



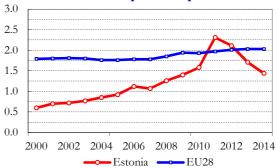
Sources: Statistics Estonia, Ministry of Finance.

Figure 18. Government investments into physical and human capital (% of GDP)

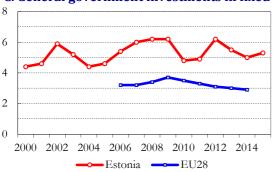
A. Public expenditure on education



B. Research and development expenditure



C. General government investments in fixed assets



Source: Eurostat.

 $^{^{28}}$ CG010 – general public services; CG020 – defence; CG030 – public order and security; CG040 – economic affairs; CG050 – environmental protection; CG060 – housing and community amenities; CG070 – healthcare; CG080 – recreation, culture and religion; CG090 – education; CG100 – social protection.

Table 23. General government expenditure by government functions (COFOG) (% of GDP)

	COFOG code	2012	2013	2014	2016*	2019*
1. General public services	1	4.0	4.0	4.0	4.4	4.4
2. Defence	2	1.8	1.8	1.8	2.0	2.1
3. Public order and safety	3	2.0	1.9	1.9	2.1	1.7
4. Economic affairs	4	4.6	4.7	4.8	5.2	4.6
5. Environmental protection	5	0.8	0.6	0.6	0.3	0.4
6. Housing and utilities	6	0.6	0.5	0.4	0.4	0.4
7. Healthcare	7	5.0	5.0	5.1	5.3	5.3
8. Recreation, culture and religion	8	1.8	2.1	2.0	2.2	1.8
9. Education	9	6.2	5.9	5.6	5.5	5.3
10. Social protection	10	12.2	11.8	11.8	13.3	13.6
11. Total general government expenditure	TE	39.1	38.3	38.0	40.8	39.6

Sources: Ministry of Finance, Statistics Estonia.

The general government expenditure of 2016 will increase by 1.2 percentage points to 40.8% of GDP. In the period of 2017–2020, the expenditure will grow on average by 4.8% per annum i.e. more slowly than GDP, which is why the general government expenditure will decrease to 38.9% of GDP by 2020. As percentage of GDP, the sharpest decrease takes place in expenditure on economy and education.

Expenditure removed from cost target

Table 24. Amounts to be excluded from the expenditure benchmark

	2015	2015	2016*	2017*	2018*	2019*	2020*
	EUR million	% of GDP					
1. Expenditure on EU programmes fully matched by EU funds	378.7	3.1	3.9	4.0	4.7	4.3	3.3
1a. of which investment fully matched by EU funds revenue		2.3	1.7	1.8	2.5	2.2	1.2
2. Cyclical unemployment insurance expenditure**	0.0	0.00	0.00	0.00	0.00	0.00	0.00
3. Effect of discretionary revenue measures***	8	0.0	0.2	0.8	-0.1	-0.1	0.2
4. General government revenue increases mandated by law	0.0	0.0	0.0	0.0	0.0	0.0	0.0

^{*} forecast

^{**} Expert assessment assumes that the level of unemployment rate is normal.

^{***} The measures that have been taken into account: increase of general basic exemption and additional basic exemption of pensions; increase in excise duties and abolishment of lower fuel excise duty; increase in value added tax on accommodation services; increase in penalties; dividends and income tax on them; establishment of health-related special benefit; wage increase in state budget; revenue from CO2 quota sales; taxation of e-cigarettes; change in packaging excise duty; more precise taxation of rental revenue; disengaging the additional basic exemption for the second child; reduction in social tax; restriction of training expenditure deduction; reduction of the upper limit of income tax deduction; change in taxation of foreign business trip pay; changes in resource charges.

Source: Ministry of Finance.

3.4. General government financing

The following forecast of debt burden and financial assets is based on the objectives of the general government's budgetary position set by the Government of the Republic.

3.4.1. General government debt

The main goal of Estonia's fiscal policy since the restoration of independence has been to keep the budgetary position of the general government over the medium term in balance or, if possible, in a surplus, which has become expressed in the low debt burden of the state. The general government debt of Estonia at the end of 2015 amounted to 9.7% of GDP, which is 0.7% less than in 2014. The main reasons for the government debt decreasing were the decreases of loans granted by European Financial Stability Facility (EFSF)²⁹ and the debt burden of local government. The central government debt (including the funds received from EFSF) comprised 1,264 million EUR³⁰ and the debt of local governments 729 million EUR of the total general government debt of 1,993 million EUR; the share of external debt in total debt was 66% (see Table 25). Without the funds of EFSF, which amounted to 455 million EUR in 2015, the central government debt was 810 million EUR or 4.0% of GDP.

Table 25. Change in general government debt burden in 2015

	31 Decem	ber 2014	31 Decem	ber 2015	Change
	EUR million	% of GDP	EUR million	% of GDP	% of GDP
General government	2,070.4	10.4	1,992.7	9.7	-0.6
Domestic debt	697.3	3.5	667.9	3.3	-0.2
External debt	1,373.1	6.9	1,324.8	6.5	-0.4
Central government ³¹	1,420.3	7.1	1,362.4	6.7	-0.5
Domestic debt	230.6	1.2	201.0	1.0	-0.2
External debt	1,189.7	6.0	1,161.4	5.7	-0.3
Local governments	754.6	3.8	728.6	3.6	-0.2
Domestic debt	571.4	2.9	565.2	2.8	-0.1
External debt	183.2	0.9	163.4	8.0	-0.1
Social security funds	0.0	0.0	0.0	0.0	0.0
Domestic debt	0.0	0.0	0.0	0.0	0.0
External debt	0.0	0.0	0.0	0.0	0.0

Source: Ministry of Finance, Statistics Estonia.

The general government debt can be expected to decrease to 9.6% of GDP in 2016, as a result of reduction in the central government's share; the debt of local governments as percentage of GDP will remain at the level of 2015. According to the forecast, general government debt will increase in 2017 and 2018 and will start decreasing in coming years and will comprise 9.6% of GDP by the end of the forecast period (see Table 26). The central government's negative cash flow will be funded from reserves and the State Treasury will incur a direct need for new loans, based on cash flow, in 2017. Without the EFSF's impact, the central government's share in the debt burden will decrease as a percentage of GDP starting with 2019 and nominally starting with

²⁹ According to the methodology used to calculate the general government debt, the loans issued by the EFSF are partially reflected in the debt burden of Estonia since the state joined the EFSF.

³⁰ Consolidated figure at the level of the general government

³¹ Consolidated figure at the level of the central government.

2020. The EFSF's nominal contribution will increase at the same time, but as a percentage of GDP it will decrease. The deficit of local governments will be covered from external funds during the entire medium-term period and the nominal amount of their debt will increase, remaining near 3.6% as percentage of GDP.

Table 26. General government debt burden, 2015-2020 (% of GDP)

	2015	2016*	2017*	2018*	2019*	2020*
1. Total debt	9.7	9.6	10.4	10.6	10.2	9.6
2. Change in debt burden	-0.6	-0.1	8.0	0.2	-0.3	-0.7
Contribution to change in	n debt bı	ırden: (2:	=3-4+5+6	5) ³²		
3. Contribution of nominal GDP increase	-0.3	-0.4	-0.5	-0.6	-0.6	-0.6
4. Primary budget balance	0.5	-0.3	-0.4	-0.1	0.0	0.1
5. Interest payments	0.1	0.1	0.1	0.1	0.1	0.1
6. Difference between the change of debt burden and the budgetary position (stock-flow adjustment, SFA)	0.0	-0.1	0.9	0.6	0.2	-0.1
Estimated interest rate of general government debt (%)	0.9	0.9	1.0	0.8	0.8	0.8
Other rele	vant ind	icators				
7. Liquid financial assets	9.3	7.9	7.5	7.2	6.9	6.8
8. Debt amortisation since the end of last year ³³	0.1	0.1	0.2	0.3	0.2	0.2
9. Net debt (9=1-7)	0.5	1.8	3.0	3.4	3.4	2.8
10. Share of debt nominated in foreign currency (%)	0.0	0.0	0.0	0.0	0.0	0.0
11. Average expiration limit ³⁴ (in years)	5.2	4.3	3.6	3.1	2.7	2.2

*forecast

Source: Ministry of Finance, Statistics Estonia.

As the budgetary deficit increases, the general government debt could also be expected to increase in the extent of the deficit. In reality, the relationship between the debt burden and the deficit is more complex and there are other factors having a role in it. For example, debt burden can also increase if loan is taken for the purpose of providing funds for financing transactions instead of covering the deficit, but financing transactions are not reflected in the state's revenue or expenditure. The amount of such other factors is measured by the difference between the change of debt burden and the budgetary position (in English also called stock-flow adjustment, SFA for short). In 2015, Estonia's SFA was 6.4 m EUR or 0.03% of GDP (see Figure 19B), which means that the debt burden increased less (78 m EUR) than the budgetary surplus (84 m EUR), meaning that the surplus was used both for debt reduction and for an increase of reserves. According to the forecast, the SFA will be negative this year, meaning that the debt burden will increase less than by the amount of budgetary deficit, resulting from the fact that reserves will be used for covering the deficit. The SFA will be positive in 2017-2019 because of debt burden decreasing more than the by the general government deficit (incl. due to increase of loan repayments which are not reflected in the budget's expenditure). The SFA will be negative in 2020 because of the debt burden decreasing less than the surplus.

³² In some years the equation does not work, due to rounding.

 $^{^{33}}$ Central government without foundations and legal persons governed by the public law.

³⁴ Central government without foundations and legal persons governed by the public law.

Figure 19. Development of debt burden, 2006-2020

A. General government debt (% of GDP)

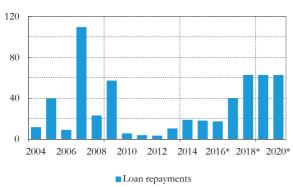
12 10 8 6 4 2 0 2006 2008 2010 2012 2014 2016* 2018* 2020*

■ Central government (excl. EFSF) ■ Local governments ■ EFSF

B. Difference between the change of debt burden and the budgetary position (% of GDP)



C. Repayment of central government³⁵ debt (EUR million) D. Average interest rate of central government ³⁶ debt (%)





Source: Ministry of Finance, Statistics Estonia, Eurostat.

3.4.2. General government reserves and net position

The volume of general government's liquid financial assets³⁷ as of the end of 2015 was 1,900 million EUR or 9.3% of GDP. Compared to 2014, the reserves of the central government decreased, while the reserves of social security funds and local governments all increased. This year, the reserves are forecasted to decrease due to the need to fund the state budget's deficit and financing transactions. The reserves are forecasted to gradually decrease until the end of 2020 because the reserves are planned for funding the state budget's nominal deficit and financing transactions. Also, the growth of reserves will remain below the nominal GDP growth, so the general government's liquid assets will decrease to 6.8% of GDP by the end of 2020.

The general government debt burden in 2015 exceeded somewhat the volume of reserves and the net debt amount was 0.5% of GDP (see Figure 20). According to the forecast, both the debt burden and the reserves will decrease in the coming years, but reserves will initially decrease more. As the debt burden will grow in 2017-2018, the net debt amount will also increase to 3.4% of GDP by the end of 2019. Thereafter the net debt will start decreasing and is forecasted

³⁵ Central government without foundations and legal persons governed by the public law.

³⁶ Central government without foundations and legal persons governed by the public law.

³⁷ Liquid financial assets are considered to be cash and deposits (ESA 2010 code F.2); securities (except shares and financial derivatives) (F.3); financial derivatives (F.71); shares noted on stock exchange (F.511) and investment fund shares (F.52).

to amount to 2.8% of GDP at the end of 2020. Without the EFSF's impact, the reserves will exceed the debt burden throughout 2016, but not in the years following the forecast period; by 2020, the net debt without the EFSF's impact will be 1.0 % of GDP.

15 Reservid 9 6 5 9,3% 6,8% 3 0 -3 -6 -9 9,7% -12 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016*2017*2018*2019*2020* Central government (debt) Central government (reserves) Social security funds (reserves) ■ Local governments (debt) Local governments (reserves) EFSF (debt) Net assets (+)/ -debt (-)

Figure 20. Liquid assets, debt burden and net position of the general government, 2006–2020 (% of GDP)

Source: Ministry of Finance, Statistics Estonia.

4. SENSITIVITY ANALYSIS AND COMPARISON WITH PREVIOUS PROGRAMME

4.1. Possible negative developments

Future developments of the Estonian economy may be both positive and negative compared to the baseline scenario. Different developmental directions are possible in the practice, so the risk scenarios constitute only technical calculations based on certain agreed assumptions and their purpose is to assess the impact of possible deviations on state budget.

In the recent months, the recovery of global economy has been shaken, mainly in developing markets. The Global Purchase Managers Index (PMI) dropped to the lowest of 3.5 years in February, indicating a continued cooling of the global economy. Commodity prices are at their lowest of recent years; additionally, the strength of US dollar is hindering the servicing of the debt of several developing countries. Although cheap oil has somewhat enlivened the consumption and reduced the cost level in countries importing oil, the risk of cheap oil also not providing the expected boost to the global economy has increased. Therefore, it is not excluded that the deterioration of forward-looking indicators and the recent geopolitical tensions will also spread into the real economy's indicators, thereby weakening the situation of industrial countries and developing economies.

Therefore, the risk scenario states that the weakening of the global economy will continue and will in turn have a negative impact on our trade partners. The economic growth and the import demand in the main export markets will be lower in the coming years. Among internal economic factors, the labour market imbalances becoming steeper will amplify the external shocks. This will worsen the export opportunities of Estonian enterprises and part of their investments will be frozen or postponed into longer future. In the situation of raising uncertainty and lower wage growth, the consumption courage of households decreases. Those factors result in Estonian GDP growth being continually below its potential, reaching 1.5% in total for 2016 and quickening to a modest pace (2.0%) in 2017. According to the risk scenario, the nominal volume of GDP will remain ca 180 million EUR less in 2016 and 480 million EUR less in 2017, compared with the baseline scenario.

Table 27. Risk scenario (percent)

		Risk sc	enario	Differ	Difference from base forecast		
	2015	2016*	2017*	2018*	2016*	2017*	2018*
Nominal GDP (EUR billion)	20.5	21.1	22.1	23.3	-0.18	-0.48	-0.65
Real GDP growth	1.1	1.5	2.0	2.8	-0.5	-1.0	-0.5
Nominal GDP growth	2.5	3.2	4.6	5.7	-0.9	-1.4	-0.6
CPI	-0.5	0.1	2.2	2.7	-0.2	-0.5	-0.2
Real growth of domestic demand	-0.7	3.3	2.0	2.7	-0.4	-1.0	-0.3
Real growth of export	-1.1	0.5	2.2	4.0	-1.1	-1.6	-0.6
Employment growth	2.6	-1.1	-0.5	-0.2	-0.2	-0.4	0.1
Nominal wage growth	6.0	4.4	3.7	5.2	-0.5	-1.1	-0.3
Unemployment rate	6.2	6.8	8.2	9.4	0.2	0.6	0.5
External assumptions							
Import growth of trade partners	0.0	2.4	3.0	4.1	-0.5	-0.8	-0.3
General government							
Tax burden (% of GDP)	33.5	34.2	33.7	33.7	0.0	0.1	0.2
Budgetary position of general government (% of GDP)	0.4	-0.6	-1.0	-0.8	-0.2	-0.5	-0.6
Debt burden of general government (% of GDP)	9.7	9.7	11.0	11.6	0.1	0.6	1.0

Source: Ministry of Finance, Statistics Estonia.

The risk scenario's forecast of revenue and expenditure is based on the relevant macroeconomic forecast and foresees that the **general governments' budgetary position** will deteriorate by up to 0.6% in 2016-2018. According to the risk scenario, this year's budgetary deficit will reach 0.6% of GDP and will increase to 1% of GDP next year. The deficit will deepen first and foremost by a decrease of tax revenue providing an impact at all levels of general government. The forecast decreasing the most in the risk scenario is that of social tax receipts, which are related to both lower employment growth and a decrease in forecasted average wage. Yet, the tax burden will increase somewhat because the decline of the level of GDP will exceed the decrease of the forecasted tax revenue. The increase in deficit will be somewhat held back by an increase of state budget expenditure related to tax revenue (allocation to Estonian Health Insurance Fund, pension expenditure). Also, defence costs will decrease as a result of a decreased nominal GDP. The Unemployment Insurance Fund's surplus will be reduced by decline of unemployment insurance payments and by increase in the amount of benefits, related to a higher unemployment rate when compared with the base scenario. The position of Estonian Health Insurance Fund will be influenced negatively by decreased health insurance revenue due to decreasing social tax. The budgetary position of local governments will deteriorate by the amount of decrease of the forecasted natural person income tax allocated to them. The budgetary position of other central government is not so closely related to the economic environment, so no changes are expected there.

The budgetary position of local governments being more negative than in the base scenario will speed up the growth of debt burden of local governments in the risk scenario, causing the general government's debt burden to increase by up to 1.0% of GDP. On the other hand, the worsened forecast of the central government and the social security funds will decrease their level of reserves to 0.1% and 0.1% of GDP in both cases. As a total effect of changes, the net debt burden will increase by 0.7% of GDP in the following year and by 1.1% of GDP in 2018.

4.2 Sensitivity analysis of interest rates

Estonian Government continually needs to borrow from both domestic and foreign funds to finance its activities. The increase of interest rates and the resulting increase of interest expenses have a direct negative impact on the budgetary balance. The increase of interest rates also has an unfavourable impact on investments and consumption. Therefore, it is important that through the sensitivity analysis, the sensitivity (vulnerability) of Estonian economy and of the state's finances in the situation of fluctuating interest rates is also assessed. If the interest rates applied to the general government increase by 100 base points per annum in the period of 2016-2020 (see Table 28), its direct impact on the budget will be 8.9 m EUR (0.04 % of GDP) in the forecast period's first year and the cumulative interest expenditure in the forecast period's last year will be a total of 54.6 m EUR (0.20% of GDP).

Table 28. Impact of increasing interest rates

Impact of increasing interest rates by 100 base points (1 %)	2016	2017	2018	2019	2020
Difference of interest expenses compared with base scenario, m €	8.9	19.4	31.0	42.9	54.6
Difference of interest expenses compared with base scenario, % of GDP	0.0	0.1	0.1	0.2	0.2

4.3. Comparison with the forecast of Stability Programme 2015

In the baseline scenario of its spring forecast of 2015, the Ministry of Finance expected the **economic growth** of 2015–2016 to be 2.0% and 2.8%, respectively. We expected a 3.4% economic growth by 2017. The actual economic growth slowed down to 1.1% in 2015, remaining significantly below expectations. The main reasons for the lower economic growth were the standstill of the import demand of our export partners and the reduced price competitiveness of enterprises due to the continued quick growth of wage costs. Due to weak external demand the investments of enterprises continued to decline. This forecast accounts for the deteriorated growth outlook of Estonia's main trade partners. Therefore we are currently expecting the economic growth of 2016 to be 2%, quickening to 3% by 2017 due to the recovery of export demand. The expectations of real growth of domestic demand for 2016 and 2017 are somewhat higher, but mainly due to the downward adjustments of inflation expectations.

Inflation in 2015 turned out lower than in the previous Stability Programme, mainly due to external factors – the price decrease of commodities like oil, as well as foodstuffs on foreign markets turned out deeper than expected. The same factors also drove the decrease of the inflation forecast for 2016 – decline in energy prices and the low price level for foodstuffs. Commodity prices are at their lowest for recent years, so the consumer price increase has remained modest. Due to indirect effects of the decrease of fuel prices, the increase of service prices is somewhat slower this year.

In the past year, **general government's budgetary position** turned out better than expected, thanks to lower investments and pension expenses. Expectations of the structural budgetary position of this year are worse, on the other hand, because both the environmental charges and the energy sector's dividend forecast have been reduced due to difficulties in the oil shale sector. The target of 0.2% structural surplus is retained for the next year. Yet, the forecast of nominal

budgetary position for 2017 has worsened when compared with the previous programme and the general government will reach a nominal surplus in 2020, meaning that the target of restoring the reserve will be achieved more slowly when compared with the previous programme.

In 2015, the debt burden of general government turned out lower by 0.6% of GDP than forecasted in the Stability Programme 2015, mainly due to a decrease in the debt burden of central government, as well as a decrease of the debt burden of local governments. A lower base level will cause this year's expected debt burden to be less than the previous forecast but the deteriorated nominal budgetary position will make the debt burden higher in the future.

Table 29. Comparison to the forecast of the Stability Programme 2015

	2015	2016*	2017*	2018*	2019*	2020*
Real GDP growth (%)						
Previous version	2.0	2.8	3.4	3.2	3.0	-
Present update	1.1	2.0	3.0	3.3	3.0	2.8
Difference	-0.9	-0.8	-0.4	0.0	0.0	-
Nominal GDP growth (%)						
Previous version	4.0	5.5	6.4	6.3	5.8	-
Present update	2.5	4.1	5.9	6.3	6.0	5.7
Difference	-1.5	-1.4	-0.4	0.0	0.2	-
Harmonised Consumer Price Ind	lex (HICP) (%	6)				
Previous version	0.8	2.6	3.0	3.2	2.8	-
Present update	0.1	0.9	2.9	3.0	2.9	2.9
Difference	-0.7	-1.7	-0.1	-0.2	0.1	-
Structural budgetary position of	general gov	ernment (%	of GDP)			
Previous version	0.5	0.6	0.2	0.2	0.6	-
Present update	1.0	0.3	0.2	0.0	0.0	0.0
Difference	0.5	-0.3	0.0	-0.2	-0.6	-
General government debt (% of	GDP)					
Previous version	10.3	9.9	9.6	8.9	8.4	-
Present update	9.7	9.6	10.4	10.6	10.2	9.6
Difference	-0.6	-0.3	0.8	1.7	1.8	-

Source: Ministry of Finance.

5. LONG-TERM SUSTAINABILITY OF FISCAL POLICY

The assumptions of the long-term budget projections given in this chapter are based on the assumptions and forecasts of the Ageing Report published in 2015. In the long term, these trends coincide with the vision of the Ministry of Finance for future developments. The pension forecast is guided by the detailed pension model forecast of Ministry of Finance, whereas the expenses related to incapacity for work are taken out of the pension expenses, respectively. Expenses related to incapacity were previously part of the pension system but with the work capacity reform currently underway, that target group will move to the social benefits system and will not be reflected in this forecast anymore. The developments of the initial years (and as a result, some of the indicators like the labour market's indicators) have been adjusted according to the macroeconomic development scenario in this forecast, to take into account the latest changes. It is worth stressing that the prerequisite for the projections presented in this chapter is that the decisions of toady will remain in force for the entire forecast period, which is why they do not represent the most probable future scenario but are intended to indicate the extent of the challenge entailed in the demographic trends, which the policies can address.

The demographic trends have started to affect public finance – according to the latest population forecast of Eurostat, the ratio of dependants (here taken to mean people up to 18 years and above 65 years of age) to the employment-age population (18–65 age range) will increase from 62% in 2016 to 70% in 2022 and to 94% in 2060.

The following steps have been taken to guarantee long-term budgetary sustainability:

- keeping the fiscal policy conservative and avoiding a significant increase in general government debt;
- o reforming the pension system and encouraging contributions to pre-financed pension schemes;
- o increasing the retirement age and making pension indices more flexible;
- o ensuring a better fiscal situation via policies aimed at economic growth and employment.

The decision to suspend contributions into the second pension pillar from 1 July 2009 to 31 December 2010 was one of the measures taken during the crisis. The payments into the second pension pillar were restored to one-half of the original amount in 2011 and fully restored in 2012. The part of the social tax paid by the state increased to 6% for the period of 2014-2017 for those who voluntarily continued contributing to their second pension pillar and also for those who submit the relevant application in 2013. In the latter case, the contribution made by the individuals themselves also increases to 3%.

Pursuant to the State Pension Act, the retirement age will be increased by 3 months a year from 2017 and will reach 65 by 2026. the current retirement age is 63 years for both men and women. The forecasted increase of life-expectancy of 63-year-old people by 2060 is also worth noting. In the next 50 years, the life-expectancy will increase by almost 4 years for 63-year-old women and nearly 6 years for men as compared to 2014 (according to the Ageing Report 2015). The goal of the increase of retirement age is to ensure the adequacy (the decision makes it possible to pay about 5-10% higher pensions from 2026) and sustainability of the pension system. The amendment was driven by the desire to support the supply of workforce that is decreasing as a result of demographic developments. The increase of retirement age will compensate the demographic changes and the current assessments are that it will keep the number of pensioners stable until 2026.

An analysis of the sustainability of the current policy indicates that thanks to the increasing retirement age and the contributions to the second pension pillar, the pressure on public finance of Estonia caused by demographic changes is one of the lightest among the EU member states. The analyses made based on today's assumptions indicate, however, that the ratio of pensions (as a summary of the first and the second pillar) to average wages will deteriorate over time and additional decisions may be required in the future regarding the pension system.

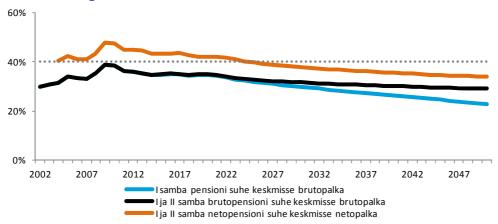
Table 30. Long-term sustainability of public finance, 2010-2060 (% of GDP)

	2010	2020	2030	2040	2050	2060
Total expenditure	40.5	37.2	37.3	37.2	37.7	37.8
of which: ageing-related expenditures	19.7	16.4	16.5	16.4	16.9	17.0
Pensions	8.9	6.4	5.9	5.9	5.9	5.6
Social security pensions	8.9	6.4	5.9	5.9	5.9	5.6
Old-age pensions	7.5	6.0	5.8	5.8	5.8	5.5
other (survivor pension, disability pensions)	1.4	0.4	0.1	0.1	0.1	0.1
occupational pensions (if in general government budget)	-	-	-	-	-	-
Healthcare	4.9	4.6	4.8	5.0	5.0	5.0
Long-term care (previously part of healthcare expenditure)	0.5	0.7	0.8	1.0	1.1	1.2
Interest payments	0.2	0.1	0.1	0.1	0.1	0.1
Education expenses	4.8	4.6	4.8	4.4	4.8	5.1
Other expenditures related to ageing	0.6	0.1	0.2	0.1	0.1	0.1
Total revenue	40.7	37.2	37.3	37.2	37.7	37.8
<pre>of which: property income (incl. interest income)</pre>	0.0	0.0	0.0	0.0	0.0	0.0
of which: social security contributions (first pillar revenue)	7.0	5.9	5.8	5.7	5.6	5.4
Pension insurance assets (first pillar)	0.0	0.0	0.0	0.0	0.0	0.0
of which: consolidated public pension fund assets (assets other than government bonds)	0.0	0.0	0.0	0.0	0.0	0.0
Impact of pension reform						
II sambasse suunatud sotsiaalkindlustus Social contributions diverted to the second pillar (4% paid by the state)	0.0	1.07	1.16	1.20	1.20	1.15
Payment of second pillar pensions	0.0	0.2	0.9	1.5	2.7	2.3
Assumptions:						
Labour productivity growth	7.8	2.7	2.0	1.9	1.8	1.5
Real GDP growth	3.3	2.0	1.5	1.2	0.9	1.4
Employment rate, men (aged 20-64)	83.8	84.9	85.3	85.5	85.7	86.6
Employment rate, women (aged 20-64)	76.8	78.9	80.5	80.0	79.9	81.2
Total participation rates (aged 20-64)	80.2	81.8	82.9	82.8	82.8	84.0
Unemployment rate	16.7	9.8	9.4	8.6	7.5	6.8
Persons aged 65+ in total population	17.0	20.6	24.3	26.8	28.8	29.9

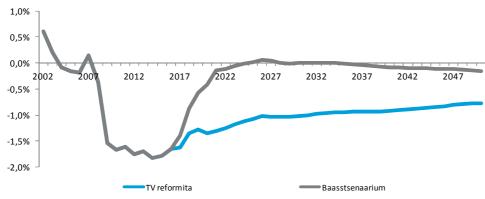
Source: Ministry of Finance, Statistics Estonia, OECD, WHO, EU Economic Policy Committee.

Figure 21. Financial indicators of state pension insurance (% of GDP)

A. Pension to wage ratio in 2002-2014 and forecast until 2050.



B. Difference between revenues and expenses of state pension insurance, with and without work capacity reform



Source: Ministry of Finance.

Measures to ensure long-term sustainability of pension insurance

The Government has agreed to implement the work capacity reform and to ensure the sustainability of work capacity allowances. The rapid increase in the number of persons receiving pension for incapacity for work needs addressing and the purpose of the concept is to establish a system that encourages employees to take care of their health and employers to create a healthy working environment. The implementation of the scheme is also a prerequisite for the plan to reform the payment of occupational pensions, old-age pensions under favourable conditions and superannuated pensions, which the Government has already approved in principle. Moreover, the Government's Coalition Programme prescribes the implementation of flexible pension age and the need to consider a faster increase of the base pension rate.

Potential general government liabilities

Potential general government liabilities are considered to be liabilities, the actual realisation of which depends on a future circumstance. Potential liabilities are not added to the general government debt (except the EFSF guarantee), but it is important to monitor their volume when assessing the long-term sustainability of public finance.

Table 31. Potential general government liabilities, 2015 (% of GDP)

	2015
Total state guarantees	11.1
of this, capital collected by ESM	5.6
of this, guarantee for the principal amount of EFSF debts	2.2
of this, capital collected by EIB, NIB, CEB, EBRD, IBRD	1.2
of this, loan guarantees of enterprises	0.3
of this, student loans	0.6
of this, Kredex and Kredex credit insurance	0.9

Source: Ministry of Finance.

6. QUALITY OF PUBLIC FINANCE

New State Budget Act

The new State Budget Act entered into force on 23 March 2014, transposing the Council Directive 2011/85/EU of 8 November 2011 on the requirements for budgetary frameworks of the member states and the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union i.e. the so-called Fiscal Compact into the national law. Among the minimum requirements for budgetary frameworks prescribed by the Directive and the Compact, the most important for Estonia are the general government's balanced budget rule and the correction mechanism.

In addition to adopting the balanced structural budget rule, the Act clarifies the financial rules for the central government, local governments and social security funds, whereas the central government includes not only constitutional institutions and governmental agencies but also other legal persons of the central government: persons under public law, foundations established by the state and business associations with state holding.

The principle of independence of the Ministry of Finance's macroeconomic and financing forecast was also established. Additionally, the Fiscal Council was established at Bank of Estonia, with the task to express opinions on forecasts, budgetary position objectives and their fulfilment and possible adjustment needs.

Pursuant to the correction mechanism, measures must be implemented where budgetary position differs significantly from the medium term budget objective or the adjustment plan i.e. by at least 0.5% of GDP per annum, until attainment of the medium term budget objective in compliance with the requirements prescribed in the Stability and Growth Pact.

In addition to the mandatory correction mechanism, a compensation mechanism was added to the State Budget Act: if the actual data indicate that the general government budget is in a notable structural deficit, the general government budget for subsequent years after implementation of the correction mechanism must be planned with a structural surplus of at least 0.5% until achieving an equivalent surplus.

To achieve a stronger effect from the use of budget funds, the rules for preparing the state budget were updated, the State Budget Strategy was made to include an obligation of four-year expenditure ceilings, the strategic planning system was tidied and a legal framework for step-by-step transitioning to activity-based budgeting was established. The State Budget Strategy will continue to be based on possibilities resulting from the public finance forecast. On the other hand, the State Budget Strategy's relationship to sectoral development plans and their implementation plans will become clearer. The new State Budget Act starts a gradual move towards a programme-based budget paying more attention to results.

The joint regulation of loans and guarantees was unified, to improve the clarity and flexibility of managing the state's cash flows. The cash flow management was connected more clearly to the need to ensure payouts at all times. The principles of management of general government liabilities were renewed. The Act provides for an extraordinary temporary loan limit for local governments in a situation where the general government's budgetary position exceeds the limits agreed in the EU. In that case all local governments must co-ordinate their loans with the Ministry of Finance.

Transition to accrual-based and activity-based state budget

The challenge before Estonian Government is to adopt better decisions when directing limited resources to solve difficult challenges. Together with Estonia's success, the complexity of choices grows, less and less decisions can be based on experiences of countries that have already gone through similar situations and more political challenges occurring for the first time ever must be solved.³⁸ Successful resolution of challenges requires the ability to implement choices and to learn from consequences and use the practical experience gathered to make future decisions. The development of strategic and financial management is focused on improving co-operation and learning from experience, as well as on stronger control and sanctioning.

Problems of the strategic and financial management system are highlighted and solutions are proposed in the OECD 2011 Public Governance Review,³⁹ the relevant audit by the National Audit Office⁴⁰ and in the 2014 joint report of Estonia, Finland and OECD titled "Fostering Strategic Capacity Across Governments and Digital Services Across Borders" and its action plan "Action Plan for building administrative capacity and implementing the recommendations of OECD Public Governance Reviews". ⁴¹

The Coalition Programme sets out an important need to increase the transparency of the state budget, incl. transitioning to activity-based budget together with more effective substantive reporting on fulfilment of action programmes.

According to one of the most used budget classifications – the OECD Results-Based Budget Classification, Estonia uses a presentational results-based budget. A presentational results-based budget presents financial information together with information about results. In Estonia, this is expressed as area policy specific situation descriptions, objectives and list of policy changes given in the State Budget Strategy, as well as the composition of the budget's explanatory memorandum and the Action Plan approved by the Government of the Republic together with the state budget's sectioning and the report on fulfilment of the Action Plan presented within annual reports. A long-term challenge is a systematic transition from presentational results-based budget to budgeting using more information on results.

To increase results-based decisions in budgeting and to make the budget more transparent, activity-based budgeting is taken into use. The prerequisite for implementing activity-based budgeting is the use of an accrual-based budget. An accrual-based budget is also necessary for unification of the accounting principles used in accountancy and budgeting.

Estonia plans to transition to an accrual-based budget in 2017 and to activity-based state budget by 2020.

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³⁸ See e.g. "Estonia's development needs for the next ten years", Ministry of Finance. 2012. (http://www.struktuurifondid.ee/public/arenguvajadused_final1.pdf). (as of 7 May 2015)

³⁹ OECD Public Governance Reviews. Estonia. Towards a Single Government Approach. OECD. 2011.

⁴⁰ Activity of the Government of the Republic upon assessing its work results and reporting the results. National Audit Office. 2012. (http://www.riigikontroll.ee/tabid/206/Audit/2265/Area/1/language/et-EE/Default.aspx). (as of 7 May 2015)

⁴¹ "Action Plan for building administrative capacity and implementing the recommendations of OECD Public Governance Reviews". 2014.

⁽https://riigikantselei.ee/sites/default/files/riigikantselei/strateegiaburoo/haldusvoimekuse ja oecd riigivalitsemis e raporti tegevuskava 10.12.2014.pdf).

Strategic management of the state

The Ministry of Finance and the Government Office continue close co-operation to ensure alignment of the state's strategic plans and funding. Starting with 2011, four main strategic documents of the Government of the Republic are updated simultaneously and in a co-ordinated manner: the action programme of the Government of the Republic of Estonia, the State Budget Strategy, the competitiveness programme "Estonia 2020" and the Stability Programme. In 2015, Estonia's European Union Policy was added as the fifth base strategic document of the Government of the Republic.

Estonia continues to plan the state budget's resources on the basis of a central principle that the state's funding sources and funding needs must be viewed as a whole. The funds of the EU programme period of 2014–2020 are also planned by analysing the state's needs as a whole. It means that in planning, the state's own funds, the EU funds and e.g. the funds of Norway, Switzerland and the European Economic Area are planned and monitored as comprehensively as possible.

Irrespective of the source of financing, all actions must be planned sustainably and effectively in cooperation with other sectors in order to mutually support the achievement of objectives. EU support is considered to be a once-off booster (e.g. to initiate and implement structural reforms and projects) and the use of it must result in a developmental leap forward, ensuring sustainable positive impact on the economy and society, while avoiding an additional burden on the state budget.

In the State Budget Strategy, the target levels and indicators were supplemented until 2020, based on priorities of the new composition of the government that entered the office after the parliamentary elections of 2015. The resources are in line with the macroeconomic and public finance indicators in the economic forecast of spring 2016 and with the objectives and fiscal policy measures of the current State Budget Strategy.

In order to address the areas of government more comprehensively, the planned actions and financial plans of other members of general government were included into the preparations of the State Budget Strategy and the state budget more than in the previous year. Therefore, the financial plans i.e. state budget requests that were in line with the objectives and actions of organisation-based development plans were submitted together with the data from the non-budgetary general government institutions in the area of government of the respective ministry.

Structural sectoral reforms

In spring 2014, Estonia adopted multiple reform plans,⁴² whereas several of the plans have a direct influence on public finance in addition to improving competitiveness. Tax burden on labour was reduced, redirecting it to taxation of consumption and environmental load instead: excise duties on alcohol and tobacco were increased, the rate of unemployment insurance payment was reduced from 3.0% to 2.4% and the rate of basic exemption was increased to 170 euros per month starting with the beginning of this year.

In order to achieve more budget flexibility, road maintenance expenditure was disengaged from fuel excise receipts and the more favourable excise duty on fiscal-marked fuel was replaced by better targeted compensations. In order to ensure a fairer environment of competition and taxation and to improve tax receipts, an addition to the value added tax declaration was

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⁴² Adopted with Government Decision dated 8 May 2014 in the national reform plan "Estonia 2020".

established, detailing transaction-based information about both purchase and sales transactions, the value added tax deductions on company-owned passenger cars used for private purposes was reduced, and the taxation of compensation for use of personal cars as a fringe benefit was specified. Also, an employee register was established where starting with 1 July 2014 all employees must be entered immediately before they start working; this register has notably improved the receipt of labour taxes.

The Government is planning to continue with the following reforms throughout the next year, based on the country-specific recommendations and priorities agreed in the European Council, which have an important effect on the efficiency and effectiveness of public finance:⁴³

- Based on the objective to reduce the tax burden on labour by redirecting it to taxation of consumption and environmental load, plans have been adopted for increases of excise duties on alcohol and tobacco, increase of the basic exemption to 205 euros and gradual decrease of the social tax rate from 33% to 32%.
- o In order to reduce tax differences, the value added tax rate of accommodation services will increase to 14% starting with 2017 and the upper limit of expenditure deductible from revenue will be reduced.
- o In order to make public governance more efficient, works will be continued to centralise support services and reduce public sector's expenditure.

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 $^{^{43}}$ Will be adopted by the Government at the end of May 2015 with an update to "Estonia 2020".

7. INSTITUTIONAL FUNCTIONS

Fiscal institutions

The fiscal institution⁴⁴ that may be pointed out in the Estonian context is the **National Audit Office**, which is independent in its activities and evaluates the legality and effectiveness of the use of public funds through economic inspections (audits). Various aspects of the audited agencies are assessed in the course of an audit e.g. the internal control system, financial management, economic activity, management, effectiveness of the organisation and activity, and reliability of the information technology systems.

An independent **Fiscal Council** was formed under Bank of Estonia in 2014, having the task of providing assessments to economic forecasts which form the basis for Estonia's fiscal policy, and monitoring the respecting of the state's internal budget rules. The Fiscal Council's task is to provide assessments to the Government's macroeconomic and financial forecasts, budget strategies, and the achievement of the objective set for the general government's structural budgetary position.

Fiscal rules

Fiscal rules play an important role in the achievement of fiscal policy objectives. The objective set for the medium term in strategic development plans and the latest Coalition Programmes is a balanced budget (the "soft" rule that has so far been followed by all governments); in 2014, the rule that requires the general government's budget to be in balance was entered into the State Budget Act as well.

Generally, the basis of the conservative fiscal policy of Estonia arises from the Constitution of the Republic of Estonia. The Constitution stipulates that if a proposed amendment to the state budget or to its draft has the effect of decreasing estimated revenue, or increasing expenditure or reallocating expenditure, the proponent of the amendment shall append financial calculations to the proposed amendment that demonstrate the sources of revenue necessary to cover the expenditure. Also, the Riigikogu may not eliminate or reduce expenditure that is prescribed by other laws in the state budget or in a draft budget.

The Constitution also regulates how expenses may be incurred in the event that the Riigikogu has not adopted the state budget by the start of the budgetary year – in such a situation, the expenses incurred in a month may not exceed one-twelfth of the previous year's expenditure. The Constitution stipulates that the President of the Republic must declare extraordinary elections of the Riigikogu if the Riigikogu has not adopted the state budget within two months after the start of the budgetary year.

Amendments to the State Budget Act entered into force in 2014, with the aim to establish legal bases and basic requirements for guaranteeing Estonia's economic and budgetary sustainability in the long term. The Act establishes requirements and obligations for the area of budgeting and also definitions and principles of budgeting. In order to fulfil the requirements prescribed for

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⁴⁴ According to the definition provided by the European Commission, fiscal institutions are institutions that (1) (regularly) analyse, assess or make recommendations regarding the fiscal policy of the state, (2) draw up independent forecasts of budget revenue or forecasts that are used upon comparison with the Government's forecasts. These institutions must also be financed from the public funds.

preparing the state budget, conditions are established for planning funds and undertaking obligations by persons included in the general government. As one of its most important parts, the Act establishes unified budgeting rules for the entire general government. Council Directive 2011/85/EU on the requirements for budgetary frameworks of the member states sets an obligation to establish the implementation of unified rules for the general government, in order to ensure the general government's budgetary discipline and thereby balance. Article 5 of the Directive declares that member states shall establish budget rules expressed in numbers, which efficiently facilitate in the entire general government the fulfilment of relevant fiscal policy obligations resulting from the base treaty. This is expressed primarily in respecting of the reference values set for deficit and debt in the base treaty and in fulfilment of the medium term budgetary objectives.

Indeed, the State Budget Act establishes budgetary position rules, pursuant to which the state budget must be prepared so that the government sector's structural budgetary position would be at least in balance. A budgetary balance rule is established for legal persons belonging to the central government, i.e. that their primary activity's expenditure must not normally exceed their primary activity's revenue. The results of primary activity do not reflect the unit's investment activity and this may result in its budgetary position being significantly different from its primary activity's result. Investments are normally funded by own means gathered from previous periods (which means that the unit's primary activity has produced a surplus) or by loans. The balance rule is applied to persons belonging to the central government by way of adding the obligation to respect that rule to Acts regulating their activities or ensuring the respecting of that rule on the basis of the law (in the person's Articles of Association). Excessive investments by legal persons belonging to the central government are limited by the net debt burden rule, pursuant to which the upper limit of signing loan agreements is 40% of the net debt burden in relation to the principal activity's revenue. This limit is not absolute and can be exceeded with permission from the Government of the Republic. In granting its permission, the Government of the Republic is guided by the need to respect the requirement for balance of the general government's budgetary position.

APPENDICES

Appendix 1. Main indicators of Estonian economy in 2005–2015

Table 32. Gross Domestic Product in 2005-2015

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
	%	%	%	%	%	%	%	%	%	%	%
1. Real GDP	9.5	10.4	7.9	-5.3	-14.7	2.5	8.3	4.7	1.6	2.1	1.1
2. Nominal GDP	16.0	20.1	20.1	1.7	-14.4	4.0	11.5	7.5	6.2	4.2	2.5
Growth sources											
3. Private consumption expenditure (incl. NPISH)	9.3	12.7	9.0	-4.9	-15.3	-1.6	3.7	4.4	3.8	3.5	4.8
4. General government's final consumption expenditure	3.0	5.4	6.6	4.5	-3.2	-0.4	1.7	3.3	2.8	2.3	2.1
5. Gross fixed capital formation	15.3	22.8	10.3	-13.1	-36.7	-2.6	33.0	10.4	2.5	-2.8	-4.5
6. Changes of inventories (% of GDP)	0.2	2.6	2.7	-0.5	-2.0	0.0	3.2	1.7	-0.5	2.0	0.3
7. Export of goods and services	19.9	9.5	12.6	0.9	-20.3	24.0	24.9	6.2	2.4	2.6	-1.1
8. Import of goods and services	16.7	20.7	13.0	-6.2	-30.6	21.0	26.5	11.8	3.3	2.7	-1.8
Contribution to GDP growth ¹⁾											
9. Domestic demand (excluding inventories)	10.2	13.7	8.8	-6.1	-20.5	-1.6	8.7	5.9	3.1	2.1	1.8
10. Changes in inventories	-0.2	2.8	2.2	-5.7	-4.6	2.0	3.2	-1.4	-2.2	2.5	-2.5
11. Balance of goods and services	-0.5	-8.4	-4.4	6.8	12.9	2.9	0.5	-4.3	-0.8	0.0	0.5
Growth of added value											
12. Primary sector	-0.9	-1.4	15.4	0.9	-0.2	10.1	16.4	16.6	-3.9	8.1	14.1
13. Manufacturing	7.6	9.3	6.1	-6.1	-17.9	15.4	12.0	1.9	3.5	3.3	-0.5
14. Construction	25.3	8.3	11.1	3.4	-34.6	-3.8	31.3	7.5	-3.9	-4.1	-4.9
15. Other services	8.2	10.7	6.9	-4.1	-12.1	1.0	4.9	4.5	2.8	0.7	0.6

¹⁾ Contribution to GDP growth indicates the shares of specific sectors in economic growth. This is calculated by multiplying growth in the area by its share in GDP. The sum of the contributions of different sectors amounts to economic growth (the slight difference can be attributed to a statistical error –the part of GDP that cannot be divided between the sectors).

Source: Ministry of Finance, Statistics Estonia.

Table 33. Prices in 2005-2015 (%)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1. GDP deflator	6.0	8.9	11.6	7.5	0.4	1.5	5.2	2.7	3.9	2.0	1.4
2. Private consumption deflator	4.4	6.1	7.7	8.3	-0.2	3.5	5.7	3.4	3.0	0.8	-0.1
3. Harmonised Consumer Price Index	4.1	4.4	6.7	10.6	0.2	2.7	5.1	4.2	3.2	0.5	0.1
3a. Consumer price index	4.1	4.4	6.6	10.4	-0.1	3.0	5.0	3.9	2.8	-0.1	-0.5
4. General government consumption expenditure deflator	9.1	7.1	14.4	13.3	0.0	-0.3	3.4	2.9	6.2	4.2	4.2
5. Investment deflator	4.2	9.1	8.4	-0.2	-1.4	-0.2	4.0	2.2	4.9	0.8	3.1
6. Export deflator	3.7	5.6	6.2	6.5	-2.2	3.6	5.1	1.8	1.1	-0.3	-1.5
7. Import deflator	1.7	3.1	4.1	6.3	-2.6	5.8	4.7	2.5	-0.2	-1.4	-1.8

Source: Ministry of Finance, Statistics Estonia.

Table 34. Labour market in 2005-2015

	2005	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
		%	%	%	%	%	%	%	%	%	%	%
1. Employment, persons	615.6 ¹⁾	2.3	5.9	0.9	-0.2	-9.5	-4.4	6.2	1.9	1.0	0.6	2.6
3. Unemployment rate		8.1	5.9	4.6	5.8	13.6	17.5	13.6	10.0	8.6	7.4	6.2
4. Labour productivity, per employed person	22.8 2)	6.9	4.2	6.8	-5.2	-5.8	7.1	1.3	3.2	0.5	2.3	-1.5
6. Compensation of employees	4,933 ²⁾	15.3	20.0	24.3	12.0	-13.3	-2.6	7.2	8.3	6.8	6.9	6.6
7. Compensation per employee (6./1.)	8.0 3)	12.7	13.3	23.2	12.2	-4.2	1.9	0.9	6.2	5.7	6.3	3.9
7a. Average gross monthly wage, EUR	516	10.8	16.5	20.5	13.9	-5.0	1.1	5.9	5.7	7.0	5.9	6.0

Thousand persons.
 Million EUR.

Source: Ministry of Finance, Statistics Estonia.

³⁾ Thousand EUR.

Table 35. Balance of payments in 2005-2015 (% of GDP)

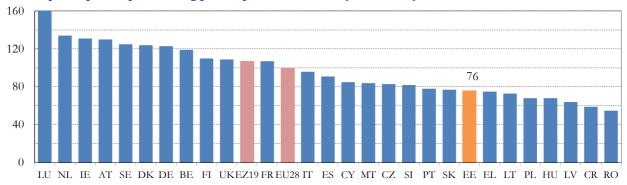
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1. Net lending/borrowing vis-à-vis the rest of the world	-8.0	-12.8	-13.8	-7.5	6.0	5.3	5.4	1.0	2.7	2.1	3.9
incl.:Balance of goods and services	-5.1	-10.1	-8.9	-3.9	5.0	6.4	5.7	1.0	2.2	3.4	4.0
- Balance of primary and secondary income	-3.6	-4.8	-6.1	-4.8	-2.4	-4.6	-4.4	-3.4	-2.3	-2.4	-2.1
- Capital account	0.8	2.2	1.3	1.3	3.4	3.5	4.1	3.4	2.8	1.1	2.0
1a. Current account	-8.7	-15.0	-15.0	-8.7	2.5	1.8	1.3	-2.4	-0.1	1.0	1.9
2. Errors and omissions	-0.3	-1.4	-0.8	-0.1	0.1	0.4	0.7	1.9	-0.2	-0.6	0.7

Source: Ministry of Finance, Bank of Estonia, Statistics Estonia.

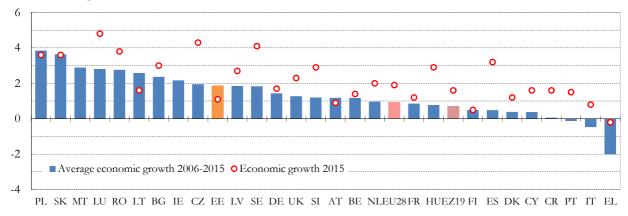
Appendix 2. Comparison of Estonia with other EU member states (figures)

Figure 22. Main macroeconomic indicators (%)

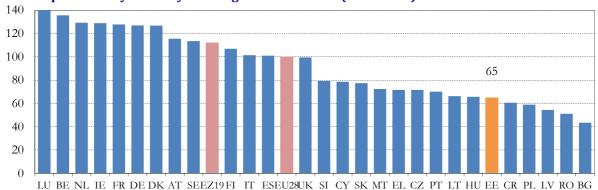
A. GDP per capita in purchasing power parities in 2014 (EU28=100)



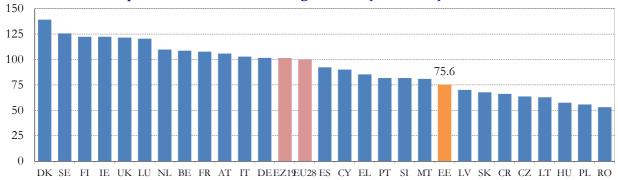
B. Economic growth in 2015 and 2006-2015



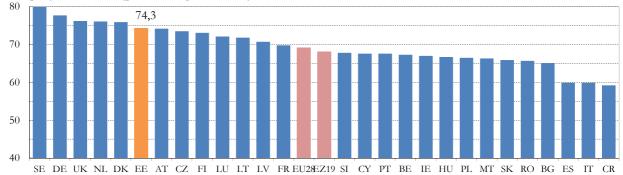
C. Labour productivity - GDP by working hours PPS 2014 (EU28=100)



D. Price level in comparison with the EU28 average in 2014 (EU28=100)



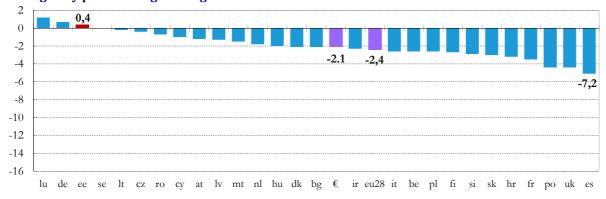
E. Employment rate (persons aged 20-64) in 2014



Sources: Eurostat, Statistics Estonia, Ministry of Finance.

Figure 23. Fiscal position of general government (% of GDP)

A. Budgetary position of general government in 2015



B. General government debt in 2015

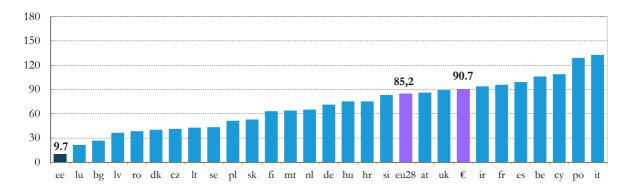
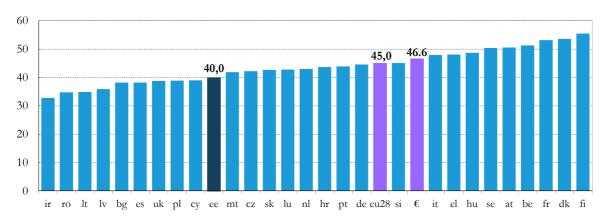
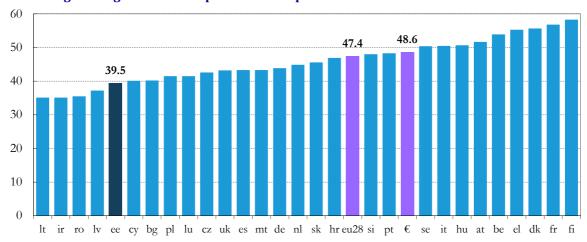


Figure 24. General government revenue and expenditure (% of GDP)

A. Estonian general government revenue compared to other EU member states in 2015



B. Estonian general government expenditure compared to other EU member states in 2015



Source: Eurostat.

Appendix 3. Effect of administrative price increases on CPI

Table 36. Effect of administrative price increases on CPI in 2015-2020 (%)

	Entry into	Price		Effect or	n CPI (pe	rcentage	points)	
Administrative measures	force	increase (%)	2015	2016*	2017*	2018*	2019*	2020*
Changes in tax policy			0.50	0.76	0.88	0.70	0.45	0.48
Increase of tobacco excise duties (6%)	1.01.2014	4.8	0.03	-	-	-	-	-
Increase of tobacco excise duties (8%)	1.06.2016	6.4	-	0.03	0.10	-	-	-
Increase of tobacco excise duties (8%)	1.01.2017	6.1	-	-	0.10	0.03	-	-
Increase of tobacco excise duties (8%)	1.01.2018	6.2	-	-	-	0.10	0.03	-
Increase of tobacco excise duties (10%)	1.01.2019	7.7	-	-	-	-	0.12	0.04
Increase of tobacco excise duties (10%)	1.01.2020	7.9	-	-	-	-	-	0.12
Increase of alcohol excise duties (15%)	1.01.2015	8.0	0.42	0.04	-	-	-	-
Increase of alcohol excise duties (15%)	1.02.2016	7.4	-	0.32	0.06	-	-	-
Increase of alcohol excise duties (10%)	1.01.2017	5.1	-	-	0.24	0.02	-	-
Increase of alcohol excise duties (10%)	1.01.2018	5.2	-	-	-	0.25	0.02	-
Increase of alcohol excise duties (10%)	1.01.2019	5.8	-	-	-	-	0.28	0.03
Increase of alcohol excise duties (10%)	1.01.2020	6.1	-	-	-	-	-	0.29
Increase of fuel excise duties (10%; 14%)	1.02.2016	6.3	-	0.30	0.03	-	-	-
Increase of fuel excise duties (10%; 10%)	1.01.2017	5.8	-	-	0.30	-	-	-
Increase of fuel excise duties (10%; 10%)	1.01.2018	5.9	-	-	-	0.30	-	-
Increase of shale oil (heating oil) excise duties***	1.01.2016	6.2	-	0.02	-	-	-	-
Increase of oil shale excise duties***	1.01.2016	11.0	-	0.02	-	-	-	-
Diesel fuel for specific purposes in heating	1.05.2015	48.0	0.03	0.01	-	-	-	-
Value added tax on accommodation services from 9% to 14%	1.01.2017	4.6	-	-	0.03	-	-	-
Increase of gas excise duties (20%)***	1.01.2015- 2017		0.02	0.02	0.02	-	-	-
Other administrative price changes			-0.67	-0.52	0.08	0.22	0.16	0.16
Free higher education	1.09.2013- 2016		-0.26	-0.13	-	-	-	-
Electricity (incl. the electricity exchange price, network fees, renewable energy fee)**	2015-2020		-0.19	0.04	0.06	0.06	0.06	0.06
Water supply and sewage**	2015-2020		0.04	0.03	0.04	0.05	0.05	0.05
Natural gas**	2015-2020		-0.07	-0.08	-0.06	0.03	0.01	0.01
Heat energy**	2015-2020		-0.19	-0.38	0.04	0.08	0.04	0.04
Total			-0.17	0.24	0.96	0.92	0.61	0.64
			0.27	0.21	0.70	0.72	0.01	0.01

^{**} Assessment by the Ministry of Finance, starting with 2016.

^{***} These effects are taken into account in the price change of gas and heat energy below. Source: Ministry of Finance, Statistics Estonia, Estonian Competition Authority.