EELARVENÕUKOGU
FISCAL COUNCIL

FISCAL COUNCIL OPINION ON THE SPRING FORECAST 2018 OF THE MINISTRY OF FINANCE AND ON THE TARGETS FOR THE STRUCTURAL BUDGET POSITION FOR 2019-2022

April 2018

Contents

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Opinion

Under the State Budget Act, the Fiscal Council must give an assessment of the macroeconomic and fiscal forecasts of the Ministry of Finance, and of the structural budget position of the general government. This year there was a short gap between the releases of the economic forecast of the Ministry of Finance and the state budget strategy, and so the Fiscal Council has put its opinions together in one publication. The Fiscal Council bases its opinion on the targets for the structural budget position on the draft version of the budget strategy that was received on 20 April.

Opinion on the achievement of the general government structural budget position target in 2017

The economy grew notably faster than was forecast in 2017, and so tax revenues could have been expected to be higher than forecast. However, tax receipts were actually similar to the expectations in the state budget. This was mainly because revenues from excises and corporate income tax were lower. The Fiscal Council noted in its opinions published in 2017 that there was a risk of forecast error arising from the large number of tax changes and of tax receipts being lower than forecast.

The Fiscal Council finds that the structural budget position of the general government for 2017, which the Ministry of Finance estimates at -0.3% of GDP and the Fiscal Council at -0.7 of GDP, is in breach of the target that was set when the state budget for 2017 was drawn up. The ability of the government to use the cumulative structural surplus to set budget targets for 2019-2022 is reduced by the amount of the structural deficit in 2017.

Opinion on the economic forecast of the Ministry of Finance for spring 2018

The good state of the economy in the past year and the favourable external environment have raised the estimates of forecasters for the potential growth in the Estonian economy. The Ministry of Finance is forecasting economic growth of 4% for this year, and inflation of almost 3%. It is forecasting that growth will slow to 3.2% in 2019, but that it will remain close to 3% over the longer term.

The expected tax receipts in the fiscal forecast have been corrected for 2018-2019 in line with changes in the economic environment and more accurate assessments of the impact of tax changes. Receipts from consumer taxes, mainly excises, are lower than was forecast last autumn, but higher receipts from labour taxes more than made up for this. The reassessment of the tax forecast overall puts general government income higher by 0.3% of GDP both this year and next year. Despite the improved outlook for tax receipts, the general government budget in the spring economic forecast is in nominal and structural deficit in the years ahead. Both the Ministry of Finance and the Fiscal Council find the structural deficit under these assumptions could reach 0.7% of GDP in 2019-2020, which is more than is permitted by the State Budget Act.

Overall the Fiscal Council finds that the spring forecast 2018 of the Ministry of Finance describes the outlook for economic growth and inflation in Estonia accurately enough and is in line with the forecasts of other institutions. The Fiscal Council finds that the risks of faster or slower economic growth are broadly balanced. As it is not yet entirely clear what impact the tax decisions taken last year will have, the risks to the tax revenue outlook for 2018-2019 lean to the downside.

Opinion on the targets for the structural budget position set in the state budget strategy

The state budget strategy 2019-2022 sets a target for government fiscal policy of being at least in structural balance over the medium term. To achieve this, the government has decided during the discussions over budget strategy to introduce several revenue and spending measures that will improve the nominal budget position over the next four years by more than 500 million euros. As a result, the state budget strategy for 2019-2022 expects the general government budget to have a small nominal surplus and be in structural balance.

Measures to increase government income will be as much as 0.7% of GDP in the years 2019-2020. The Fiscal Council finds there is a danger that some of the planned measures presented in the state budget strategy will not bring in all of the additional revenues expected. Measures to create additional jobs for example, such as the renovation of apartment buildings or changes to the Aliens Act and the Weapons Act, may in the end not create jobs, but lead instead to existing workers and jobs being replaced. In this case there could be a fall in the tax revenues that the Ministry of Finance has already calculated in its recent spring forecast. It is also possible that the profits of state-owned companies will not grow at the expected rate and they will not be able to pay out as much in dividends as is hoped in the coming years.

The Fiscal Council is of the opinion that the targets for the structural budget position set in the state budget strategy 2019-2022 are in line with the State Budget Act, but achieving those targets assumes that the additional revenue and spending measures introduced in the budget strategy will materialise in their expected form. The materials received by the Fiscal Council do not explain these measures well enough, and their impact has been assessed only approximately. For this reason the Fiscal Council does not believe that the revenue and spending measures presented in the state budget strategy are sufficient for the target of structural balance to be achieved.

The spring forecast of the Ministry of Finance expects the general government budget to be in structural deficit in 2017 and 2018 even though the economy has grown rapidly. So that the flexibility built into the budget rules could be used in future should the economy take a turn for the worse, the Fiscal Council believes that a structural surplus should be planned at a time when the output gap is positive. In consequence the Fiscal Council recommends that the government draw up its state budget for 2019 so that the general government budget would be in structural surplus.

Chairman of the Fiscal Council
Raul Eamets
Tallinn, April 26 2018

Explanatory Report

Under the State Budget Act, the Fiscal Council must give an assessment of the macroeconomic and fiscal forecasts of the Ministry of Finance, and of the structural budget position of the general government. This year there was only a short gap between the releases of the spring forecast and the state budget strategy, and so the Fiscal Council has put its opinions together in one publication. The spring forecast indicated that the structural deficit will be larger than permitted in 2019-2020 and the government will need to take steps to improve its fiscal position. For this reason the assessment of the Fiscal Council of the fiscal forecast covers only tax receipts. The budget position of the general government is assessed in the opinion on the structural budget position achieved last year and on the targets for the upcoming years set in the state budget strategy, which also includes additional revenue and spending measures intended to improve the fiscal position. The Fiscal Council bases its opinion on the targets for the structural budget position on the draft version of the budget strategy that was received on 20 April.

Opinion on the spring forecast 2018 of the Ministry of Finance

Assessment of the macroeconomic forecast

Since spring 2017, forecasters have had to recognise on several occasions that economic growth will be faster than previously expected in the years ahead both in Estonia and elsewhere in the world. Although the growth in the economy in 2017 in Estonia was more broadly based than previously, the driver of the growth remained domestic demand, though unlike previously, the lead role was taken not by consumer spending but by increased investment. The growth in investment by the general government and by business was unexpectedly faster than in previous years and than its long-term average, and stood at 16% in constant prices. Growth in consumption at current prices remained fast, but prices rose substantially more than in 2016. For this reason consumption made a smaller contribution to the growth in real GDP than previously. Real GDP growth for the whole year was 4.9% though, which is faster than usual.

Given all this, it is to be expected that the economic forecasts published this year would have corrected estimates of the potential growth in the Estonian economy and growth in the years ahead upwards. Forecasts published last spring on average expected real GDP growth this year to be 2.8%, but this year that figure has risen to 3.6% (see Table 1). Upwards corrections to consumer prices for 2018 have been smaller on average and this primarily reflects the reassessment of assumptions about tax changes and global commodities prices.

Table 1. Estimates by various institutions for GDP and CPI growth in Estonia in 2018-2019 (%)

	Real GDP growth (%)		CPI inflation (%)	
	2018	2019	2018	2019
Nordea (January)	3.7	3.0	3.4	2.5
European Commission (February)*	3.3	2.8	3.1	2.6
SEB (February)*	3.5	3.0	3.2	2.5
Consensus Forecasts (March)	3.5	3.1	3.2	2.7
Swedbank (March)	3.9	3.0	3.0	2.5
IMF (April)*	3.9	3.2	3.0	2.5
Average of other forecasts:	3.6	3.0	3.2	2.6
Ministry of Finance (April)	4.0	3.2	2.9	2.3

* Inflation forecasts based on the harmonised consumer price index. These estimates are not used in calculating the average of the forecasts.

Sources: Consensus Forecasts, European Commission, Nordea, Ministry of Finance, IMF, SEB, Swedbank

The spring forecast of the Ministry of Finance expects growth of 4% this year and 3.2% next year, which is similar to the outlooks from other forecasters. The views of forecasters on changes in consumer prices are also relatively similar for both years. In summary the main indicators in the spring forecast of the Ministry of Finance for 2018-2019 are in line with other forecasts drawn up at the same time.

One reason the forecast for growth has been reassessed is generally increased foreign demand in 2017 and in the years ahead. The Ministry of Finance has also indicated its assumption for foreign demand is more optimistic than before. One departure in the new forecast of the ministry from that of last year is that the leading role in raising the forecast for growth has been changes in the assumptions about domestic demand. In spring 2017 the Ministry of Finance forecast real GDP growth for this year of 3.1%, but the new forecast expects faster growth of 4%. Within this it is notable that the largest change is in the outlook for investment activity in the private sector, as the very fast growth last year means that investment is expected to continue growing rapidly in 2018-2019 (see Table 2).

Table 2. Key macroeconomic figures for 2018-2019 in the spring forecasts of 2017 and 2018

	2017	Forecast for 2018		Forecast for 2019	
	Actual	Spring 2017	Spring 2018	Spring 2017	Spring 2018
Nominal GDP growth (%)	9.0	6.3	7.6	5.7	6.3
Real GDP growth (%)	4.9	3.1	4.0	2.8	3.2
Real private consumption growth (%)	2.0	4.0	4.7	2.5	3.3
Real investment growth (%)	13.1	0.0	3.3	4.8	5.1
Real growth in exports of goods & services (%)	2.9	3.9	4.5	4.0	4.2
Nominal wage growth (%)	6.5	5.0	7.0	5.4	5.7
CPI inflation (%)	3.4	2.7	2.9	2.5	2.3

Source: Ministry of Finance

The forecast for growth in nominal wages in 2018 has also been revised upwards. It is hard to assess whether this is justified as there are arguments both for and against. Expectations of faster growth in the economy than previously, including faster growth in foreign demand and the state of demand and supply in the labour market, argue for faster growth in wages. However, it is not clear how and how much the substantial rise in the tax-free minimum threshold affects negotiations about gross wages, and it is not impossible that the tax reform will cause a one-off slowdown in wage growth. For this reason it is harder than usual to forecast wage growth, and consequently private consumption, for this year. In general, the Fiscal Council finds that the changes from the earlier forecasts are mainly justified.

The spring economic forecast of the Ministry of Finance covers this year and the next four years. Real GDP growth remaining at close to 3% even after the faster growth than usual in 2017-2018 reflects the change in the Ministry of Finance's assessment of the potential growth in the Estonian economy (see Table 3). The ministry has corrected both potential GDP growth and the level of potential GDP upwards from a year ago. It is the opinion of the Ministry of Finance that the Estonian economy is currently running above its potential level, but that this difference will narrow in the future and disappear by the end of the forecast horizon. In spring last year the Ministry of Finance forecast that Estonia's average potential GDP growth in the last four years of the forecast would be 2.6%, but now that figure is put at 3.4%. The Fiscal Council finds that the explanatory note attached to the forecast does not give sufficient explanation for the sources of this rise in potential growth from the position last spring.

Table 3. The key indicators for the medium term in the spring forecast and the forecasts for them in 2017

	Spring 2018			Summer 2017	Spring 2017
	2018	2019	Average 2020-2022	Average 2019-2021	Average 2019-2021
Real GDP growth (%)	4.0	3.2	2.9	3.0	2.7
Real private consumption growth (%)	4.7	3.3	2.8	2.5	2.4
Real growth in exports of goods & services (%)	4.5	4.2	3.9	3.9	4.0
Real investment growth (%)	3.3	5.1	4.0	4.3	4.7
Nominal GDP growth (%)	7.6	6.3	5.5	5.6	5.6
Nominal growth in private consumption (%)	7.8	5.8	5.1	5.1	4.9
Nominal growth in investment (%)	6.5	7.8	6.4	6.7	7.3
Change in the number of employed (%)	0.8	0.5	−0.2	0.4	0.1
Nominal wage growth (%)	7.0	5.7	5.6	5.3	5.3
Nominal payroll growth (%)	7.8	6.2	5.4	5.7	5.4
Consumer price index (%)	2.9	2.3	2.1	2.3	2.3

Source: Ministry of Finance

The key figures for the economy have changed relatively little in proportion to each other in the medium term from what they were in last year's forecasts. The main medium term risks also remain the same.

The first is that there is no certainty about how the global economy will grow and how this affects trade. It is possible that 2017 was indeed a turning point and that outside the European Union growth in demand for imports will start to exceed growth in GDP as well. Assessments by experts from the European Commission and the International Monetary Fund at the start of this year support this opinion, although they expect the gap to narrow. The main question in the medium term is whether a stronger revival in global trade than was expected will also affect Estonia. Current assumptions show import demand in Estonia's main trading partners growing by less than the average in Europe or in the whole world. At the same time there has been an increase in protectionist measures and in the danger of a trade war. If this were to happen the current assumptions about foreign demand could turn out in fact to be too optimistic.

It is also debatable what the sustainable rate of growth is for labour costs. Labour costs increased as a share of Estonian GDP in 2013-2016, and it is not clear whether and for how long investors will accept additional growth in labour costs at the expense of profits.

Assessment of the fiscal forecast

The Estonian economy is very small and open and there can be substantial differences in the contributions of domestic demand and foreign demand to economic growth from year to year. For the state finances this means that tax revenue as a share of GDP is not the same every year. Looking back at the years 2011-2017 for example, it can be seen that on average the tax income of the general government grew at the same rate as nominal GDP (see Figure 1). This does not apply in every individual year though, and last year tax revenues grew by less than GDP did[1]. The updated forecast of the Ministry of Finance assumes that the tax burden will remain stable as a share of GDP in the medium term. The years 2018-2019 will be an exception to this, as receipts from income taxes and consumption taxes have been affected by the changes in tax rates there were introduced last year.

[1] Domestic demand grew quickly in 2017, but this was largely because of sharp growth in investment in the business sector. However, there is a rebate for the VAT on inputs for such investments and so they do not directly boost tax receipts.

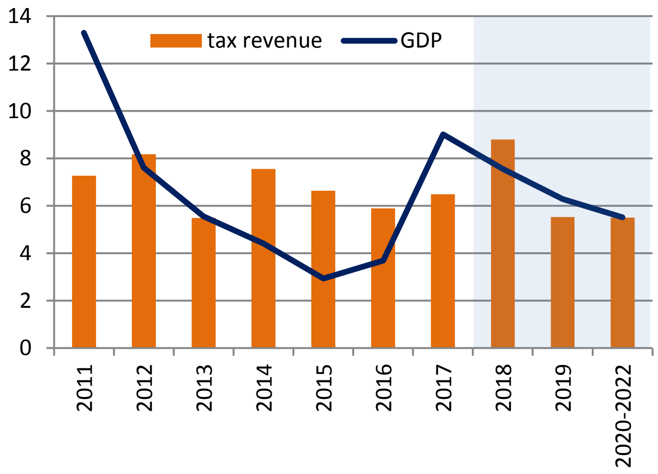

Figure 1. Tax revenues and nominal GDP growth with the forecast for 2018-2022 (%)

Source: Ministry of Finance

Developments last year gave grounds for forecasting that employment and wages will grow a little faster in future than was previously expected. Consequently the Ministry of Finance has increased its forecast for labour tax revenues (see Figure 2), with the budget positions of the central government, the social insurance funds, and local governments all improving if other conditions remain the same.

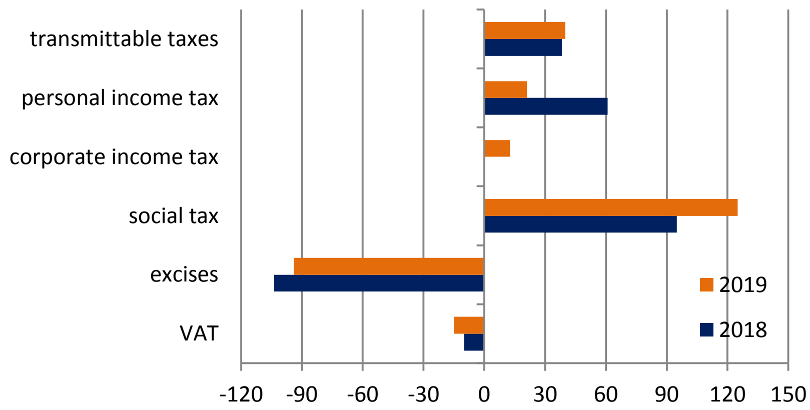

Figure 2. Changes in the state budget tax revenues compared to the previous forecast (million euros)

Source: Ministry of Finance

In addition to this, the Ministry of Finance has adjusted its estimate of the impact of the rise in excises in response to data from the second half of last year and the first months of this. It is natural that for 2018-2019 the review of the forecast for labour taxes should increase the expected income of the general government and the adjustment of excises should reduce it. The reassessment of the tax forecast overall puts general government income higher by 0.3% of GDP both this year and next year. Another change has been the forecast distribution across years of the income transfers received from the budget of the European Union.

Tax revenues in 2018-2019 are affected not only by macroeconomic development, but also by several major changes in tax policy for both income taxes and consumption taxes. The Fiscal Council stands by its earlier opinion that the behaviour of investors was already hard to predict with income tax as it was. The Ministry of Finance assumes that the cut in the tax rate for dividends paid out regularly will encourage owners to take out more in dividends than before, meaning that corporate income tax receipts will increase substantially. This though assumes that businesses believe that the new tax rules will remain over the long term. The volatility of the tax measures proposed in recent years may disprove that assumption though and reduce the desire of businesses to take long-term decisions about profits. Greater clarity is expected only by the end of this year.

Consumer behaviour may also be affected by the combination of the reform of personal income tax, which raised the tax-free threshold for those on low and average wages to 500 euros a month, and the changes in excise rates, and this also increases the probability of forecast error. As it is not yet entirely clear what impact the tax decisions taken last year will have, the risks to the tax revenue outlook for 2018-2019 lean to the downside.

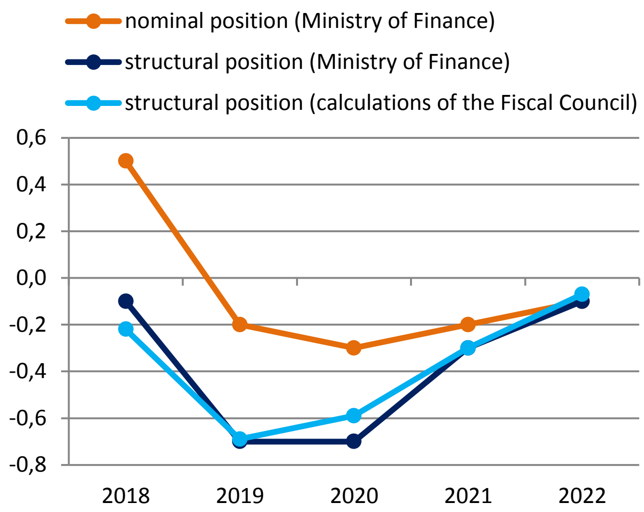

Figure 3. The general government budget position according to the spring forecast 2018 of the Ministry of Finance (% of GDP)

Sources: Ministry of Finance, calculations of the Fiscal Council

Despite the improved outlook for tax receipts, the general government budget in the spring economic forecast is in nominal and structural deficit in the years ahead (see Figure 3). The structural deficit will be 0.7% of GDP in 2019-2020. Calculations by the Fiscal Council indicate the structural deficit will be of similar size. However, this is larger than is permitted by the State Budget Act and the government has proposed additional revenue and spending measures in the state budget strategy to improve the fiscal position.

Opinion on the achievement of the general government structural budget position target in 2017

Alongside the assessment of the economic forecasts, it is the responsibility of the Fiscal Council to monitor compliance with the rules on structural balance. The Fiscal Council does this by looking at the structural budget position for the past year once the result for it is clear, and the targets set in the state budget strategy for the structural budget position for the coming years. The opinion of the Fiscal Council on the achievement of the target for the structural budget position for 2017 follows.

When the state budget for the next year was being drawn up in autumn 2016, it had to follow the requirements of the State Budget Act, which required the general government structural budget position to be in balance or in surplus[2]. The Fiscal Council recommended at the time that a state budget be passed that set the target for 2017 of a small surplus in the structural budget position. The state budget passed for 2017 had a nominal deficit of 0.6% of GDP and a structural surplus of 0.2% of GDP (see Table 4).

Table 4. The general government budget position for 2017

	SBS 2017-2020	State budget 2017	Actual
Nominal position (million euros)	−105	−135	−66
Nominal position (% of GDP)	−0.5	−0.6	−0.3
Output gap (% of GDP)	−0.6	−1.0	0.9
Cyclical component (% of GDP)	−0.3	−0.4	0.4
One-off measures (million euros)	−77	−78	−80
Structural position (% of GDP)	0.2	0.2	−0.3

Source: Ministry of Finance

The state budget for 2017 was drawn up using the assumption that the Estonian economy would grow by 2.5% at constant prices and 5.2% in current prices. Growth accelerated at the end of 2016 though, and for 2017 as a whole it was at almost 5% in constant prices and 9% in current prices. Growth in both employment and the average wage was also faster than forecast.

In the favourable economic climate tax revenues from labour taxes and VAT were higher than expected, but revenues were lower from corporate income tax and excises because of the tax changes. As these higher and lower revenues than had been expected balanced each other out, overall the tax receipts for 2017 were 100.2% of the amount expected in the state budget. Receipts from social tax and VAT grew strongly compared to their growth in 2016, and total tax receipts in the state budget increased by 6.4%. Preliminary data from Statistics Estonia show that for the year as a whole the general government was in nominal deficit of 0.3% of GDP.

The summer forecast 2016 of the Ministry of Finance was used in drawing up the budget, and it put the Estonian output gap in 2017 at -1.0% of GDP. However, experts differed in their opinions about the cyclical position of the Estonian economy. The forecast of the Ministry of Finance was that the economic cycle would have a negative effect on the budget, the European Commission found the cycle would have practically no impact, and the Fiscal Council estimated the impact would be positive. At present, all the main experts analysing the Estonian economy agree that the Estonian output gap was positive in 2017 (see Figure 4).

[2] Changes came into force in the State Budget Act in summer 2017 and in the structural balance rules in it. For more on the changes to the fiscal rules see the opinion of the Fiscal Council published last July: http://eelarvenoukogu.ee/news/the-general-government-budget-for-2016-is-in-nominal-and-structural-surplus

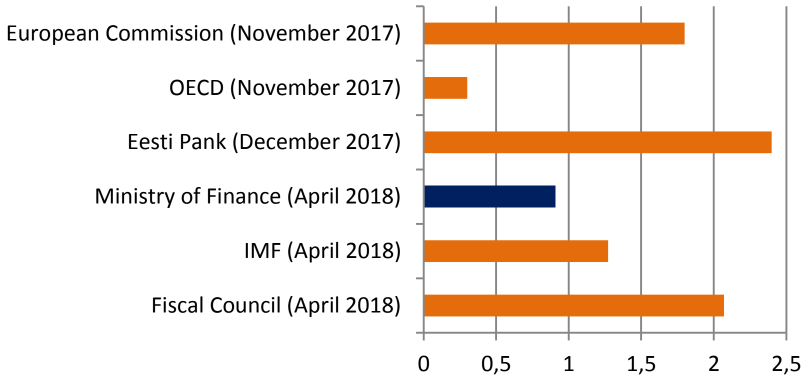

Figure 4. Estimates of the output gap in Estonia in 2017 (% of GDP)

Sources: Eesti Pank, European Commission, IMF, OECD, Ministry of Finance, calculations of the Fiscal Council

The forecasts of spring 2018 show the Estonian economy exceeding its potential size by 0.9% according to the Ministry of Finance and 1.3% in the assessment of the IMF. Analysis by the Fiscal Council of the position of the economic cycle shows the positive output gap may be even bigger than this at around 2% of GDP. The Fiscal Council uses three methods in its retrospective assessment of the position of the economic cycle: the output gap found using the Hodrick-Prescott filter; the output gap derived from the cyclical component calculated using the disaggregated method; and the assessment of the cyclical position found using the macroeconomic heatmap[3].

A nominal deficit combined with a positive output gap means there is a structural deficit (see Figure 5). In the assessment of the Ministry of Finance, the structural deficit of the Estonian general government was 0.3% of GDP in 2017, which is 0.5 percentage point weaker than the target set in the budget strategy and the state budget. It is also 0.5 percentage point weaker than the assessment of the Ministry of Finance of the structural position for 2016.

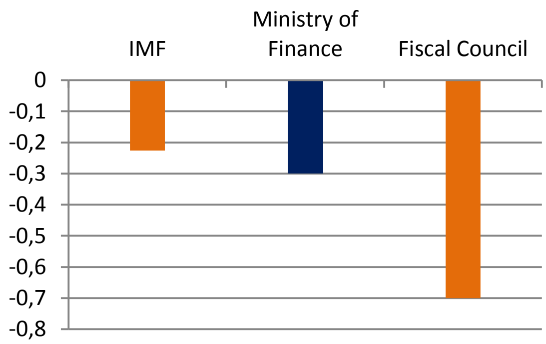

Figure 5. Estimates of the structural position of the Estonian general government in 2017 (% of GDP)

Sources: IMF, Ministry of Finance, calculations of the Fiscal Council

The assessment of the Ministry of Finance for the structural deficit last year is in line with that of the IMF, though in the opinion of the Fiscal Council the deficit may be somewhat larger. Calculations by the Fiscal Council using the disaggregated method, which takes account not only of the output gap but also of the cyclical development of the payroll and private consumption, indicate a structural deficit of 0.7% of GDP. The difference arises primarily because the good receipts of labour taxes in 2017 are considered

[3] For further information on the macroeconomic heatmap for Estonia, see the background information on page 16.

temporary, meaning they are due to the favourable position of the economic cycle, to a greater extent in the method used by the Fiscal Council than in the assessment by the Ministry of Finance.

The assessment by the Fiscal Council of the achievement of the target for the structural budget position in 2017 is not the same as previously as significant changes were made to the State Budget Act after the state budget for 2017 was drawn up. The first change was to the timing of the opinion to be issued by the Fiscal Council. Previously the Fiscal Council prepared its assessment of the fiscal position for the previous year in July, after the state report on the economic year was published, but under the changed State Budget Act the Fiscal Council must give its opinion on the previous year's fiscal position in the spring before the state budget strategy has been approved by the government. The second change was to the rule on structural balance, which the Fiscal Council must follow in giving its opinion. The main difference is that the new State Budget Act allows a structural deficit to be planned.

The state budget for 2017 was written under the State Budget Act of 2014, under which no planned structural deficit was permitted, as the state budget had to be drawn up so that the structural budget position of the general government was in balance or in surplus. The same act states that if a structural deficit arises and it is more than 0.5% of GDP, measures to correct the budget position need to be followed in the subsequent years. No correction or compensation mechanism needs to be employed when the structural deficit is smaller than 0.5% of GDP.

The updated State Budget Act allows the state budget to be written so that the general government budget position is in structural deficit. The structural deficit may be of up to 0.5% of GDP in one year, if a structural surplus of at least the same amount has previously been built up. The calculation of such a cumulative surplus is done following from the value of the structural fiscal position in 2014. As the Ministry of Finance finds that the general government budget position was in structural surplus in 2014-2016, the structural deficit that occurred in 2017 does not breach the principles of the new fiscal rules.

The Fiscal Council finds that the structural budget position of the general government for 2017, which the Ministry of Finance estimates at -0.3% of GDP and the Fiscal Council at -0.7 of GDP, is in breach of the target that was set when the state budget for 2017 was drawn up. The ability of the government to use the cumulative structural surplus to set budget targets for 2019-2022 is reduced by the amount of the structural deficit in 2017.

Opinion on the targets for the structural budget position for 2019-2022

The state budget strategy sets targets for the structural budget position of the general government for each of the next four years. When the state budget strategy and its fiscal framework are prepared, the spring macroeconomic and fiscal forecast of the Ministry of Finance is used as the starting point. The state budget strategy 2019-2022 sets a target for government fiscal policy of being at least in structural balance over the medium term.

To achieve this, the government has decided during the discussions over state budget strategy to introduce several revenue and spending measures that will substantially improve the budget position of the general government in 2019-2022 from the outlook for state finances given by the spring forecast 2018. For the next four years as a whole, the gap between the revenue and spending of the state has been improved during the discussion over the budget strategy by more than 500 million euros. The state budget strategy expects the general government budget for 2019-2022 to have a small nominal surplus and be in structural balance (see Table 5).

Table 5. The general government structural budget position in the state budget strategy 2019-2022

	2018	2019	2020	2021	2022
Nominal position (million euros)	53	133	105	50	20
Change from the spring forecast (million euros)	−60	178	189	102	51
Nominal position (% of GDP)	0.2	0.5	0.4	0.2	0.1
Output gap (% of GDP)	1.6	1.3	0.9	0.4	0.0
Cyclical component (% of GDP)	0.7	0.6	0.4	0.2	0.0
One-off measures (million euros)	−30	−21	0	0	0
Structural position (% of GDP)	−0.4	0.0	0.0	0.0	0.1

Source: Ministry of Finance

The state budget strategy contains both revenue and spending measures (see Table 7 in the appendix). Revenue measures dominate and among them is taking larger dividends from state-owned enterprises than previously planned. This accounts for around 60% of all of the revenue measures. In the opinion of the Fiscal Council it is possible that the profits of those enterprises will not be large enough for them to pay substantially larger dividends than at present and still make the investment they need.

Measures to increase government income will be as much as 0.7% of GDP in the years 2019-2020. However, according to the budget strategy this will not lead to slower GDP or tax revenue growth than was projected in the spring forecast 2018. The Fiscal Council finds that the measures to create additional jobs for example, such as renovation of apartment buildings or changes to the Aliens Act and the Weapons Act, may in the end not create jobs, but lead instead to existing workers and jobs being replaced. In this case there could be a fall in the tax revenues that the Ministry of Finance has already calculated in its recent spring forecast.

The materials received by the Fiscal Council do not explain the revenue and spending measures introduced in the state budget strategy well enough, and their impact has been assessed only approximately. For this reason the Fiscal Council does not believe that the revenue and spending measures presented in the state budget strategy are sufficient for the target of structural balance to be achieved.

The improvement in the nominal position assumed in the state budget strategy is the starting point for measuring the structural budget position of the general government, meaning the effect of the economic cycle and of one-off revenue or spending measures is removed from the nominal position. The spring forecast of the Ministry of Finance puts the output gap in Estonia this year as positive at 1.6% of GDP, and expects it to close gradually in the future. This means that the impact of the economic cycle, the cyclical component of the budget, will be positive in the years ahead (see Figure 6). In this the assessment of the Ministry of Finance of the cyclical component for 2018-2019 is not significantly different from that of the IMF or the Fiscal Council. During this period, only the merger support for local governments will be classified in the Ministry of Finance's opinion as one-off measures, and these will amount to some 50 million euros over two years.

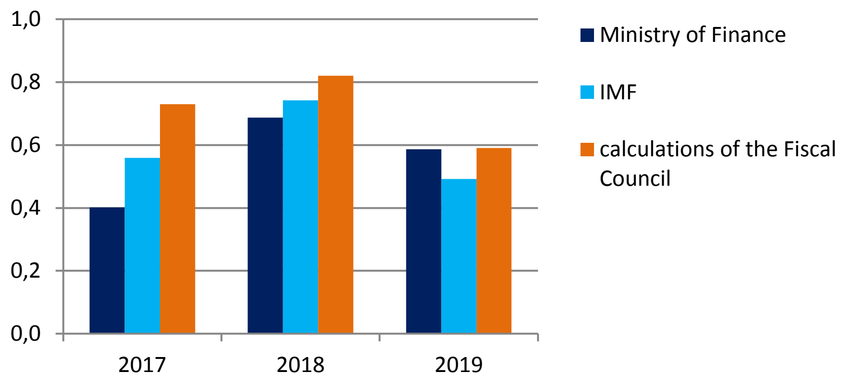

Figure 6. Estimates of the cyclical component of the budget (% of GDP)[4]

Sources: Ministry of Finance, IMF, calculations of the Fiscal Council

A similar estimate of the cyclical component of the budget means that the estimates for the future structural budget position of the general government of the Ministry of Finance and the Fiscal Council are similar (see Figure 7). In the state budget strategy 2019-2022 the general government budget in 2018 will have a structural deficit of 0.4% of GDP, but after that structural balance will be achieved in 2019 and will be maintained throughout the forecast horizon. The targets that have been set are more demanding than those in the strategy that was drawn up last spring. Assuming that the general government budget is in as much nominal surplus in the coming years as is forecast by the state budget strategy 2019-2022, the calculations of the Fiscal Council using the disaggregated method also show that the general government budget will remain in structural balance in future.

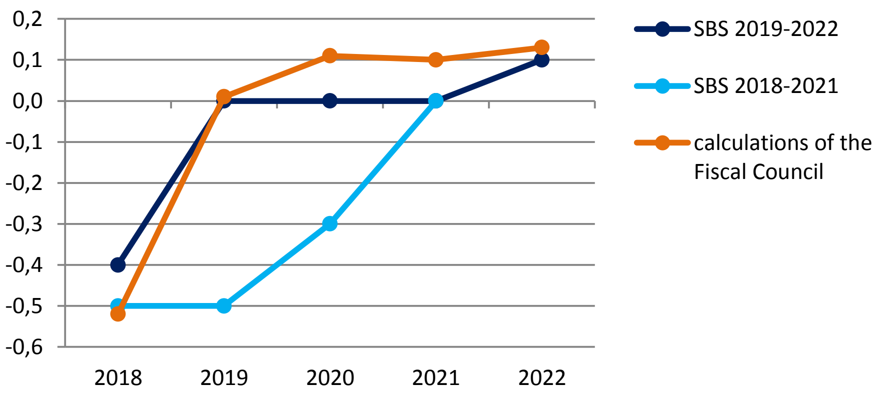

Figure 7. Estimates of the structural budget position (% of GDP)

Sources: Ministry of Finance, calculations of the Fiscal Council

[4] The IMF's assessment of the cyclical component in the budget position of the general government of Estonia is derived from the IMF's forecast for the output gap and the cyclical sensitivity value for the budget of 0.44.

As the estimate of the Ministry of Finance for the structural deficit in 2017 was 0.3% of GDP and a structural deficit of 0.4% is expected for this year, the cumulative structural surplus will have diminished to around 100 million euros by the end of 2018 (see Table 6). This amounts to 0.4% of the forecast GDP for 2019. The cumulative surplus would be even smaller, at around 0.2% of GDP in 2019, if the assessment of the Fiscal Council for the structural deficit in 2017 were used instead. Overall this means that unless additional structural surpluses are built up, the budget for the years ahead cannot fall into significant structural deficit.

Table 6. The cumulative structural surplus as at the end of the year (million euros)

	2014	*2015*	*2016*	*2017*	*2018**
Based on the fixed estimate	32	118	270	192	105
Based on the latest estimate	*47*	*148*	*187*	*109*	*22*

Sources: Ministry of Finance, calculations of the Fiscal Council

The spring forecast of the Ministry of Finance expects the general government budget to be in structural deficit in 2017 and 2018 even though the economy has grown rapidly and the output gap is positive. So that the flexibility built into the budget rules could be used in future should the economy take a turn for the worse, the Fiscal Council believes that a structural surplus should be planned at a time when the output gap is positive. In consequence the Fiscal Council recommends that the government draw up its state budget for 2019 so that the general government budget would be in structural surplus.

The Fiscal Council is of the opinion that the targets for the structural budget position set in the state budget strategy 2019-2022 are in line with the State Budget Act, but achieving those targets assumes that the additional revenue and spending measures introduced in the budget strategy will materialise in their expected form. The materials received by the Fiscal Council do not explain these measures well enough, and their impact has been assessed only approximately. For this reason the Fiscal Council does not believe that the revenue and spending measures presented in the state budget strategy are sufficient for the target of structural balance to be achieved.

Background information. *A macroeconomic heatmap for Estonia*

To assess the compliance with the rules on structural balance and the output gap in the macroeconomic forecast, the Fiscal Council needs to analyse the economic cycle in Estonia. Alongside the technical calculation of the output gap the Fiscal Council monitors several economic indicators that are simpler to measure and that give an indication of the cyclical position of the economy. The end result of this analysis can be presented in the form of a heatmap (see Figure 8), where orange indicates periods when the economy is operating above average and blue when it is operating below average.

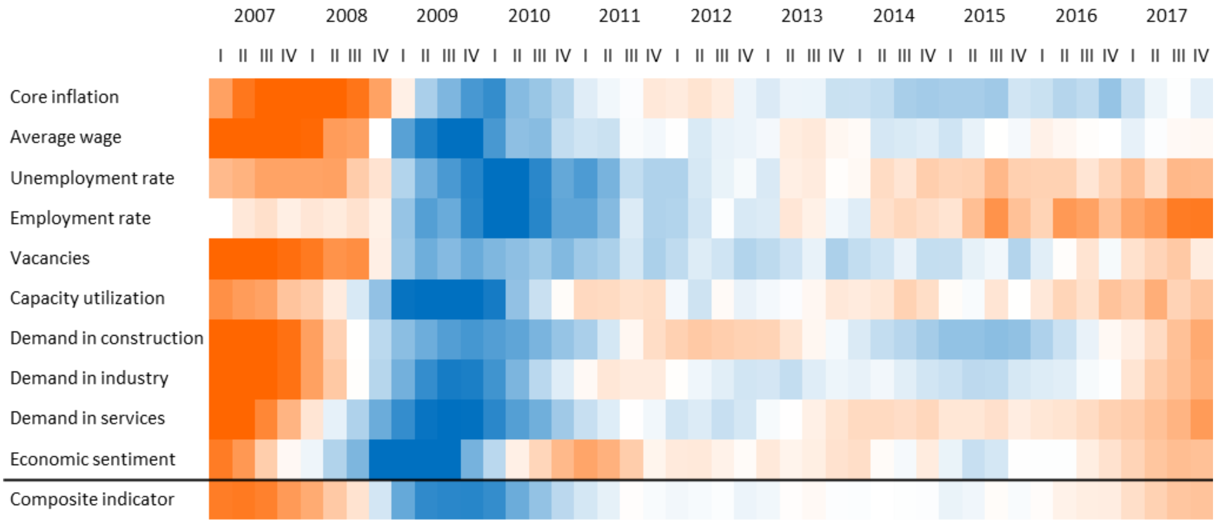

Figure 8. Macroeconomic heatmap for Estonia (Q1 2007 - Q4 2017)

Sources: Eurostat, Estonian Institute of Economic Research, Statistics Estonia, calculations of the Fiscal Council

The heatmap of the Estonian economy uses quarterly data and a total of ten economic indicators to describe the cyclical position of the Estonian economy. The darker shade of blue indicates that the economy is cooling, while the darker orange indicates the economy is at risk of overheating. White areas or light shades indicate times when economic conditions are normal. The greater the number of economic indicators that are orange or blue at the same time, the greater the certainty that the economy is experiencing cyclical good or bad times.

The colour scheme of the heatmap is based on the logic that cyclical good times, such as 2007, generally see rapid wage growth and inflation, low unemployment and a high employment rate, a high number of vacancies, strong economic sentiment, a high level of capacity utilization in manufacturing industry, and no restrictions on business stemming from a lack of demand. The opposite applies in bad times such as 2009-2010.

The economic indicators that are chosen for the heatmap have historically been strongly linked with the economic cycle, are available for each quarter, and give a broad picture of the Estonian economy. The final selection comprises five indicators for the labour market and price levels, and five soft indicators derived from survey data. The heatmap is not designed for forecasting the economy, but for describing how it has developed and its current position.

To convert the original data into the orange and blue colour scale on the heatmap, the quarterly value for each economic indicator is compared with its long-term average value[5]. The starting point for calculating the average value is the first quarter of 2007 and the end is the most recent quarter for which data are available. The time period that can currently be used for the comparison is 11 years long. During this period the average wage growth was 6.9% for example, the unemployment rate was 8.8%, and core inflation averaged 2.4%.

The row under the line on the heatmap shows a composite indicator, made up as an average of all the economic indicators. Figure 9 shows this composite indicator together with the estimates by various institutions of the Estonian output gap, which can be considered the most common indicator of the economic cycle, and which compares the actual and potential levels of the economy. Over a long period of time the movements of the composite indicator of the heatmap and of the output gap are quite similar. Unlike the output gap, the heatmap analysis is based only on indicators that are measurable and are retrospectively revised relatively little.

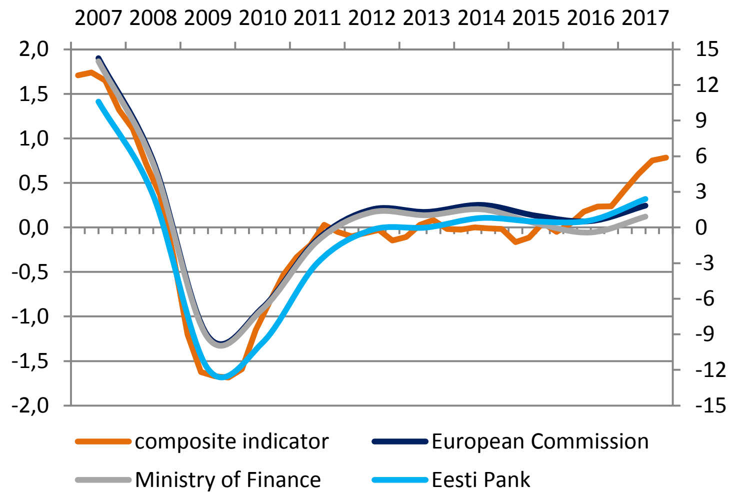

Figure 9. The composite indicator of the heatmap (left scale) and estimates of the output gap in % of GDP (right scale)

Sources: Eesti Pank, European Commission, Ministry of Finance, calculations of the Fiscal Council

The composite indicator of the heatmap for the data from the fourth quarter of 2017, the most recent available, shows the Estonian economy is in its best cyclical condition since before the crisis. The state of the economy has improved for eight quarters consecutively and across a broad base. The historical relation between the composite indicator and the output gap suggests that the heatmap would indicate an output gap of 3-4% of GDP for 2017.

[5] The darkest blue and the darkest orange indicate a difference of at least two standard deviations from the average value for the particular economic indicator. If the indicator is close to its average value, the area is coloured white.

APPENDIX

Table 7. The impact on the fiscal position of additional measures in the state budget strategy 2019-2022 (% of GDP)

	2018	2019	2020	2021	2022
Cancelling the rise in alcohol excise	−0.14	0.02	−0.11	−0.11	−0.11
Tax revenue from renovation of apartment buildings	-	0.04	0.07	0.12	0.11
Revenues from sales of 3.5 GHz licences to operators	-	0.06	-	-	-
Tax revenues from limiting the use of illegal labour	-	0.02	0.02	0.02	0.02
Fines depending on income	-	0.02	0.02	0.02	0.02
Tax revenue from changes to the Weapons Act	-	0.01	0.01	0.02	0.03
Tax revenue from changes to the Aliens Act	-	0.09	0.09	0.09	0.09
Additional dividends and income tax	−0.08	0.37	0.31	0.13	0.19
Other income	-	0.04	0.03	0.04	0.03
Revenue measures total	−0.22	0.65	0.45	0.32	0.37
Higher labour costs	-	0.14	0.14	0.13	0.12
Changes to investment	-	−0.25	−0.34	−0.24	−0.03
Spending on ICT	-	0.04	0.04	0.09	0.1
Additional applications accepted	-	0.24	0.24	0.33	0.31
Redirection of Structural Funds	-	−0.15	−0.18	−0.20	−0.19
Changes related to real estate	0.02	−0.06	−0.13	−0.13	−0.13
Spending measures total	0.02	−0.03	−0.24	−0.03	0.2
Revenue and spending measures total	−0.2	0.7	0.7	0.4	0.2

Source: Ministry of Finance