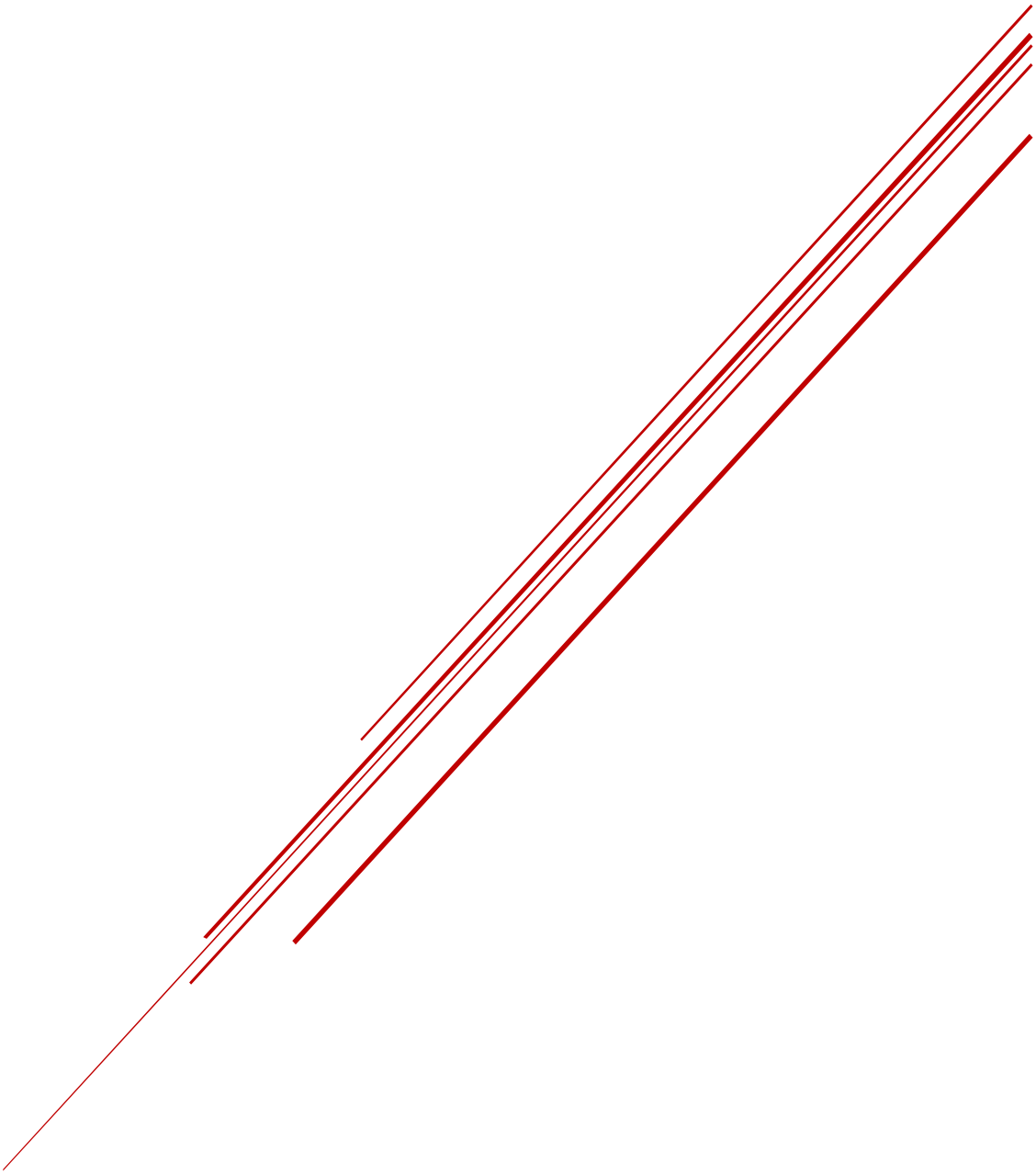
FISCAL SUSTAINABILITY REPORT 2017-2037



Fiscal Discipline Council of the Republic of Latvia
December 2017

Contents

Executive summary

Fiscal sustainability refers to the ability of a government to maintain current policies without failing to meet its financial commitments and obligations. Fiscal sustainability has received a lot of attention in recent years due to the significant increase of public debt during and after the financial crisis that started in 2008. This has stimulated analyses as to whether the current alignment of revenue and expenditure policies can be sustained without leading to an unmanageable growth of public debt.

The Council's decision to prepare a fiscal sustainability report is motivated by concerns over the failure to reduce public debt during a period of sustained economic growth. Even without breaching the 60% of GDP threshold, high public debt threatens fiscal sustainability. While low interest rates have assisted in keeping interest expenditure low, the persistence of deficit spending is troubling and contrary to the principles of the Fiscal discipline law, which foresees a balanced budget over the economic cycle.

Public debt should be closely monitored and reduced during times of growth. While public debt is below the 60% of GDP threshold, all opportunities to reduce it should be taken. Failure to lighten the debt burden during periods of growth will limit the fiscal space available to absorb the effects of economic downturns, and the resources available for investment projects and public services.

Unexpected macroeconomic developments and government expenditures can endanger sustainability. As a small economy, Latvia is extremely sensitive to fluctuations in macroeconomic conditions. Furthermore, recent experience shows that one-off transactions have had a considerable impact on the level of government debt. In conjunction, these sources of risk suggest that fiscal sustainability is highly precarious.

The implementation of reforms that address skill-mismatch and low productivity growth is crucial for sustainability. The Council's macroeconomic framework assumes that the government will intervene to stimulate participation in the labour market and increase productivity. The analysis shows that higher potential output improves sustainability and leads to a lower debt-to-GDP ratio.

Raising health and social protection expenditures is possible without threatening sustainability, but this requires higher revenues or expenditure cuts in other areas. As living standards rise, public services will have to be improved to meet expectations, leading to higher expenditures**.** The report shows that reaching a tax-to-GDP ratio of 1/3 can compensate expenditure increases on health care and social protection. However, expenditure at 75% of the EU average on health care and social protection leads to a gradual deterioration of the general government budget balance and puts public debt on an upward trajectory, even with a 1/3 tax-to-GDP ratio. This means that higher revenues or expenditure reviews will be necessary to stabilise public debt and ensure fiscal sustainability.

Sustainability is affected by interest rates, but a proper alignment of revenues and primary expenditure is crucial. Our analysis shows that higher interest rates have a negative effect on the level of public debt. Nonetheless, interest rates do not affect the overall trajectory of public debt in the scenarios that we have looked at. The primary balance plays a more important role in determining the sustainability of public finances.

Approved at the meeting of the Fiscal Discipline Council on 6 December 2017 Minutes No 7(26) §7.1.

Introduction

Fiscal sustainability refers to the ability of a government to maintain current policies without failing to meet its financial commitments and obligations. There are several available definitions of fiscal sustainability. However, in most cases the emphasis is on whether the current alignment of revenue and expenditure policies can be sustained without leading to an unmanageable growth of public debt[1].

Fiscal sustainability has received a lot of attention in recent years. The prominence of sustainability concerns is mainly due to the significant increase of public debt during and after the financial crisis that started in 2008. The crisis witnessed an unprecedented peacetime public debt increase, and Latvia was among the countries that were hit the hardest. Furthermore, while inflation has recently started to pick up, it was low for several years. This, combined with subdued economic growth, created a further challenge for reducing the public debt burden.

Public debt management was facilitated by historically low interest rates, but this is expected to change. Even though the level of public debt in most EU member states currently exceeds the 60% of GDP threshold stipulated in the Maastricht treaty, fiscal sustainability challenges were less pressing due to favourable interest rates and the accommodating policies of the ECB. Nonetheless, interest rates are expected to rise in the future as growth recovers. This means that interest payments may grow and place additional strain on public finance. However, a recent report by the European Commission indicates that Latvia is among several EU member states whose medium-term budgetary plans rely on significant savings from lower interest expenditure (European Commission 2017a).

Many EU member states appear to be facing sustainability challenges. According to the European Commission's *Fiscal sustainability report 2015*, none of the countries analysed appear to be facing significant fiscal stress from fiscal or macro-financial developments in the short run. However, more than half of the 26 member states analysed in the European Commission's report are deemed to face high or medium fiscal sustainability risks. In most cases, the risks are associated with high public debt and the continuation of current fiscal policies. Furthermore, projected age-related spending will require fiscal adjustment to ensure fiscal sustainability. This means that further reforms to contain costs and raise efficiency will be necessary.

Understanding the impact of current demographic trends and their effect on growth prospects and expenditure needs is crucial for sustainability assessments. Europe's ageing population means that fiscal space will be required to absorb the costs of age-related expenditures on health and social protection. Other than economic downturns, the costs of population ageing and pension commitments will be the most significant sources of strain on public finance. Consequently, analyses should consider stated policy commitments, the growing dependency ratio, the projected evolution of the level of public debt in view of expected ageing costs, and other challenges to economic growth (e.g. declining labour force, implicit impact on savings).

Assessments of fiscal sustainability are not common among independent fiscal institutions, but such analyses are recommended by international organisations. A number of independent fiscal institutions have taken it upon themselves to analyse long-term fiscal sustainability (e.g. UK, Slovakia, Lithuania). While this practice is still comparatively exceptional, several international organisations have suggested that, in addition to monitoring compliance with fiscal rules, independent fiscal institutions should also monitor whether public finances are managed effectively from a long-term perspective (see European Commission 2014; Hagemann 2011; Debrun et al. 2013).

[1] *Public debt, government debt* and *general government debt* will be used interchangeably in this report to refer to general government debt.

Latvia's public debt grew considerably during the financial crisis. Prior to the financial crisis, Latvia's public debt was below 10% of GDP, but it has hovered around 40% of GDP in the post-crisis period (see below).

The Council contends that sufficient fiscal space is crucial for weathering another crisis. The cyclical nature of economic growth means that periods of growth will be punctuated by recessions and crises. This requires that deficits be avoided or minimised during periods of growth to maintain the ability of public finances to absorb sudden shocks or the costs of economic downturns. While Latvia's public debt is comfortably below the 60% of GDP threshold set in the Maastricht treaty and the Fiscal discipline law, vigilance should be maintained. Latvia is a small, open economy that is sensitive to sudden economic shocks, which expose public finances to financial stress.

The justification for preparing a fiscal sustainability report derives from the principles stipulated in the Fiscal discipline law. Section 4 of the Fiscal discipline law contains a list of principles for fiscal policy. Principle 5 is the principle of sustainable fiscal policy. This means that fiscal policy should ensure that general government debt does not impose a burden on the economy and economic growth. Principle 6 is the mutual liability principle of generations. This means that fiscal policy should take into account the impact of decisions on both current and future generations.

The Council's decision to prepare a fiscal sustainability report is motivated by concerns over the failure to reduce public debt during a period of sustained economic growth. After recovering from the crisis, the government has continued to practice deficit spending. Furthermore, according to the Medium-term budget framework 2018-2020, deficit spending will persist in the medium term, even as the economy enters the upswing of the business cycle. This is not consistent with responsible fiscal policy and contrary to the principles of the Fiscal discipline law, which foresees a balanced budget over the economic cycle.

The Council maintains that sustainability analyses are made more pressing by population ageing and a shrinking labour force. With the continuation of current population trends, significant changes in the demographic structure are to be expected. Unadjusted for inflation, in the last ten years the annual per capita burden of interest payments, has increased from 33 euro in 2006 to 162 in 2015 (Chart i), as a result of higher public debt and population decline.

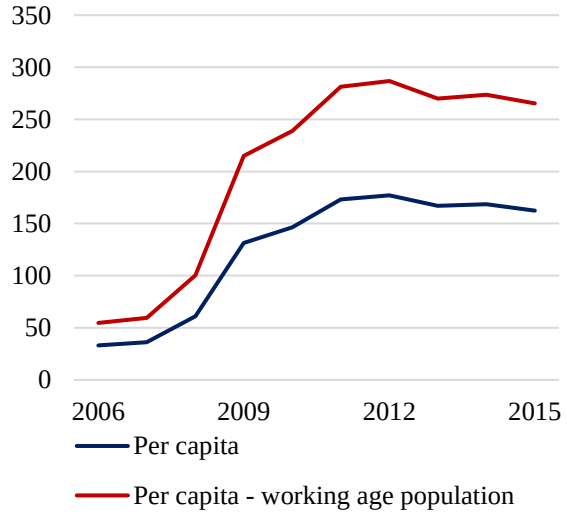


Chart i. Interest payments on general government debt (euro). Source: Eurostat, CSB, Council's calculations[2].

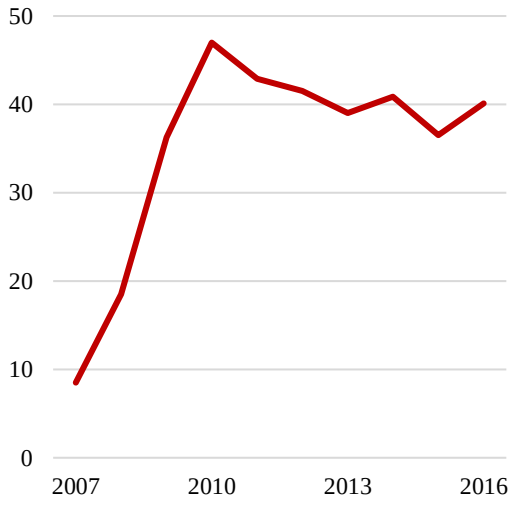


Chart ii. General government debt, % of GDP. Source: Eurostat

[2] See Veide and Kilis (2016) for a more detailed overview.

The labour force in particular has declined significantly, which is illustrated by a steeper increase of the per capita burden of interest payments. Demographic projections suggest that Latvia's population will continue to age, which means that an increasingly smaller number of people will have to shoulder the burden of public debt and the provision of adequate public services.

While Latvia's level of public debt is believed to be sustainable, assessments often refer to concrete sources of social and political risk. Latvia's current level of public debt (Chart ii), combined with public service commitments, does not lead to an unsustainable debt trajectory. Nonetheless, several publications note risks associated with low pension adequacy and high poverty rates that may result in political support for the implementation of costly policy changes (see Carone et al. 2016; European Commission 2017b; OECD 2016a).

The fiscal sustainability report aims to clarify our understanding of long-term government expenditure needs, factors affecting economic development and growth, and their impact on public debt. The identification of possible future challenges can assist in developing appropriate policy responses to pre-empt the materialisation of risks and ensure that sustainable policies are implemented in a timely manner.

The report looks at a 20 year period (2017-2037). In general, fiscal sustainability reports may contain an analysis of different scenarios that offer a more detailed picture of the effects that different fiscal policies or specific shocks may have in the medium and long term. While the European Commission's *Fiscal sustainability 2015* report covers the period until 2060, this report is more modest and will only consider a 20 year period.

The report employs several general assumptions in its assessment and calculations:

1) gradual convergence to EU average living standards will increase demands for, and expectations of, public services;
2) the tax-to-GDP ratio will grow in line with recent trends and achieve stated policy targets;
3) the government will continue meet its obligations (e.g. public services) and financial commitments (e.g. interest payments).

Expenditure scenarios will consider the impact of growing expenditure on health and social protection. While it is likely that all areas of public expenditure will fluctuate, this report will primarily look at expenditure items that will be most affected by population ageing. Funding for both health care and social protection currently lags behind the EU average, and this report will analyse the impact of gradual expenditure increases in these areas.

The decision to analyse the impact of higher expenditures derives from the results of a public opinion survey commissioned by the Council[3]. The survey was carried out in April 2017 and contained several questions related to fiscal sustainability. While the results indicated public support for countercyclical fiscal policy and a pronounced preference for sound long-term thinking, they have to be approached cautiously. Persistent dissatisfaction with the current level of public services may lead to support for policies than entail higher deficits without sufficient compensatory measures. In particular, the results suggest that the perceived inadequacy of public health care and social protection may potentially be a source of future pressure to increase expenditures in these areas.

The report uses data from various sources and was prepared in cooperation with an external consultant. Both national and international data sources were employed to gain an in-depth understanding that would also be internationally comparable and draw on existing literature. Local sources of data include the Treasury, the Ministry of Health, the Ministry of Welfare and the Ministry

[3] Survey summary available here: *http://fdp.gov.lv/files/uploaded/20170802_aptaujas_kopsavilkums_SKDS.pdf*, accessed on 10/11/2017.

of Finance. The report also draws on data published by Eurostat[4], the European Commission and the IMF. In addition, to receive outside expert input, the Council consulted with Sandra Jēkabsone[5].

The structure of the report is as follows.

Section 1 will outline the macroeconomic frameworks employed for the purposes of this report. The report will outline two macroeconomic frameworks. The first was developed by the Council's secretariat, after discussions with Council members. The second scenario is based on the projections of the European Commission.

Section 2 will outline the fiscal framework employed in the report. This section will give a general overview of Latvia's and expenditure and revenue policies. It will also provide a more in-depth look at expenditure on health care and social protection, and outline several reasons why it is likely that expenditures will have to be increased.

Section 3 will look at four scenarios and their respective impact on the level of public debt. This section will look at the impact of (i) higher expenditure on health and social protection and (ii) higher interest rates on the level of public debt by 2037.

[4] The report uses data that was available prior to the revisions made in October 2017, i.e. used as the input for medium-term budget framework 2018/20. Most of the archived data is available here: *http://ec.europa.eu/eurostat/documents/3217494/8003048/KS-EK-17-001-EN-N.pdf*, accessed on 10/11/2017.
[5] In accordance with the agreement signed with the Latvian Academy of Sciences (Nr.1-15/1426), available at: *http://fdp.gov.lv/files/uploaded/FDP_1_15_1426_20170915_FDP2017_3_Ligums_ilgtspeja.pdf*, accessed on 10/11/2017.

Section 1: Macroeconomic framework

The assessment of economic indicators is a framework for further work on the budget and fiscal policy. Regardless of the horizon period (e.g. the annual budget, the three-year medium-term budget or the twenty-year long-term framework), there is a need to outline (i) the historical changes in the main macroeconomic indicators and (ii) assumptions regarding future developments. In what follows, the assumptions of the Council and the European Commission are discussed for the period 2017-2037.

1.1 Macroeconomic development 1990-2016

Since the restoration of independence, the Latvian economy has undergone significant structural changes, both in the sectoral structure and in the financial and labour markets. In the transition period from a planned economy to a market economy structure characteristic of EU member states Latvia's agricultural and industrial sectors shrank. At the same time, the construction sector, as well as certain service sectors, grew as a share of GDP.

The current account deficit of the balance of payments indicated imbalances in economic development. Rapid economic growth (an average of 7.9% per year) was observed from 1997 to 2007 (Chart 1.1), while the current account (in the period from 2000 to 2007) was characterised by a continuous and growing negative balance (Chart 1.2), which increased the vulnerability of the Latvian economy to external shocks. After accession to the European Union, the current account balance improved temporarily from the second quarter of 2004 to the first quarter of 2005 (an improvement of 198.0 million euro). However, this trend was soon reversed.

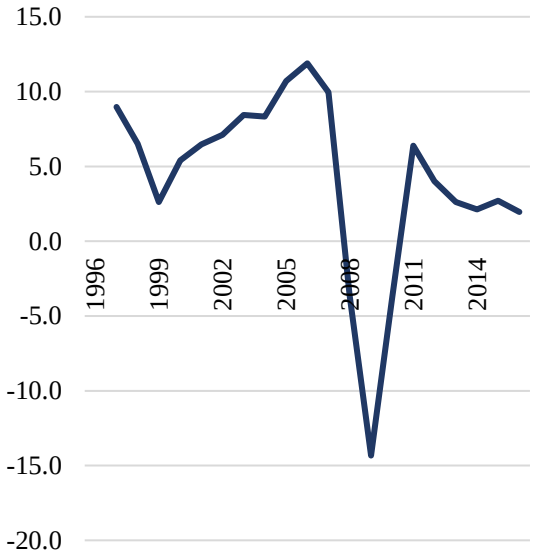


Chart 1.1. Real GDP growth, %, y-t-y. Source: CSB.

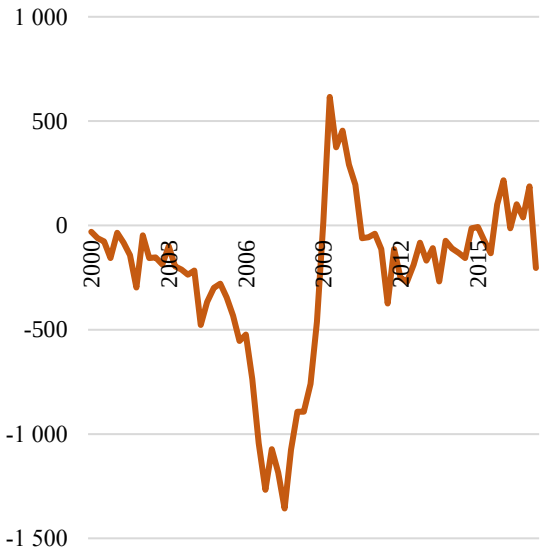


Chart 1.2. Current account balance (2000 1st quarter – 2017 2nd quarter), million euro. Source: Eurostat.

Lending and investment growth continued to fuel the Latvian economy until the 2008 financial crisis. In October 2008, the volume of loans granted reached its highest level – 20.9 billion euro (Chart 1.3). The increase in the volume of lending contributed to the inflow of investments into the economy, with investment reaching a GDP share of 29.9% (Chart 1.4).

A sharp structural break took place in 2008 that altered the development of the Latvian economy. The global financial crisis caused the economy to rapidly enter a period of recession. The volume of lending and investment dropped sharply, and limited access to financial resources constrained household consumption and business opportunities. In the wake of the credit and mortgage

crisis, the Latvian economy was at the historically lowest point of the economic cycle since the restoration of independence.

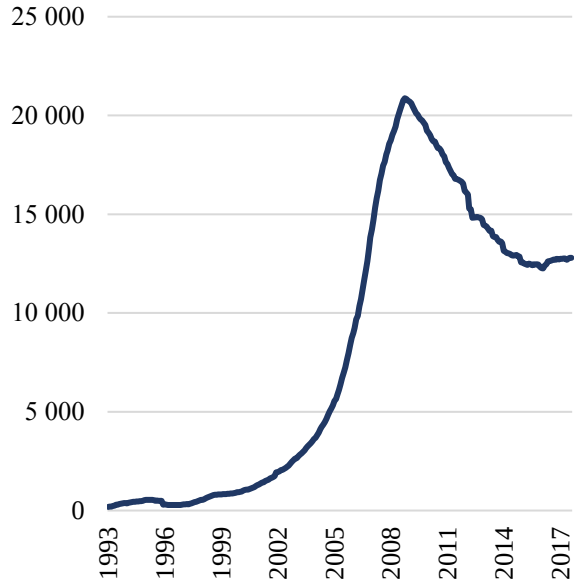


Chart 1.3. Loans to resident financial institutions, non-financial corporations and households, million euro, at the end of period. Source: Bank of Latvia.

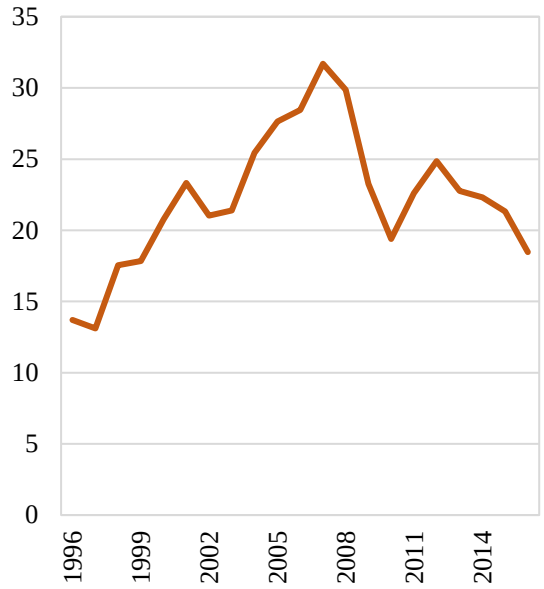


Chart 1.4. Investment to GDP (in real prices). Source: CSB, Council's calculations.

From 2012 onwards, the economic situation was characterised by low inflation and a slowdown in lending, but the period also witnessed cautious investment and a gradual return of economic activity. As the economy stabilised, the volume of investments gradually increased, but their share has fluctuated and was lower at the end of 2016 than before the crisis of 2008. The introduction of the euro in 2014 reinforced the persistence of low inflation (Chart 1.5), which, in turn, allowed for a gradual increase of wealth, with per capita GDP reaching 11.1 thousand euro and 24.6 thousand euro per employee at the end of 2016 (Chart 1.6).

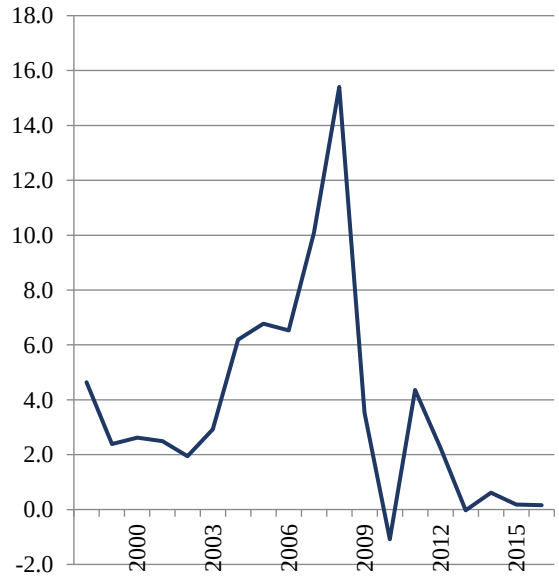


Chart 1.5. Annual average inflation. Source: CSB.

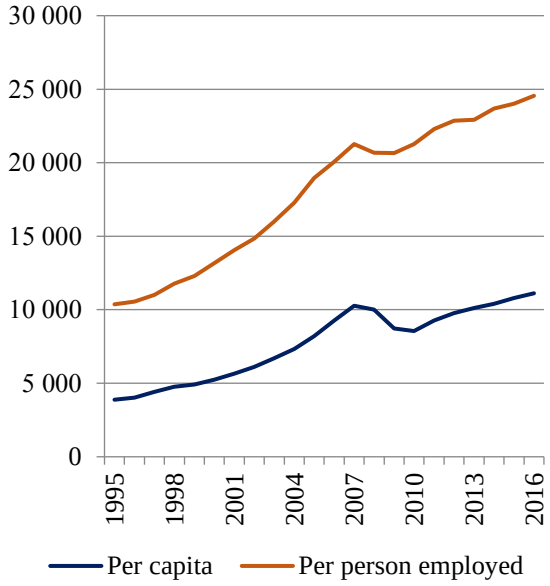


Chart 1.6. GDP in real prices per capita and per person employed, euro. Source: CSB.

1.2 Macroeconomic framework 2017-2037

The macroeconomic framework 2017-2037 (Table 1.1) is cautiously optimistic. It assumes gradual convergence towards the average welfare level in the EU, but also takes into account current demographic trends.

Indicator	2017	2037	Changes since 2017	Average 2017-2037
Real / potential growth, y-t-y, %	3.7	2.5	x	2.7
Real / potential GDP, million euro	22 585.4	38 378.3	15 792.9	x
GDP deflator	2.8	2.5	x	2.5
Nominal GDP growth, y-t-y, %	6.6	5.1	x	5.3
Nominal GDP, million euro	26 676.1	74 096.6	47 420.5	x
Participation rate, 15-64, %	74.8	77.5	2.7	76.1
Unemployment rate	8.9	7.0	x	7.2
Employment, 15-64, thousands	859.2	680.1	-179.0	x
Employment growth, y-t-y, %	-0.4	-1.0	x	-1.1
Total factor productivity growth, y-t-y,	1.9	3.0	x	2.4
Capital stock growth, y-t-y, %	5.9	0.4	x	3.0
Investment to GDP, in real prices, %	29.9	16.1	x	24.5

Table 1.1. Council's assumptions on main macroeconomic indicators (2017-2037) [6]

Eurostat's revised demographic projections were used as the basis for the Council's macroeconomic development framework. Demographic indicators (e.g. the number of people in the 15-64 age group), are taken from the baseline scenario of Eurostat's demographic projections. The scenario envisages a gradual decrease in the working-age population from 1 261.7 thousand in 2017 to 943.6 thousand in 2037.

It is assumed that the participation rate will maintain an upward trend. The share of the economically active in the total population (15-64 age group) will reach 77.5% by 2037. This assumption is mainly due to the fact that, as the economy grows, demand for labour will increase (Chart 1.7).

Unemployment will approach Latvia's natural level of unemployment. The unemployment rate (for the 15-64 age group) is estimated at 7.0%. It is assumed that further reduction of unemployment will not take place, as the expected structural changes in the economy will not significantly reduce unemployment. Medium-term (2017-2020) annual unemployment projections are in line with the Ministry of Finance's projections for the 15-74 age group (Chart .8).

The number of employed people will continue to decrease. The Council's macroeconomic framework envisages that the participation rate will grow. However, in view of Eurostat's demographic projections, it is assumed that the number of the employed will decrease by 1.1% annually.

It is assumed that the reduction in the employment rate will be offset by greater productivity. The Council's macroeconomic framework is optimistic and predicts that productivity will increase by an average of 2.4% per year. This is based on the assumption that the Latvian economy will move towards the production and provision of higher value-added goods and services.

The reduction in the employment rate will be offset by an increased share of investments. The Council believes that a higher proportion of investment (on average, 24.5% of GDP – mainly due to

[6] Full data set on the Council's assumptions on macroeconomic indicators 2017-2037 available in the report Annex 1 Table 1 (MS Excel format).

EU funds) is an important condition for offsetting the declining employment rate. This will increase production capacity and promote productivity growth.

The framework uses a constant capital depreciation rate and labour-to-capital ratio. The depreciation rate of 5% is used for calculating capital stock. The ratio of labour force (1-α = 0.65) and capital (α = 0.35) to GDP is constant for the entire horizon period.

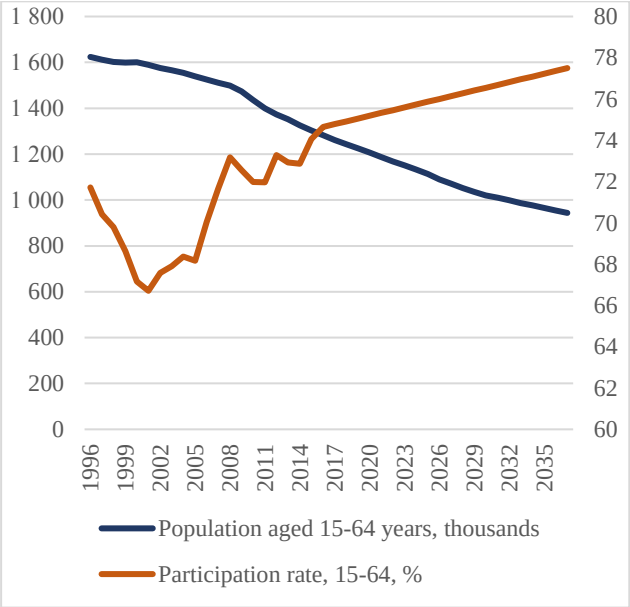


Chart 1.7. Population (in thousands) and participation rate (rhs, %), 15-64, Source: CSB, Council's calculation.

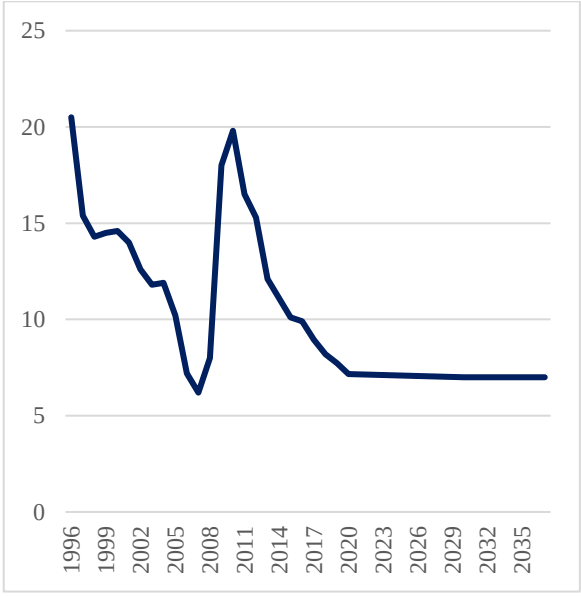


Chart 1.8. Unemployment rate, 15-64, %. Source: CSB, Council's calculation. For medium-term 2017-2020 has been used Ministry of Finance's forecast for 15-74.

For the purposes of our calculations, real and potential GDP are identical for the horizon period. Without changes to the structure of the economy, while maintaining a constant level of productivity growth, annual economic growth will remain at 2.5%. The Council has taken a moderate position, between the Ministry of Finance's more optimistic forecasts (3% annual average potential growth) and the European Commission's more cautious forecasts (2% annual average potential growth).

The GDP deflator will reflect convergence to the EU average welfare level. The European Commission's report assumes that the average annual GDP deflator for the horizon period in the EU will be 2%. Taking into account Latvia's convergence to the EU average, the Council believes that Latvia's GDP deflator will be 0.5% higher than the EU average. A level of 2.5% will be reached in 2025 and will remain constant going forward.

In view of the assumptions regarding real GDP growth and the GDP deflator, on average nominal GDP will grow by 5.3% annually.

The European Commission's projections have been used as the basis for an alternative macroeconomic development framework[7]. The Council's report uses the GDP deflator and real GDP growth rate projections (Table 1.2) prepared by the European Commission. Unlike the Council, the European Commission maintains that the GDP deflator will remain in line with the EU average (i.e. 2.0%), and real GDP growth is less optimistic, with only 1.6% growth in 2037. The average level of

[7] Source: *European Commission - Directorate General for Economic and Financial Affairs, Debt Sustainability Monitor (DSM) model, based on Spring 2016 EC forecasts.*

real growth in the European Commission's estimate is 2.0% per year, as opposed to the Council's 2.7% average annual growth forecast (Table 1.1). Consequently, the European Commission's nominal GDP estimate for 2037 is by 15 942.8 billion euro smaller than the estimate provided by the Council's macroeconomic framework.

Indicator	2017	2037	Changes since 2017	Average 2017-2037
Real GDP growth, y-t-y, %	3.1	1.6	x	2.0
Real GDP, million euro	22 462.0	33 086.7	10 624.7	x
GDP deflator	2.2	2.0	x	2.0
Nominal GDP growth, y-t-y, %	5.4	3.6	x	4.1
Nominal GDP, million euro	26 375.6	57 853.2	31 477.6	x

Table 1.2. European Commission's assumptions regarding main macroeconomic indicators (2017-2037) [8]

[8] Full data set on the European Commission's assumptions regarding macroeconomic indicators for 2017-2037 is available in Annex 1 Table 2 (MS Excel format).

Section 2: Fiscal policy

2.1 Revenues

Latvia has historically been a country with low tax revenues. A commonly used measure to compare government revenues is the so-called tax-to-GDP ratio. If we use this indicator, Eurostat data clearly show (Chart 2.1) that between 2006 and 2015 Latvia's revenues from taxes and social contributions were below the EU average by about 10-11 percentage points. Furthermore, revenues have hovered between 28% and 29% of GDP, with a low point in 2009 (27.5%) and a high point in 2015 (29.3%).

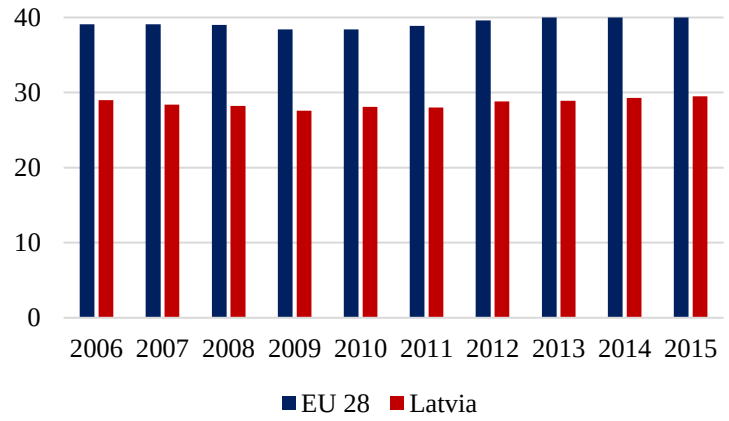


Chart 2.1. Total general government receipts from taxes and social contributions (% of GDP). Source: Eurostat.

Recently, tax revenues have remained resilient despite lower than forecasted economic growth. The execution of the State revenue service's collection plan has been consistent, and revenue targets have been met even during periods of subdued growth. For example, in 2016 the revenue plan was executed with a surplus, even though nominal GDP growth was lower than forecasted by the Ministry of Finance. Concurrently, Latvia's tax-to-GDP ratio has steadily grown (see Chart 2.1).

The Government intends to reach a tax-to-GDP ratio of 1/3, mainly by combatting the shadow economy. One of the goals outlined in the Declaration of Māris Kučinskis' Cabinet is to increase revenues from taxes and social contributions. The plan is to achieve this goal mainly by limiting the shadow economy. A recent study by researchers working at the Stockholm School of Economics in Riga suggests that informal activities constitute 20.3% of GDP[9]. Even though the share of the shadow economy has been shrinking, it is still the highest in the Baltic States.

Historical data suggest that the achievement of the intended tax-to-GDP ratio of 1/3 will require an unprecedented increase in government revenues. As noted above, the tax-to-GDP ratio has consistently hovered around 28-29%, and the ratio decreased during the crisis. Even though (i) the tax-to-GDP ratio has been steadily growing since the crisis and (ii) there is still a significant tax gap[10] that can be reduced, the government's target requires an unprecedented increase in tax revenues. This suggests that measures will be required to achieve a tax-to-GDP ratio of 1/3.

[9] *Ēnu ekonomikas indekss Baltijas valstīs 2009.–2016*, available at: https://www.sseriga.edu/download.php?file=/files/news/arnissauka.pdf, *accessed on 10/11/2017.*

[10] For example, according to a study by the European Commission, in 2015 the VAT gap in Latvia was 411 million euro. See: *https://ec.europa.eu/taxation_customs/sites/taxation/files/vat_gap_factsheet_2017.pdf*, accessed on 10/11/2017.

The recently passed tax reforms do not envisage a significant revenue increase, even though there are potential long-term benefits. Several measures included in the tax reform package foresee a significant tax revenue decrease (e.g. 0% tax rate on undistributed profits). This means that the reforms do not envisage the achievement of the 1/3 revenue target. Furthermore, while the reform addresses some prominent issues (e.g. it reduces the labour tax burden on low-income earners), other potential benefits (e.g. improved crisis resilience for businesses) are less certain.

Additional revenues will be required to meet long-term expenditure needs. While budget deficits are currently in line with international requirements, there is reason to believe that expenditure levels may rise. In particular, age-related expenditures on health care and social protection will place additional demands upon public finance.

A stronger position on tax evasion will be crucial for raising the necessary revenues. The tax reform passed on 28 July envisages both legislative changes and behavioural changes. While the estimates vary, the shadow economy is said to account for about 1/5 of all economic activity. This suggests considerable room for increasing government revenues if appropriate measures are developed to combat informality and lend credibility to the Government's stated stance on tax evasion.

Non-tax revenues play a significant role, and foreign financial assistance is a crucial form of non-tax revenue[11]. While most government revenues come from taxes and social security contributions, a significant portion comes from non-tax revenues. By far the most prominent variety of non-tax revenue in Latvia is foreign financial assistance, which, on average, accounts for more than 4% of GDP every year. This has allowed the government to fund public services above the level permitted by the collected taxes and social security contributions.

	2012	2013	2014	2015	2016
Foreign financial assistance (million euro)	1 203.8	1 110.0	1 070.7	1 005.7	750.7
Foreign financial assistance (% of GDP)	5.5	4.9	4.5	4.1	3.0

Table 2.1. Foreign financial assistance. Source: Treasury

For the purposes of our calculations, it will be assumed that the tax-to-GDP ratio will gradually reach 1/3 by 2037, and non-tax revenues will remain flat from 2018 onwards Latvia's tax-to-GDP ratio has been growing steadily since the crisis, and we assume that it will continue to grow, mainly as a result of a shrinking shadow economy. The impact of the recent tax reform is difficult to estimate. We assume that the tax-to-GDP ratio will not grow in 2019 as a result of the decision to levy a 0% tax rate on undistributed profits, but we do not assume any further changes as a result of the new tax rates. Non-tax revenues are assumed to stay at the level forecasted for 2018 (5.7% of GDP).

2.2 Expenditure

General government expenditure has historically been lower than the EU average. In the last ten years, Latvia's general government expenditure has, on average, been 9.4 percentage points lower than the EU average (Chart 2.2). The high point was 2010 when government expenditure in Latvia accounted for 44.8% of GDP, compared to the EU average 49.9% of GDP.

[11] This report follows the example of Mourre and Reut (2017) and refers to all sources of revenue that are not taxes or social contributions as non-tax revenues.

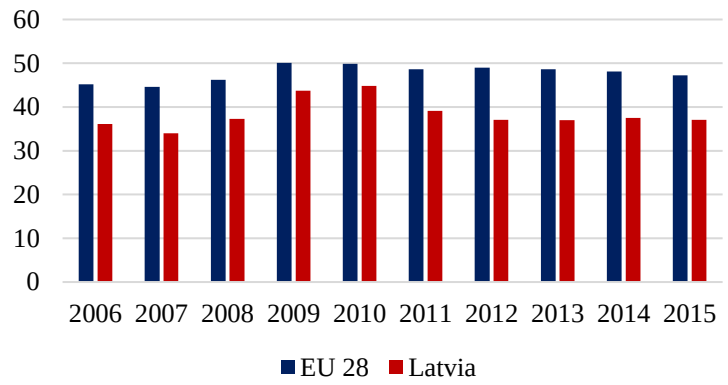


Chart 2.2. Total general government expenditure (% of GDP). Source: Eurostat

Government expenditure increased during the crisis, and it is currently higher than during the pre-crisis period. Eurostat data clearly show that general government expenditure accounted for 36.1% of GDP in 2006, and even reached 34% of GDP in 2007. The need for additional government spending during the recession of 2008-2010 increased expenditure as a share of GDP. While economic recovery and GDP growth has led to a decrease in the level of government spending, expenditure has stabilised above 37% of GDP.

Crucial public services are not funded at a level comparable to the EU average. While Latvia's general government expenditure is considerably below the EU average, some public services consistently receive higher than average funding. For example, public funding for education has consistently been above EU average levels. However, many public services such as health care and social protection have generally been funded below EU average levels.

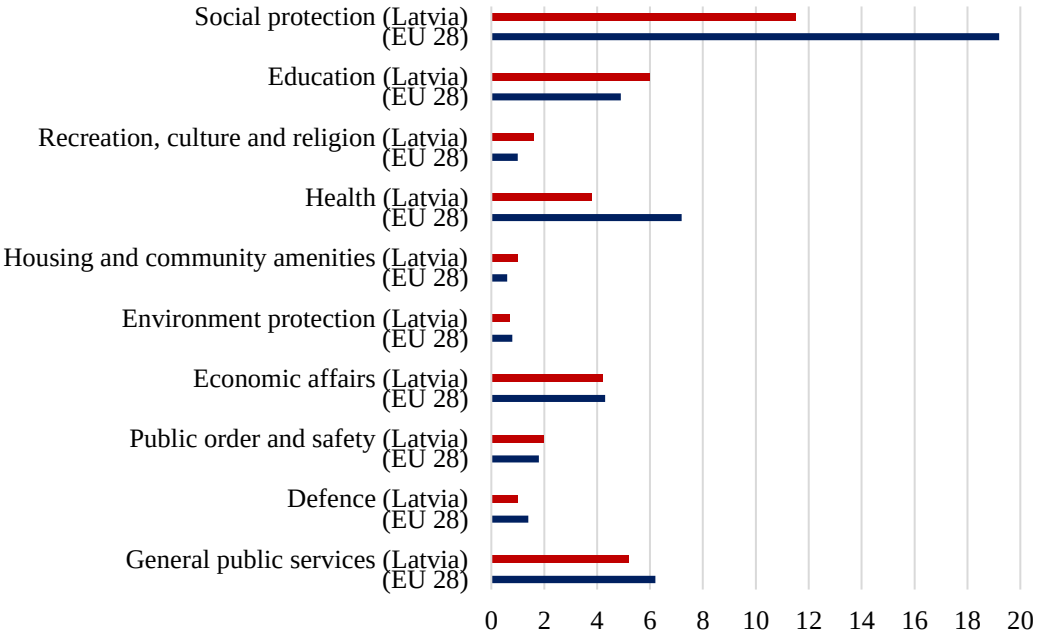


Chart 2.3. General government expenditure by function in 2015 (% of GDP). Source: Eurostat

The general government deficit has historically been lower than the EU average. Latvia has consistently practised deficit spending, which means that the last decade has seen an increase of Latvia's public debt. Nonetheless, if we exclude the crisis of 2008-2010, Latvia's general government deficit has consistently been lower than the EU average, and it was balanced in 2016. This was only the third time in 20 years that the budget was either balanced or with a surplus.

While budget deficits have been low, faster growth has not lead to deficit reduction. Budget deficits have generally been in line with both national and international budgetary requirements. Nonetheless, all permissible deviations are employed to allow for the largest possible deficit. Furthermore, the MTBFL 2018-2020 foresees deficits in both 2018 and 2019 – the projected upswing of the business cycle.

Unplanned expenditures have had a significant impact on public debt. In the last few years, the negative deviations from budget balance targets have been minor. However, historical data show that there have been several unplanned transactions and expenditures that have contributed to the increase of public debt (e.g. transactions related to airBaltic) and a deterioration of the general government budget balance (e.g. expenditure associated with the acquisition of the State revenue service building).

The report does not assume that the requirements of the Fiscal discipline law will be observed consistently. While one of the aims of the Fiscal discipline law, and the fiscal rules it contains, was to constrain fiscal policy, the government has not been consistent in applying the requirements of the Fiscal discipline law. In addition to practicing deficit spending during a period of sustained economic growth, the government did not establish a fiscal security reserve for 2016, and no reserve is planned for 2019.

2.3 Health care

Public funding for health care in Latvia is low. Eurostat data from 2015 clearly show (Chart 2.4) that general government expenditure on health care is low compared to other EU member states, and even other states from the former socialist bloc. OECD analysts have noted that, "even compared to other former Soviet economies, the Latvian system is under-resourced" (OECD 2016b:13).

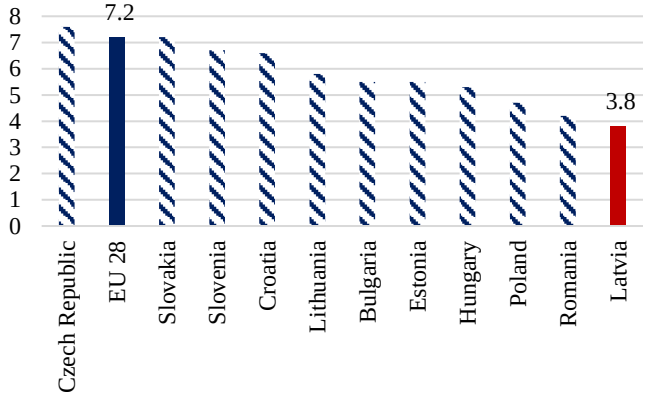


Chart 2.4. General government expenditure on health in 2015 (% of GDP). Source: Eurostat

Health care funding accounts for a comparatively small part of government expenditure. International comparisons show that Latvia's public sector is smaller than on average in the EU. However, even if we look at health as a percentage of government expenditure (rather than % of GDP) we still see that health care is allocated a smaller than average portion of government funds

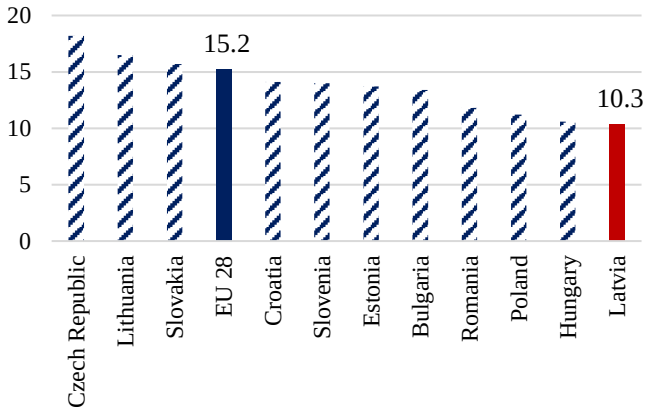


Chart 2.5. General government expenditure on health in 2015 (% of total expenditure). Source: Eurostat

Public expenditure on health care has not increased over the past decade. Eurostat data show that, over the past decade, general government funding for health has generally stagnated and even slightly decreased. In 2006 spending on health care was approximately 2/3 of the EU average and higher than in Estonia (Chart 2.6). After the financial crisis, however, general government expenditure on health care decreased both in relation to the EU average and as a percentage of GDP.

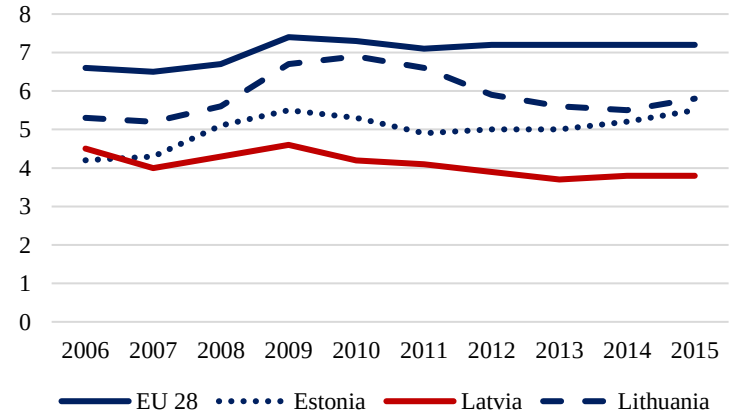


Chart 2.6. General government expenditure on health (% of GDP). Source: Eurostat.

Latvia's population health indicators are poor. Latvia's performance on a number of indicators is concerning. For example, in 2015 the number of healthy life years at birth was 51.8 for males and 54.1 for females, and both results were the lowest in the EU (Chart 2.7). Similarly, life expectancy at birth was among the lowest in the EU in 2015.

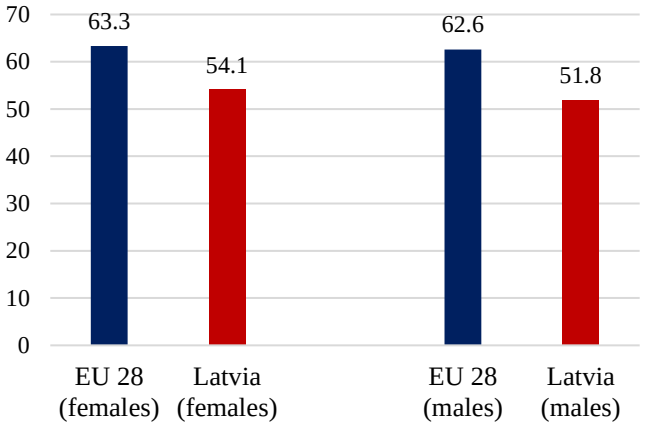


Chart 2.7. Healthy life years in 2015. Source: Eurostat.

Amenable and preventable mortality rates were the highest and second highest respectively (Chart 2.8).

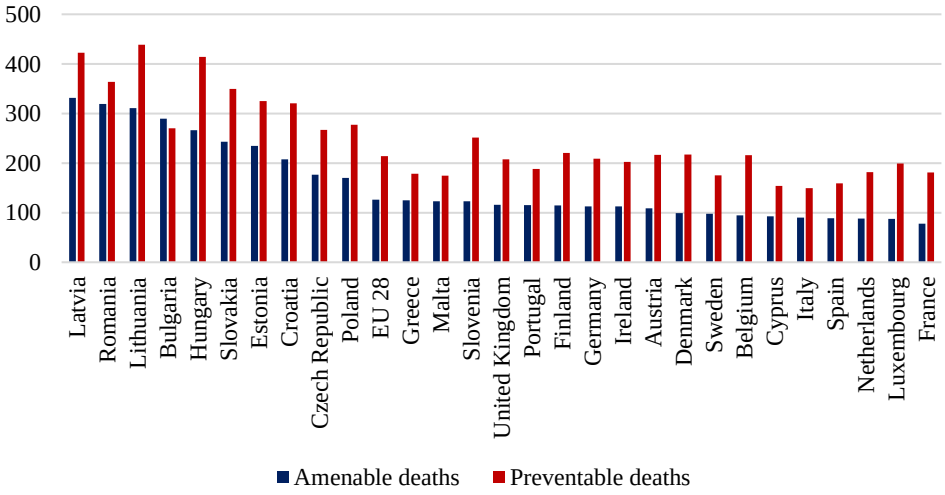


Chart 2.8. Amenable and preventable deaths in 2014 (per 100 000 inhabitants). Source: Eurostat.

Self-perceived health is poor, and satisfaction with the health care system is low. According to Eurostat data, in 2015 the proportion of people aged 16 and over with very good and good self-perceived health was the second lowest in the EU, whereas the proportion of people with bad self-perceived health was the fifth highest (Chart 2.9).

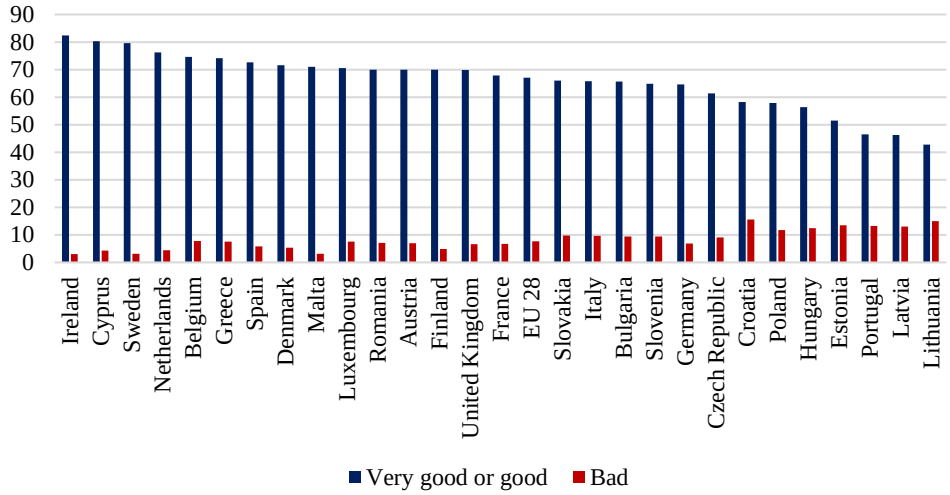


Chart 2.9. Self-perceived health in 2015. Source: Eurostat.

In addition, a Eurobarometer survey shows that Latvia's inhabitants have an unfavourable view of their country's health system, and a high proportion felt it was likely that patients would be harmed at hospitals (Eurobarometer 2014).

High out-of-pocket payments and widespread informality limit access to health care and exacerbate inequality. Despite the fact that the public health care system is available to all, the services available free of charge are limited. This means that a considerable part of expenditure on health care in Latvia comes from patient co-payments. This constitutes a considerable obstacle to health care access, as health care is an expensive knowledge-intensive service. As a result, a comparatively high proportion of individuals have unmet medical needs due to the fact that they cannot afford it. Furthermore, the incidence of informal payments is high, and this has been identified as a factor that increases health inequalities, as costs are already a significant barrier to health care access.

Poor health has a damaging effect on economic growth prospects, and the government is implementing a health care reform to rectify the problem. Latvia's poor population health has high economic (a smaller and less productive labour force) and social (low quality of life) costs. The continued loss of healthy life years has a negative effect on economic growth. The government received permission from the European Commission to increase the general government structural deficit objective for 2017-2019 to continue implementing structural reforms in health care. One of the justifications for the implementation of a reform by using deficit financing, outlined in consecutive Stability Programmes, is the long-term economic impact of improved public health.

The government has committed to increasing public funding for health care. There have been repeated demands from the health care sector for additional funding, with inadequate remuneration and long waiting lines cited as the main reasons. During spring and summer 2017, the Cabinet of Ministers discussed a major reform document and committed to increasing health care funding by approving a health care financing law.

The public health care system of Latvia can make efficiency gains, though low funding is a problem. A recent publication by OECD notes that approximately one-fifth of health spending in OECD countries could be used more efficiently (OECD 2017). For example, an OECD review of Latvia's health care system suggests that more extensive use of data to improve the provision and quality of services would increase efficiency (OECD 2016b). Similarly, strengthening quality assurance mechanisms, and monitoring adherence to clinical guidelines could also help. However, Latvia's health system has to deliver effective public health measures with a comparatively limited

amount of resources. In other words, more funds will have to be allocated to health care in order to improve public health indicators in line with Latvia's overall level of economic development.

It is likely that people's expectations of their own health and public health care will change. Even though Latvia's population indicators are poor, it is probable that this will change as the economy develops. Furthermore, as living standards improve, health care may become a greater priority for people, which may create political pressure to improve the quality of public health care.

Higher living standards and ageing populations will lead to further pressure to raise expenditure on health care. While general government expenditure of health care is currently low, our assessment concurs with the *Ageing report* 2015 and foresees that expenditure on health care will increase. The cumulative impact of convergence to EU average living standards and a significant elderly population with extensive health care needs will drive up health expenditures.

For the purposes of our calculations, we assume that general government funding for health care will increase to improve public health and increase labour productivity. The calculations in Section 3 will employ two different expenditure-growth scenarios. The first is that expenditure (% of GDP) will be at 66% of the EU average. The second is that expenditure will be 75% of the EU average.

2.4 Social protection

Government expenditure on social protection is comparatively low, but has increased over time. Eurostat data on government expenditure shows that the funds allocated for social protection are below the EU average. Nonetheless, expenditure has increased when compared to the pre-crisis period. In 2006, expenditure on social protection amounted to 8.9% of GDP. Even if we ignore the impact of the crisis (i.e. increased expenditure on social benefits), it appears that expenses on social protection have grown – in 2015 the Latvian government spent 11.5% of GDP on social protection (Chart 2.10).

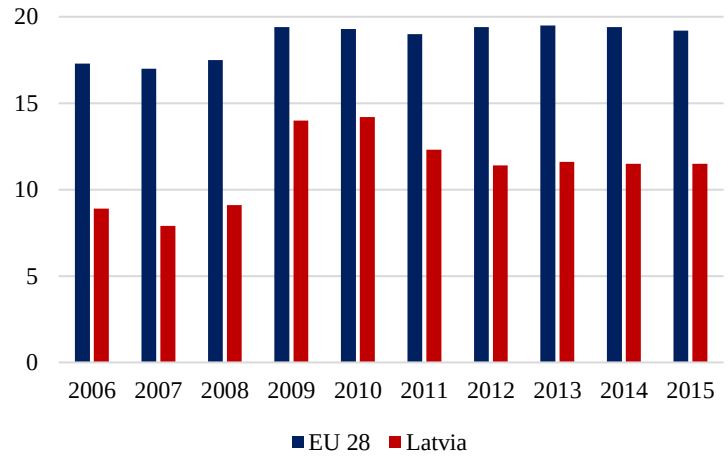


Chart 2.10. General government expenditure on social protection (% of GDP). Source: Eurostat.

Economic inequality is high (Chart 2.11), and the number of people living at risk of poverty or social exclusion remains a major social challenge and an obstacle to economic growth.

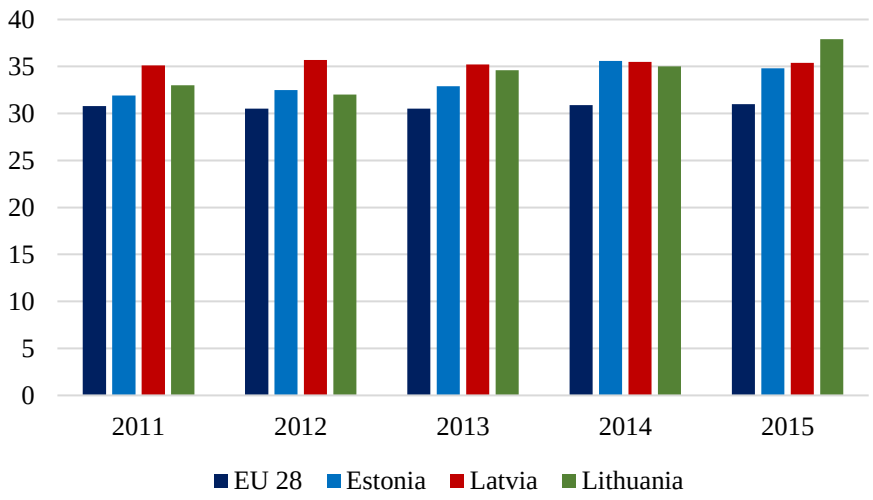


Chart 2.11. Gini coefficient of equivalised disposable income. Source: Eurostat.

Latvia has a comparatively high proportion of people at risk of poverty or social exclusion. Eurostat data show that in 2016, 28.5% of people in Latvia were at risk of poverty and social exclusion. While the percentage is down from 36.2% in 2012, it is still above the EU average of 23.4% (Chart 2.12).

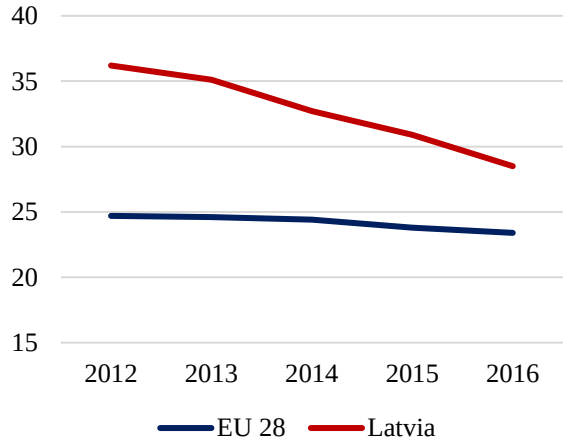


Chart 2.12. People at risk of poverty or social exclusion (% of total). Source: Eurostat

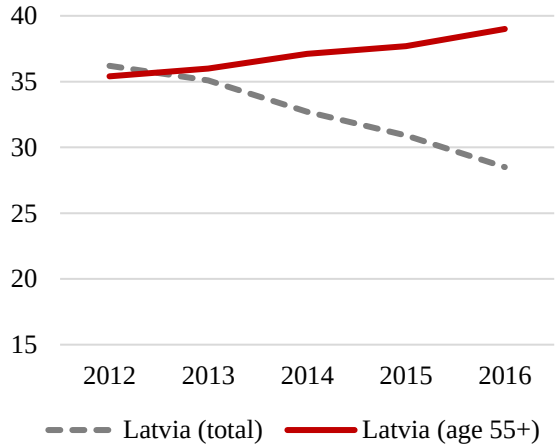


Chart 2.13. People at risk of poverty or social exclusion in Latvia (% of age group). Source: Eurostat

While the total percentage of people at risk of poverty or social exclusion has gone down, it has gone up for people aged 55 and above. In 2012, the percentage of people aged 55 and above at risk of poverty or social exclusion was slightly lower than the percentage of the population as a whole. In 2016, however, overall poverty risk had gone down, but it had increased for people aged 55 and above (Chart 2.13).

Latvia has a high number of people experiencing severe material deprivation, but the situation has improved considerably since 2012. The percentage of people experiencing severe material deprivation in Latvia has consistently been higher than the EU average. In 2012, the difference was 15.7 percentage points (25.6% in Latvia and 9.9% in the EU as a whole). Since 2012, however, the percentage has been halved, which has moved Latvia considerably closer to the EU average (Chart 2.14).

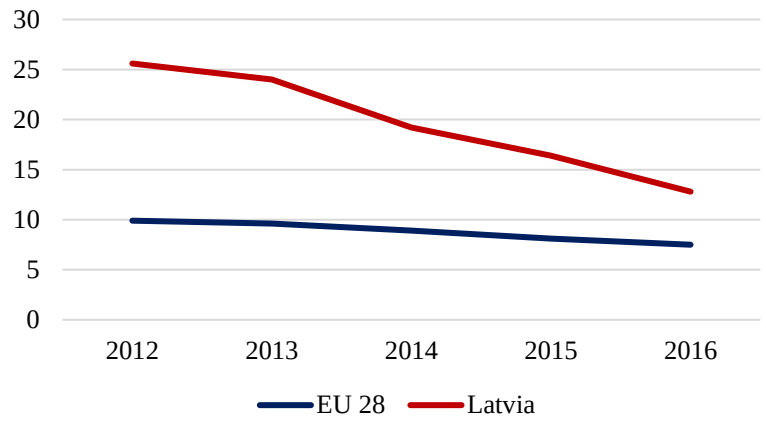


Chart 2.14. Severe material deprivation rate (% of total population). Source: Eurostat.

It is expected that Latvia's old-age dependency ratio will increase. The structure of Latvia's population will continue to change, and several recent reports have shown that the proportion of people above pension age will increase, whereas the number of working age people will shrink. While our macroeconomic framework assumes that the participation rate will increase, a smaller number of workers will be paying taxes and making social contributions to sustain budget expenditures.

Public pension expenditure in the EU as a whole is projected to increase between 2013 and 2040, but it will decrease in Latvia. The 2015 iteration of the *Ageing report* prepared by the European Commission notes that pension expenditure will increase by 0.4% of GDP over the period between 2013 and 2040. The average conceals considerable internal heterogeneity, however, as Latvia's public pension expenditure will decrease by 2.3 percentage points of GDP.

	2013	2020	2025	2030	2035	2040
EU 28	11.3	11.2	11.4	11.6	11.7	11.7
Latvia	7.7	5.9	5.5	5.5	5.5	5.4

Table 2.2. Projected public pension expenditure 2013-2040 (% of GDP). Source: European Commission (2015c)

While the *Ageing report* notes that pension expenditure will decrease, the results suggest that this is mainly due to low pension adequacy[12]. Latvia currently has one of the lowest benefit ratios in the EU, and it is expected to decline further, meaning that a considerable portion of pensioners will likely have limited resources at their disposal (see Carone et al. 2016; European Commission 2015b).

Reform measures have reduced the long-term fiscal burden of public pension systems. In Latvia, private pension pillars will increase the total share of pensions (as % of GDP) in the long term, but the public pillar will gradually decrease (Carone et al. 2016). These changes in the pension system will play an increasing role in the provision of retirement incomes over time, while reducing the burden on public finances.

While Latvia's pension system is deemed to be fiscally sustainable, low pension adequacy will be a cause for concern. In order to be sustainable, public pension systems must be able to absorb the impact of population ageing without threatening the stability of public finances. Projections prepared by the European Commission (sees European Commission 2015c) suggest that the legal framework does not pose sustainability challenges. Nonetheless, low pension adequacy is consistently referenced as a caveat to the sustainability of Latvia's pension system.

[12] There are different ways of assessing the adequacy of pensions. See Grech (2013) for a detailed explanation.

Our report assumes that social protection expenditure will gradually increase to improve the adequacy of pensions and reduce poverty risk. The calculations in Section 3 will employ two different expenditure-growth scenarios. The first is that expenditure (% of GDP) will be at 66% of the EU average. The second is that expenditure will be 75% of the EU average.

Section 3: Analysis

For the purposes of brevity, we will be using codenames for each of the scenarios analysed in the current section of the report. None of the scenarios envisage specific economic shocks (e.g. recessions, interest rate shocks). However, they illustrate how different expenditure commitments can affect the sustainability of public finances.

All scenarios assume that (i) the tax-GDP ratio will reach 1/3 by 2037, (ii) non-tax revenues remain flat from 2018 onwards and (iii) primary expenditure, with the exception of expenditure on health and social protection, remains flat from 2018 onwards.

The differences are as follows:

Scenario 1 will be based on the Council's macroeconomic framework and assume that public expenditure on health care and social protection will reach 66% of the EU average by 2037.

Scenario 2 will be based on the macroeconomic framework employing the European Commission's assumptions and will assume that public expenditure on health care and social protection will reach 66% of the EU average by 2037.

Scenario 3 will be based on the Council's macroeconomic framework and assume that public expenditure on health care and social protection will reach 75% of the EU average by 2037.

Scenario 4 will be based on the macroeconomic framework employing the European Commission's assumptions and will assume that public expenditure on health care and social protection will reach 75% of the EU average by 2037.

	Moving towards 66% of EU average (health & social protection)	**Moving towards 75% of EU average (health & social protection)**
Council's macroeconomic framework	Scenario 1	Scenario 3
European Commission's macroeconomic framework[13]	Scenario 2	Scenario 4

Table 3.1. Fiscal policy scenarios. Council's assumptions and calculations[14].

3.1 Results

The overall results can be seen in Chart 3.1 below.

Scenario 1

The results show that, compared to 2015, expenditure on health and social protection will grow by 1.0 percentage point and 1.2 percentage points of GDP respectively. In 2037, health care expenditure will account for 4.8% of GDP, and expenditure on social protection will account for 12.7% of GDP. Compared to Eurostat data from 2015, this is a cumulative increase of 2.2 percentage points.

[13] For an overview, see section 1.2

[14] Full data set on the Council's assumptions on fiscal policy scenarios for 2017-2037 is available in Annex 2 (MS Excel format).

The expenditure increase is fully compensated by a tax-to-GDP ratio of 1/3. According to our simple model, revenue growth gradually overtakes expenditure growth. This leads to the general government balance steadily improving, reaching a surplus of 0.5% of GDP by 2037.

Public debt gradually diminishes. Public debt peaks at 39.4% of GDP in 2020, and gradually diminishes from 2021 onwards, reaching 20.0% of GDP in 2037.

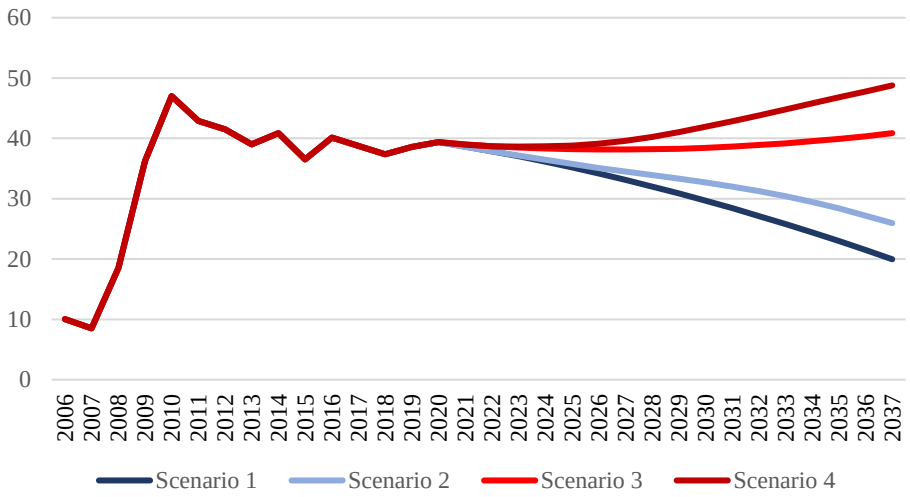


Chart 3.1. General government debt, % of GDP. Source: Council's calculations.

Scenario 1 is sustainable, and leaves room for additional expenditure. This particular alignment of revenues and expenditures puts public debt on a downward trajectory and leads to a budget surplus from 2033 onwards. The surplus can be used to further reduce public debt or allocate additional funds to government priorities.

Scenario 2

Less favourable economic conditions lead to slightly higher public debt compared to Scenario 1. Primary expenditure is identical to Scenario 1. However, lower inflation and real GDP growth mean that, in relative terms, previously accumulated public debt places a higher burden on public finances and interest payments are consistently higher. Ultimately, this leads to 5.9 percentage point difference in the level of public debt in 2037 (25.9% of GDP).

Higher interests payments lead to a lower budget surplus. While revenue growth eventually overtakes the pace of expenditure growth, higher interest payments contribute to expenditure staying at a higher level. This means that the budget balance becomes positive a year later than in Scenario 1 and the surplus is also lower.

Scenario 2 is sustainable, but less funds are available for other expenditure needs. Scenario 2 puts public debt on a downward trajectory and leads to a budget surplus from 2034 onwards. The surplus can be used to further reduce public debt or allocate additional funds to government priorities.

Scenario 3

The results show that, compared to 2015, expenditure on health and social protection will grow by 1.6 percentage points and 2.9 percentage points of GDP respectively. In 2037, health care expenditure will account for 5.4% of GDP, and expenditure on social protection will account for 14.4% of GDP. Compared to Eurostat data from 2015, this is a cumulative increase of 4.5 percentage points.

The expenditure increase leads to a gradual deficit increase. Even with a tax-to-GDP ratio of 1/3, the 75% of EU average expenditure level leads to growing pressure on public finances. According to our simple model, the general government balance in 2037 is -2.4% of GDP.

Public debt is on an upward trajectory. Higher deficits lead to a gradual increase of public debt. After shrinking to 38.1% of GDP in 2027, public debt starts growing, albeit slowly, and reaches 40.8% in 2037.

The sustainability of Scenario 3 is uncertain. While public debt remains comfortably below the 60% threshold during the horizon period of this report, it is growing. Combined with a steadily increasing deficit, this creates sustainability challenges that have to be addressed.

Scenario 4

Less favourable economic conditions lead to higher public debt compared to Scenario 3. Primary expenditure is identical to Scenario 3. However, lower inflation and real GDP growth mean that, in relative terms, previously accumulated public debt places a higher burden on public finances and interest payments are consistently higher. Ultimately, this leads to a 8.0 percentage point difference in the level of public debt by 2037 (48.8% of GDP).

Higher interests payments lead to a higher budget deficit. Expenditure growth outpaces revenue growth, which leads to a deterioration of the general government budget balance and pressure on public debt. The annual budget deficit is steadily growing, reaching 2.7% of GDP by 2037.

Public debt is on an upward trajectory. Higher deficits lead to a gradual increase of public debt. After shrinking to 37.3% of GDP in 2018, public debt starts growing and reaches 48.8% of GDP in 2037.

Scenario 4 appears to be unsustainable. Scenario 4 puts public debt on an upward trajectory. Furthermore, the general government balance will continue to put pressure on public debt even if the balance remains at the level of 2037. Public debt will continue to grow and interest expenditure will increase, requiring policy action to cut expenditure in other areas.

3.2 Additional observations

Macroeconomic assumptions have a considerable impact on the development of the debt ratio. The Council's macroeconomic assumptions (Scenario 1 and Scenario 3) provide grounds for a favourable snow-ball effect[15], i.e. growth, inflation (GDP deflator) and also interest rate contribute to the reduction of the debt ratio. The European Commission's assumptions (Scenario 2 and Scenario 4) are more conservative, leading to a limited snow-ball effect.

Scenario	Interest rate	2017.	2027.	2037.
Scenario 1	Council's assumptions	38.7	33.1	20.0
	European Commission's assumptions	38.7	32.9	24.5
Scenario 2	Council's assumptions	38.7	34.5	25.9
	European Commission's assumptions	38.7	34.2	31.6
Scenario 3	Council's assumptions	38.7	38.1	40.8
	European Commission's assumptions	38.7	37.9	47.4
Scenario 4	Council's assumptions	38.7	39.6	48.8
	European Commission's assumptions	38.7	39.4	56.8

Table 3.2. General government debt, % of GDP. Source: Council's calculations.

[15] The so-called "snow-ball effect" is the net impact of the counter-acting effects of interest rate, inflation and GDP growth, […], on the evolution of the debt ratio (European Commission 2017c).

Higher interest rates heighten sustainability concerns for Scenario 3 and Scenario 4. All four scenarios employ interest rates that were decided upon after consultation with colleagues from the Treasury[16]. If we employ the European Commission's interest rate assumptions, the level of public debt increases in all scenarios (see Table 4.1). However, Scenario 1 and Scenario 2 are still sustainable and public debt is on a downward trajectory. The sustainability of Scenario 3 becomes more dubious, because the budget deficit reaches 3.5% of GDP in 2037. Scenario 4 moves closer to the 60% of GDP threshold, with a budget deficit of 3.9%.

[16] It should be noted, however, that this does not mean that our assumptions about interest rate dynamics reflect the official position of the Treasury.

Conclusions

Latvia's public debt grew considerably during the crisis. While the level of public debt is low compared to other EU member states, interest payments are considerably higher than prior to the financial crisis and place greater demands upon Latvia's public finances.

Even without breaching the 60% of GDP threshold, high public debt threatens fiscal sustainability. Low interest rates have assisted in keeping interest expenditure low. However, the persistence of deficit spending, potential interest rate increases and a declining work force mean that public debt may create a burden on economic growth and threaten the stability of public finances.

Public debt should be closely monitored and reduced during times of growth. While public debt is below the 60% of GDP threshold, all opportunities to reduce it should be taken. Failure to lighten the debt burden during periods of growth will limit fiscal space available to absorb the effects of economic downturns, and the resources available for investment projects and public services.

As living standards rise, public services will have to be improved to meet expectations. Latvia's general government expenditure is comparatively low, and this is reflected in low funding for health care and social protection. However, as the economy grows and quality of life improves, it is likely that people (i) will have higher expectations of public services and (ii) support the implementation of potentially costly policy changes. This is why the report has assumed that social protection expenditure will gradually increase to improve the adequacy of pensions and reduce poverty risk and funding for health care will increase to improve public health and increase productivity

The government can raise health and social expenditures if the tax-to-GDP target is reached. The government has stated that it intends to achieve a tax-to-GDP ratio of 1/3. Our analysis illustrates that a gradual tax-to-GDP increase creates room for additional expenditures on government priorities without endangering fiscal sustainability.

The implementation of reforms that address skill-mismatch and low productivity growth is crucial for sustainability. The Council's macroeconomic framework assumes that the government will intervene to stimulate participation in the labour market and increase productivity. Our analysis shows that higher potential output improves sustainability and leads to a lower debt-to-GDP ratio.

Raising health and social protection expenditure to 66% of the EU average is fully sustainable, even with higher interest rates. Our analysis shows that revenue growth fully compensates expenditure increases on health care and social protection. This is true of both the Council's cautiously optimistic macroeconomic scenario and the European Commission's less optimistic scenario with higher interest rates on general government debt.

The sustainability of raising health and social protection expenditures to 75% of the EU average is conditional upon higher revenues or expenditure cuts in other areas. Our analysis shows that the revenue target of 1/3 cannot fully compensate expenditure increases on health care and social protection. While the 60% of GDP threshold is not breached, all the 75% scenarios lead to a gradual deterioration of the general government budget balance and put public debt on an upward trajectory. This means that higher revenues or expenditure reviews will be necessary to stabilise public debt and ensure fiscal sustainability.

Sustainability is affected by interest rates, but a proper alignment of revenues and primary expenditure is crucial. Our analysis shows that higher interest rates have a negative effect on the level of public debt. Nonetheless, they do not affect the overall trajectory of public debt. The only minor exception is Scenario 3 where sustainability appears less credible if interest expenditure increases.

Budget balance in 2037	Council's interest rate				European Commission's interest rate			
	S1	S2	S3	S4	S1	S2	S3	S4
	0.5	0.3	-2.4	-2.7	-0.1	-0.4	-3.5	-3.9

Table s. Budget balance (% of GDP). Source: Council's calculation.

Unexpected macroeconomic developments and unplanned government expenditures can endanger sustainability. As a small economy, Latvia is extremely sensitive to fluctuations in macroeconomic conditions. Furthermore, recent experience shows that one-off transactions have had a considerable impact on the level of government debt. In conjunction, these sources of risk suggest that fiscal sustainability is highly precarious.

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