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# Overview of Central Government Risks and Liabilities 2018

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## Overview of Central Government Risks and Liabilities 2018

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<b>Abstract</b>	<p>Central government debt has almost doubled in the past ten years, to approximately EUR 105 billion at the end of 2017. The debt-to-GDP ratio has also grown substantially. The government's implicit liabilities have been growing at an even faster rate than the debt figure. Whereas in 2008 government guarantees amounted to about EUR 22 billion, the year-end 2017 figure was as much as EUR 52 billion. Central government finances are concerned not only with explicit and implicit liabilities but also 'hidden' liabilities, the most significant of which are connected with the banking sector and local government. As a consequence of structural changes, the size of the banking sector in relation to GDP in Finland will grow in the remainder of this year to a point significantly beyond the EU average. Although the government has no legal obligation to rescue banks from difficulties they may find themselves in, experience has shown that in times of crisis, governments have used tax payer funds to safeguard the continuity of access to deposits and the functioning of critical infrastructure. The European banking union, if it succeeds, may limit these hidden liabilities. In Finland, the municipalities enjoy wide-ranging autonomy under the Constitution, and central government is not liable for the municipalities' financial commitments. Local government finances are nevertheless part of general government finances, and financial problems experienced by municipalities will most likely also affect central government finances. As with central government, the municipalities' loan and guarantee portfolios have grown considerably in the past ten years. In Finland, with the regional government, health and social services reform, local government finances are also in the midst of a major structural change. In the reform, healthcare and social welfare costs will change from being a hidden liability to more of an explicit liability of central government. The extent of explicit, implicit and hidden liabilities will be dependent on the performance of the economy. Finland's economic outlook is expected to be favourable in the coming years. There are risks associated with this, however. Political decision-makers should also be prepared for the economy to perform less well than expected. The growing debt burden and increase in implicit liabilities have weakened the government's room for manoeuvre and ability to deal with negative shocks in recent years. Efforts to strengthen general government finances should be continued and the growth in the government's guarantee liabilities should be restricted in order that any economic disturbances do not lead to an unnecessary tightening of fiscal policy for the purpose of securing the government's liquidity and preserving its credit worthiness.</p>		
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<b>Tiivistelmä</b>	<p>Valtion velka on lähes kaksinkertaistunut viimeisten kymmenen vuoden aikana ollen vuoden 2017 lopussa noin 105 miljardia euroa. Myös suhteessa kansantalouden kokoon velka on kasvanut voimakkaasti. Valtion epäsuorat vastuut ovat kasvaneet jopa velkaa nopeammin. Kun vuonna 2008 valtiontakausten ja -takuiden määrä oli noin 22 miljardia euroa, niin viime vuoden lopulla luku oli jo 52 miljardia euroa. Valtiontalouteen kohdistuu suorien ja epäsuorien vastuiden ohella myös ns. piileviä vastuita. Merkittävimmät näistä koskevat pankkisektoria ja paikallishallintoa. Rakennemuutosten seurauksena pankkisektorin koko suhteessa kokonaistuotantoon tulee Suomessa kasvamaan vuoden lopulla merkittävästi yli EU-keskiarvon. Vaikka valtiolla ei ole oikeudellista velvoitetta pelastaa pankkeja niiden ongelmatilanteissa, niin kokemus on osoittanut, että kriiseissä valtiot ovat tukitoimillaan joutuneet turvaamaan talletusten saatavuuden jatkuvuuden ja kriittisen infrastruktuurin toimivuuden. Pankkiunioni voi onnistuessaan rajoittaa näitä piileviä vastuita. Suomessa kunnilla on perustuslain nojalla laaja itsehallinto, eikä valtio ole vastuussa kuntien taloudellisista velvoitteista. Kuntatalous on kuitenkin osa julkista taloutta ja kuntatalouden ongelmat vaikuttaisivat todennäköisesti myös valtiontalouteen. Valtion tavoin kuntien laina- ja takauskanta on viimeisen 10 vuoden aikana kasvanut merkittävästi. Suomessa sote- ja maakuntauudistuksen myötä kuntatalous on myös suuren rakennemuutoksen keskellä. Uudistuksessa sosiaali- ja terveydenhuollon kustannukset muuttuvat valtion piilevästä vastuusta nykyistä enemmän valtion suoraksi vastuuksi. Suorien, epäsuorien ja piilevien vastuiden toteutuminen on riippuvainen talouskehityksestä. Suomen talousnäkymien odotetaan olevan lähivuosina myönteiset. Kehitykseen liittyy kuitenkin riskejä. Poliittisten päättäjien onkin syytä varautua myös odotettua heikompaan kehitykseen. Velkaantumisen ja epäsuorien vastuiden kasvun myötä valtion liikkumavara ja kyky kohdata negatiivisia sokkeja on viime vuosina heikentynyt. Julkisen talouden vahvistamista tulisikin jatkaa ja valtion takausvastuiden kasvua rajoittaa, jotta mahdollisten häiriöiden sattuessa finanssipolitiikkaa ei tarvitsisi tarpeettomasti kiristää valtion maksuvalmiuden turvaamiseksi ja luottokelpoisuuden säilyttämiseksi.</p>		
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<b>Referat</b>	<p>Statsskulden har nästan fördubblats under de senaste tio åren och uppgick till cirka 105 miljarder euro vid utgången av 2017. Även i förhållande till samhällsekonomin storlek har skulden ökat kraftigt. Statens indirekta åtaganden har till och med ökat i snabbare takt än skulden. Då det totala beloppet av statsborgen och -garantier uppgick till cirka 22 miljarder euro 2008 var motsvarande siffra hela 52 miljarder euro i slutet av förra året. Utöver direkta och indirekta åtaganden omfattas statsfinanserna även av s.k. dolda åtaganden. De mest betydande av dessa gäller banksektorn och den lokala förvaltningen. Till följd av strukturomvandlingarna kommer banksektorns storlek i förhållande till den totala produktionen i Finland att öka avsevärt över EU-genomsnittet under slutet av året. Även om staten inte har några rättsliga skyldigheter att rädda banker när de får problem, har erfarenheterna visat att stater vid kriser genom sina stödåtgärder har tvingats trygga en kontinuerlig tillgång till insättningar och att den kritiska infrastrukturen fungerar. Om bankunionen blir verklighet kan den begränsa dessa dolda åtaganden. I Finland har kommunerna omfattande självstyre med stöd av grundlagen, och staten ansvarar inte för kommunernas finansiella åtaganden. Den kommunala ekonomin är dock en del av de offentliga finanserna och problem i den kommunala ekonomin påverkar sannolikt även statsfinanserna. Kommunernas låne- och borgensstock har liksom statens ökat avsevärt under de senaste 10 åren. På grund av vård- och landskapsreformen befinner sig den kommunala ekonomin i Finland i en stor strukturomvandling. Genom reformen kommer kostnaderna för social- och hälsovård att allt mer bli ett direkt åtagande för staten, då de för närvarande är ett dolt åtagande. Huruvida de direkta, indirekta och dolda åtagandena kommer att realiseras beror på den ekonomiska utvecklingen. De ekonomiska utsikterna i Finland väntas bli positiva de närmaste åren. Det finns dock risker med utvecklingen. De politiska beslutsfattarna bör förbereda sig även på en svagare utveckling än väntat. Genom att skuldsättningen och de indirekta åtagandena ökar har statens spelrum och förmåga att hantera negativa chocker också försvagats under de senaste åren. De offentliga finanserna bör alltså stärkas och ökningen av statens borgensåtagande begränsas för att man vid eventuella störningar inte ska tvingas strama åt finanspolitiken i onödan för att trygga statens likviditet och bibehålla statens kreditvärdighet.</p>		
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## SUMMARY

This year will mark the tenth anniversary of the most difficult moments of the global financial crisis. The bankruptcy of the investment bank Lehman Brothers in autumn 2008 drove the world economy into a deep and prolonged recession. Finnish exports collapsed and our total output fell by more than 8% in 2009. In the euro area, the financial crisis was followed by a banking crisis in many countries and ultimately it developed into a sovereign debt crisis affecting in a number of member countries. At the start of the crisis, Finland's general government finances were in a good shape. A good budgetary position allowed the government to alleviate the impacts of the crisis through fiscal stimulus. A strong budgetary position also permitted more extensive use of government guarantees to limit the effects of market disturbances.

As a result of the crisis and the policies adopted by the Finnish government, there has been a substantial increase in central government debt and off-balance-sheet liabilities. Central government debt has almost doubled over the past ten years, totalling about EUR 105 billion at the end of 2017. The debt to GDP ratio has also increased significantly. Adjustment measures and economic growth have helped to put the debt to GDP ratio on a slightly downward path. Despite this, the long-term structural challenges facing the Finnish economy have not disappeared. The Ministry of Finance estimates that as the Finnish population is ageing and if no new policy measures are taken, general government debt will start growing again at the end of the next decade.

In fact, government guarantees have increased more rapidly than the central government debt. In 2008, they totalled about EUR 22 billion but by the end of last year, they had already reached EUR 52 billion. During the financial crisis, the extensive use of government guarantees was explained by the exceptional situation in the financial markets, which had led to serious problems in the availability of financing. The intention was that government guarantees would be used in a targeted, timely and temporary manner.

The crisis and the structural changes in the financing system have boosted the growth in contingent liabilities. This trend has been further strengthened by the competition

between countries on export markets and the problems with the implementation of structural changes at national level. As a result, the use of guarantees is now also explained as a competitiveness factor. The risk is that financial risks will also be increasingly transferred from the private sector to the public sector in the future if no measures are taken to curb the trend.

In addition to the direct and contingent liabilities referred to above, there are also implicit liabilities potentially affecting central government finances. One the most significant of them concerns the banking sector as a critical infrastructure. As a result of the structural changes, the size of the Finnish banking sector relative to our total output will, at the end of the year, reach a level that is substantially above EU average. The financial crisis showed that a situation where the banking sector is very large relative to the economy of its home country may be a problem if there are doubts about the solvency of the system as a whole. Even though countries do not have any legal obligations to save banks facing problems, the experience has shown that in crisis situations, governments have been forced to take support measures to ensure the continuous availability of deposits and the functioning of the critical payments infrastructure.

The implicit liabilities arising from the large size of the banking sector may be mitigated by ensuring the success of the EU Banking Union. The purpose of the new bank recovery and resolution legislation is to make the crisis resolution financing the responsibility of the bank investors and the banking sector itself. The EU Banking Union will also pool resources in a situation where private funding should ultimately be supplemented through financing from public sector sources. However, the new legislation and the institutions of the EU Banking Union have not yet been tested in a serious crisis. For this reason, general government finances may still face implicit risks arising from structural changes.

The second major implicit liability in central government finances concerns local governments. Under the Constitution of Finland, municipalities have wide-ranging autonomy and central government is not responsible for their financial liabilities. However, local government finances are part of general government finances and economic problems in municipalities would probably also have an impact on central government finances. Like central government, municipalities have substantially increased their loan and guarantee portfolio over the past ten years.

The health, social services and regional government reform will also necessitate major structural changes in local government finances. As part of the reform, the responsibility for providing health and social services will be transferred from municipalities and joint municipal authorities to counties. The activities of counties would mainly be financed from central government funds and partly from service fees from clients. This means that the costs arising from health and social services would be increasingly transformed from

implicit government liabilities into direct government liabilities. The aim of the reform is that in 2030, health and social services expenditure would be three billion euros lower each year than they would be without the reform. There are, however, uncertainties concerning the achievement of this objective.

The realisation of the direct, contingent and implicit liabilities depends on economic growth. Finland's growth prospects for the next few years are expected to be positive. However, there are also risks in this development. In fact, political decision makers should also be prepared for weaker than expected growth. The last chapter of the report contains a stress test scenario for Finland's general government finances. In the scenario, a shock spreading from the financial markets to the real economy will weaken Finnish GDP growth by 8.4% during a three-year period relative to the baseline.

In addition to the direct impacts of the macroeconomic shock, the stress test for general government finances also examines the impacts arising from contingent liabilities on the revenue and expenditure of central and local government as well as social security funds. The shock would push the general government deficit close to the deficit limit set out in the Stability and Growth Pact (3% of GDP) and the 60% debt criterion would be exceeded. In addition to having direct impacts on general government finances, the realisation of the contingent liabilities would also lead to a substantial decrease in the buffer funds and necessitate capital injections, which would increase the indebtedness of the public sector.

The stress test described in the report is based on the macroeconomic risk scenario used by the European Banking Authority in its stress tests for banks. It is not expected to trigger off a domestic banking crisis or reignite the euro area debt crisis again in a manner that would lead to the realisation of Finland's guarantee liabilities agreed as part of the financial support programmes for euro area countries. However, the realisation of such tail risks cannot be fully ruled out. The threat of trade policy crises has also increased. However, these crises are not assessed in this report in detail because producing quantitative impact assessments is difficult, due to the complexity of the contagion channels for exceptional events taking place separately. In such situations, the pressures facing central government finances and general government finances as a whole would anyway be higher than in the scenario discussed in this report.

Finland should consistently slow down the growth in government liabilities with the awareness that limiting direct and contingent liabilities can lead to an increase in implicit liabilities and vice versa. However, some of the factors increasing these liabilities are largely beyond Finnish control. The exceptional central bank policy, which weakens the profitability of the banks will be abandoned as the economy is picking up and inflationary pressures are growing. Finland is also actively negotiating on the completion of the EU Banking Union so that the growth of the implicit liabilities contained in the banking

system can be mitigated. It should be noted, however, that a banking union limiting the implicit liabilities of central government would, if successful, probably lead to changes in the banks' balance sheet structures. To prevent the growth in direct and contingent government liabilities, there is a need for a deeper and more extensive capital markets as a complement to the bank based financing. In order to ensure that this will happen, Finland is actively involved in the development of the Capital Markets Union for the EU.

Implementation of the structural reforms (including a successful health, social services and regional government reform) is however fully in Finnish hands. A successful structural reform will boost potential growth rates and limit the growth in liabilities. In addition to this, it is also important to carefully monitor the liabilities and to prioritise the targets. A more comprehensive collection of guarantee fees on new government guarantees would be one possible policy option. When priced correctly, this would help to direct the use of guarantees to those entities where genuine market failures occur.

In addition to pursuing an active policy limiting the growth in liabilities, it should also be noted that the relatively substantial central government liquid financial assets serve as a buffer for government liabilities. These assets can be realised to meet central government financing needs if needed. However, the financial assets entail a price risk that would probably be realised (at least in part) in a financial stress situation where selling some of these assets is considered necessary.

It is clear, however, that with the growth in debts and contingent liabilities, the central government's fiscal room for manoeuvre and its ability to withstand negative shocks have considerably weakened in recent years. Against this background, the efforts to consolidate general government finances should continue and the growth in government guarantee liabilities slowed down so that, should any disturbances occur, there would not be any need for unnecessary tightening of the fiscal policy so that central government liquidity and creditworthiness can be ensured.

# 1 Introduction

There has been a substantial increase in central government debt and financial assets as well as in its off-balance-sheet liabilities over the past ten years. At the same time, the credit, guarantee, market and financial risks associated with these financial items have also increased. The National Audit Office of Finland (NAOF) and the International Monetary Fund (IMF) have drawn attention to the fact that the reporting on central government assets, debts and other liabilities remains fragmented, which means that it is difficult to form a clear overview of the central government budgetary position and its key risks.

The reporting on central government financial risks has been developed on the basis of the recommendations of the Ministry of Finance working group that discussed risk management in 2015<sup>1</sup>. Government liabilities are extensive, which, in turn, means that the risks affecting central government finances can emanate from multiple sources. Financial risks are typically divided into two categories: unanticipated macroeconomic disturbances and contingent liabilities. An example of the first would be a financial market disruption originating from inside or outside Finland and an economic downturn or even a recession resulting from it, which would impact the Finnish economy through a variety of channels. Contingent liabilities include government guarantees involving the guarantor's obligation to pay that depends on factors beyond the central government's control.

The risks associated with macroeconomic development, central government financial assets, central government debt, government guarantees and other direct and contingent government liabilities often correlate each other. For example, a macroeconomic shock could lead to an economic downturn and higher central government indebtedness and, as a result of lower asset prices, to a reduction in financial assets. A weak economic situation may cause the realisation of contingent government liabilities and, consequently, add a further burden to already weakened general government finances and to the national economy as a whole. These mutual dependencies underline the importance

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<sup>1</sup> Development of the government's financial risk reporting and management. Ministry of Finance publications 11/2015.

of careful management of government liabilities and adequate risk management and monitoring.

This publication provides a review of the risks affecting different parts of the central government balance sheet and off-balance-sheet liabilities. Risks associated with macroeconomic developments are discussed in section 2. Main central government liquid financial assets are reviewed and the risks associated with them examined in section 3. Direct government liabilities and the risks arising from them are reviewed in section 4. In section 5, the focus is on contingent off-balance-sheet liabilities. Calculations for an alternative stress scenario are presented in section 6.



## 2 Macroeconomic risks

Forecasting economic prospects is essential for financial planning and decision-making. Forecasts are used as a basis for budget planning and for outlining the spending limits. A full understanding of the economic outlook will help to situate economic policy actions in their proper scale and promote their timely execution.

The objective of macroeconomic forecasts is to provide the most likely future scenario. However, forecasts always involve risks which, if they materialise, may lead to a more negative or more positive development than anticipated. Weaker-than-predicted development tends to result in a higher than expected increase in government borrowing.

### 2.1 Macroeconomic trends a major element in budget planning

Macroeconomic scenarios provide a starting point for tax revenue forecasts. Tax revenue forecasts are based on the estimates of trends in tax bases, such as private consumption, earned income, pension income and company profits, as well as the impact of known changes in tax criteria. The GDP growth rate is the key indicator of economic activity in economic forecasts. To a large extent, national economic output determines how income is generated and provides the financial basis for general government finances.

The conclusion in a study commissioned by the Parliamentary Audit Committee<sup>2</sup> was that, in terms of accuracy, the tax revenue forecasts produced by the Ministry of Finance do not essentially differ from the forecasts prepared by other forecasting institutes. When the accumulation of tax revenue over a period of 20 years was examined, it was noted that the forecast errors were not of systematic nature. Typically, major overestimates or

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<sup>2</sup> Publication of the Audit Committee 1/2009

underestimates of tax revenue occur at turning points of the economic cycles, where their magnitude and/or timing has not been accurately forecast.

Besides providing a tool for tax revenue assessment, economic forecasts are also used to predict budgetary expenditure. The economic cycle reflects particularly strongly on unemployment expenditure. Forecasts of the general price and earnings level affect the development of current transfers to private households and municipalities. With the normalisation of the monetary policy, interest expenditure will also grow. Despite rapid debt growth, interest expenditure has remained fairly modest, a result of exceptionally low interest rate levels (see chapter 4.1.1).

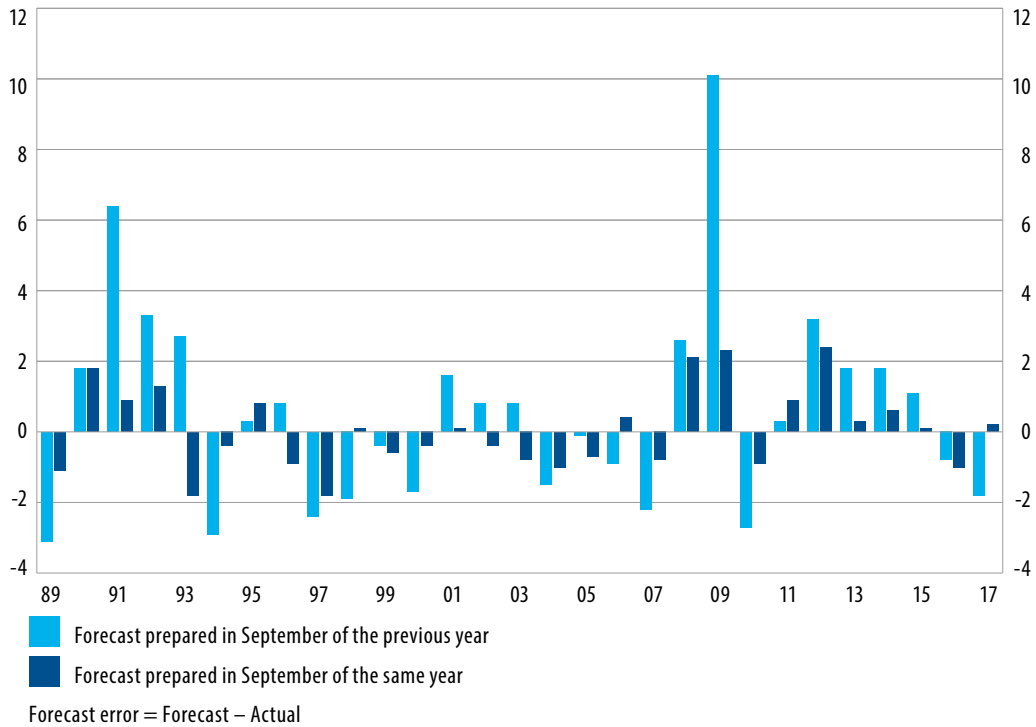
## 2.2 Actual economic growth and forecast errors

The reasons for the differences between the forecasts and actual development include false initial assumptions and an inaccurate picture of the interaction between economic players or sectors. Figure 1 illustrates the accuracy of the economic forecasts published by the Ministry of Finance in September 1989–2017 in terms of GDP growth in the current (forecast preparation year) and the year after that. These forecasts were used in the planning of the state budget for the following year.

The figures show that forecast errors have been more substantial during deep downturns and recessions. In terms of GDP growth, the average forecast error in year  $t + 1$  in the period 1988–2017 was 0.6 percentage points, which means that economic growth was expected to be stronger than it actually was.

According to a report produced by NAOF in 2016, the economic forecasts prepared by the Ministry of Finance are statistically reliable and their accuracy is comparable with the forecasts produced by other forecasting institutes.

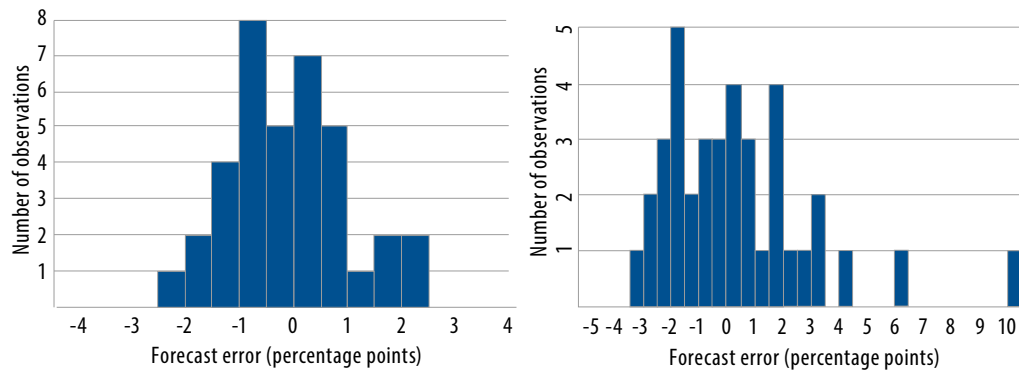
**Figure 1. Forecast errors on GDP growth**



Source: Ministry of Finance

The forecast errors contained in the forecasts published in September can be presented as a distribution. The left side of Figure 2 describes the distribution of the forecast errors for the current year, while the right side gives the distribution of the errors in the forecasts for the following year in the years between 1980 and 2017. The average for the forecasts for the current year is 0 percentage points, while the average for the errors for the following year's forecasts is 0.4 percentage points. The forecast errors are highly symmetrically distributed around the averages and the assumption is that they are in accordance with the normal distribution. The most significant forecast errors occur at turning points, which can be seen in the histogram as deviating observations.

**Figure 2. Forecast errors for the current year and the following year in September forecasts**



Source: Ministry of Finance

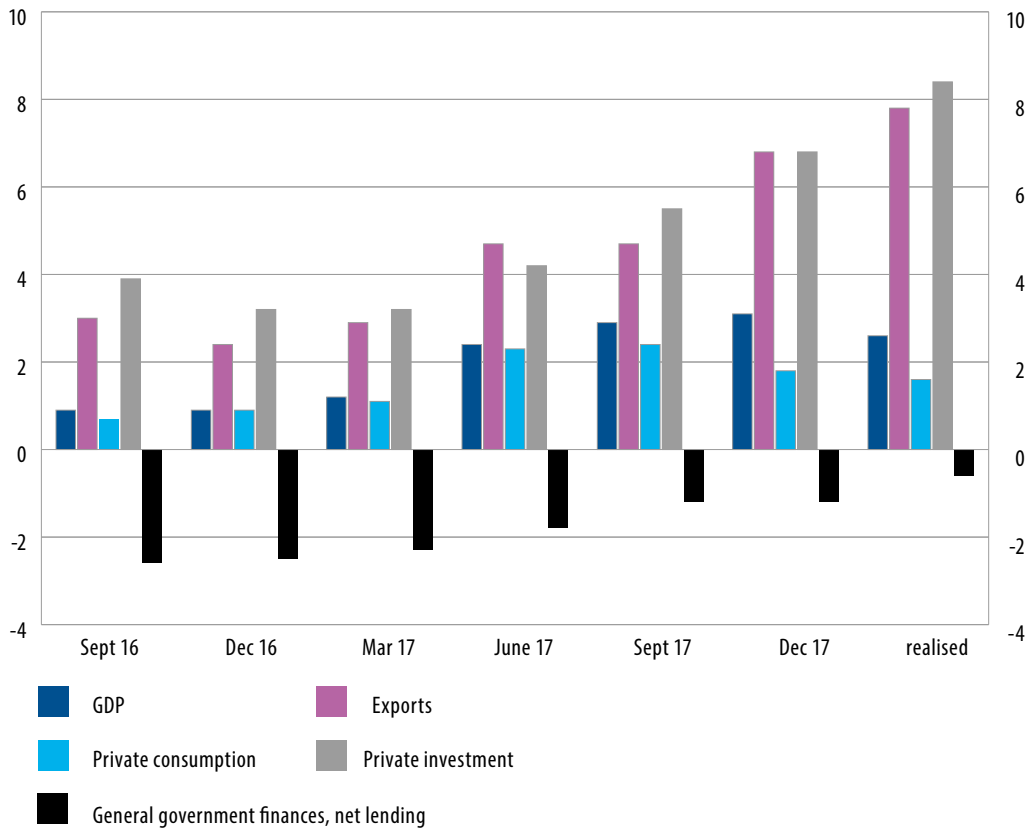
### 2.2.1 Economic growth in 2017 and realisation of the macroeconomic risk

According to the preliminary data published by Statistics Finland in March 2018, Finland's gross domestic product grew by 2.7% in 2017.

The state budget for 2017 was based on the forecast published in September 2016, which predicted GDP growth of 0.9% in 2017. The figure was revised considerably upwards in the updates following this publication. Finnish exports grew rapidly in 2017 and the rate of growth was more than twice as high as had been predicted in autumn 2016. The growth in domestic demand had also been underestimated in the autumn 2016 forecast. Growth in private consumption was higher than expected and the reasons included slower than expected inflation and a low savings rate. Growth in investments was also higher than forecast and this was due to an upturn in investments in machinery and equipment.

Figure 3 shows how macroeconomic improvements also had an impact on the general government budgetary position and indebtedness. However, a cyclical upturn based on improvements in labour productivity only had a moderate consolidating impact on general government finances.

**Figure 3. More detailed macroeconomic forecasts for 2017, %**



Sources: Statistics Finland, Ministry of Finance

### 2.2.2 The forecast for the year 2018 produced in September 2017

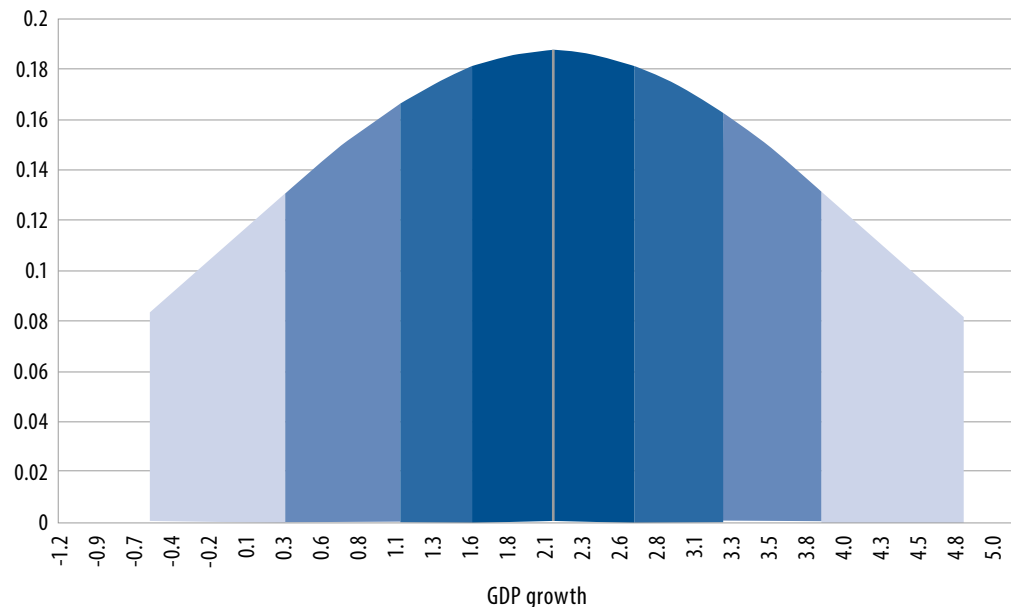
The 2018 state budget was based on the forecast prepared in September 2017 in which the GDP was expected to grow by 2.1% in 2018. A stabilisation following the strong upturn in 2017 was given as the main reason for the slowdown. Growth in all demand items was expected to continue, albeit at a slower rate. A more rapid rise in prices was also expected to slow down the economic growth. The growth estimate for 2018 was raised in the forecasts produced after September and latest estimate, published in March 2018, is 2.6%.

Figure 4 gives the probability distribution for the autumn 2017 forecast for economic growth in 2018.<sup>3</sup> It shows that the 2.1% growth predicted for the year 2018 in September

<sup>3</sup> The assumption in the calculation is that the forecast errors are based on normal distribution. The width of the distribution is defined by the mean deviation calculated on the basis of the statistical material. The mean value for the following year's forecasts is 0.1 and the standard deviation 2.1, as calculated for the period 1980–2017. In the calculation of the key figures, the substantial forecast error for 2009 has been left out. Figure 4 presents 80% of the distribution. Actual growth may not necessarily be within the distribution.

2017 has a probability of 19% (based on the past forecast errors). A growth of 1.1% (one percentage point lower) has a probability of 17% whereas a growth of 3.1% (one percentage point higher) also has a probability of 17%<sup>4</sup>. The probability that GDP growth in 2018 is between 1.1% and 3.1% can be put at 40%.

**Figure 4.** Figure 4. Probability distribution of the autumn 2017 forecast for GDP growth in 2018



Source: Ministry of Finance

## 2.3 Sensitivity of general government budgetary position to economic cycles

The sensitivity of Finland's general government finances to economic cycles has been assessed by i.a. the OECD. On average, Finland is, due to the size of its general government and the structure of its national economy, more sensitive to macroeconomic developments than many other EU countries.

Overall, automatic stabilisers are clearly less significant on the revenue side than on the expenditure side. During a recession, in addition to automatic stabilisers, factors that may increase expenditure also include the other discretionary public intervention measures.

<sup>4</sup> This derives from the assumption that the probability distribution used as a basis is symmetric.

The effects of the cyclical fluctuation on general government budgetary position and borrowing may vary depending on which factors contribute to the weaker or stronger-than-anticipated development. The more economic activity is affected by domestic demand, the stronger the effect on general government finances.

In September 2017, the general government budgetary position was estimated to be at -1.4% of the GDP. General government debt to GDP ratio was expected to be at 61.9%. Despite an economic upturn, the general government budgetary position was expected to remain in deficit even though a gradual improvement during the forecast period was anticipated.

In the Finnish case, economic growth exceeding the forecast rate by one percentage point would put the general government budgetary position at -0.9% of the GDP (improvement of 0.5 percentage points). At the same time, a growth rate that is one percentage point lower than forecast, would put the general government budgetary position to -2.0% of the GDP. Here the impact on central government finances is strongest in tax revenues sensitive to economic cycles and in unemployment expenditure. Changes in general government debt would amount to about one percentage point.

**Table 1. Cyclical sensitivity of general government finances**

2018	Change in GDP, %	General government budgetary position relative to GDP, %	General government debt relative to GDP, %
Baseline scenario	2.1	-1.4	61.9
Slower growth	1.1	-2.0	62.9
Faster growth	3.1	-0.9	60.9

Source: Ministry of Finance

## 2.4 Risks associated with macroeconomic development

According to the spring 2018 economic survey, the risks inherent in the global economy are still skewed to the downside. There is a danger that trade policy disputes will escalate, which may slow down growth in world trade and weaken Finland's export prospects and economic growth.

The risks set out in the investment forecast are connected with possible corrections in the financial and capital markets and the general uncertainty resulting from this. Furthermore,

there are uncertainties concerning the implementation of large projects on schedule, due to uncertainties concerning permit processes and acquisition of funding.

Growth in private consumption based on a low household savings rate means that the consumption forecast is accompanied by a negative risk. Growth in private consumption, which is based on consumer confidence, is highly sensitive to negative news. Household indebtedness continues to grow, which poses a negative risk to economic growth. Growing household indebtedness has been raised as a concern by the authorities in recent years and the European Systemic Risk Board (ESRB) and the IMF have warned Finland about the matter. Household indebtedness is examined in more detail in Box 1.

There are also positive risks in the macroeconomic development. For example, the decisions on the General Government Fiscal Plan taken by the government may improve the employment situation more than anticipated.

#### **BOX 1. HOUSEHOLD INDEBTEDNESS AND MACROPRUDENTIAL POLICY**

Growing indebtedness among households has been raised as a concern by the financial sector authorities in recent years. The European Systemic Risk Board (ESRB) and the IMF have also warned Finland about the matter. In fact, the household debt relative to annual gross disposable income has reached record levels in Finland (127.8%) and it is also above EU average. According to Eurostat, in 2016 the ratio was, however, well below the levels in other Nordic countries. (Sweden: 155.9%, Norway: 193.8% and Denmark: 244.0%.)

Most of the debt has been accumulated by a relatively small number of households, which are particularly vulnerable to negative developments in the economy or the housing market. Popularity of variable rate loans and the resulting sensitivity to interest rate risks among households has also caused concern.

The Bank of Finland (BoF) and the Financial Supervisory Authority (FSA) have estimated that indebtedness will continue to grow as the economic outlook is brightening. This trend is supported by low interest rates, positive developments in the labour market, easier terms for new housing loans, recovery of the housing market and strong growth in housing construction. However, problems associated with high indebtedness will surface once interest rates start rising and households have to make cuts in other areas of spending.

Housing company loans have been mentioned as a special cause for concern. Last year, the housing company loan stock grew considerably more rapidly (10.9%) than the loans granted directly to households (2.3%). According to a number of estimates, the rapid growth in housing company loans will increase the risk of overindebtedness, as banks are no longer responsible for assessing home buyers' solvency.



Macroprudential policy measures can help to slow down lending by banks and, consequently, prevent households from accumulating excessive debts. The Ministry of Finance is responsible for drafting the macroprudential legislation, whereas the responsibility for applying macroprudential instruments lies with the Board of Directors of the Financial Supervisory Authority.

The Board of Directors of the FSA has gradually introduced a number of macroprudential policy measures over the past few years:

- A maximum loan-to-value ratio for housing loans took effect in July 2016. In March 2018, the Board of Directors decided the lower the ratio so that a housing loan granted by a bank may not be more than 85% of the collateral posted for the loan. In addition to the apartment, other types of physical collateral and personal guarantees can also be held as collateral. For loans taken out for the first home, the limit remains at 95%.
- From 1 January 2018, a 15% floor was set for the average risk weight of the housing loans granted by banks applying internal risk based models.
- Additional capital buffers, as set out by the Basel Committee, were imposed on the four largest systemically important banks as of July 2017.

The government has also introduced a range of macroprudential measures:

- The systemic risk buffer was introduced in the legislation as of 1 January 2018. Its purpose is to cover risks that, as a result of the banking system structure, may affect the entire banking system and the stability of the national economy. Applying the buffer is at the discretion of the Board of Directors of the Financial Supervisory Authority.
- As laid out in the Government Programme, the deductibility of housing loan interest payments has been gradually reduced in recent years so that this year, only 35% of the interest payments are deductible. Next year, the deductibility will be reduced to 25%.

It is still too early to say to what extent the policy measures listed above have helped to slow down household indebtedness. However, interest rates have been at low levels in recent years, and this has been an important factor encouraging households indebtedness. Furthermore, there are consumer loans and housing company loans that remain outside the scope of the macroprudential policy.

In fact, it should be discussed in the future how credit intermediation by actors outside the banking sector should be considered in the macrostability policy. In the Ministry of Finance's view, Finland should also have a comprehensive positive credit register and the Ministry of Justice is now examining the feasibility of such a scheme.

## 3 Risks associated with central government financial assets

Central government financial assets and the risks associated with them are examined below. In this review, financial assets cover central government cash assets, major loan receivables, fixed-income investments, shares and other investments. The extent of the review is determined by the liquidity perspective and on the basis of the amount of the assets. Special-assignment companies (except for Solidium Oy and Vake Oy) and state-owned real property are outside the scope of this review.

### 3.1 Central government cash funds

Central government cash funds constitute the most liquid part of the central government financial assets. The central government cash funds listed in financial accounts totalled about EUR 4.4 billion at the end of 2016. At the same time, the cash funds administered by the State Treasury amounted to about EUR 3.1 billion. The differences between the two figures are largely explained by the units included. For example, the cash funds of such companies as Solidium Oy are included in the financial accounts but not in the State Treasury's figures. The cash managed by the State Treasury are essential from the perspective of central government liquidity and its management<sup>5</sup>.

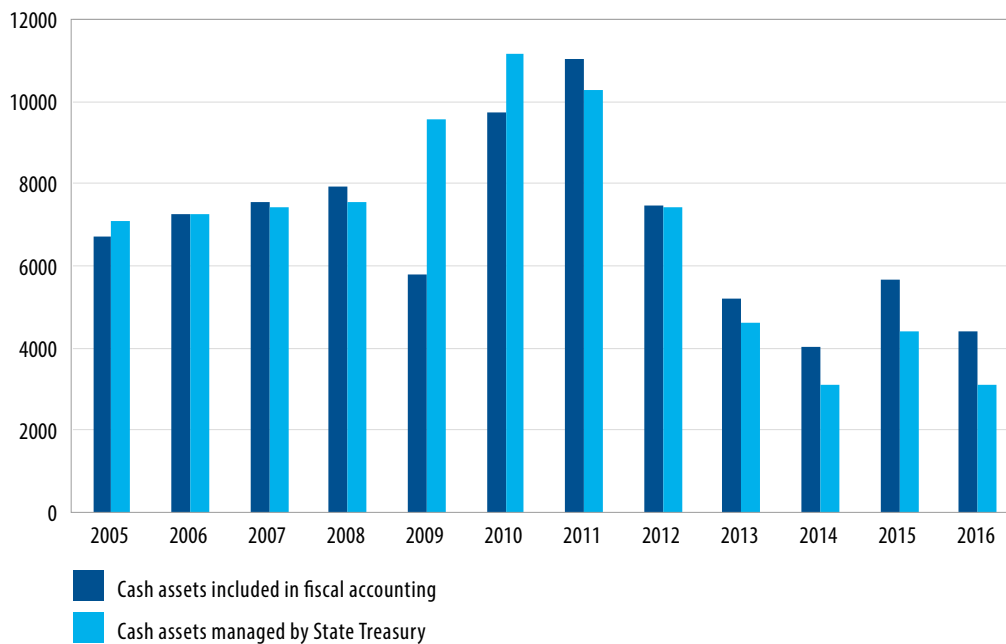
Based on its liquidity assessment, the State Treasury has reduced the amount of cash funds since 2011. There are two factors behind this: the good fundraising capacity of central government and the adoption of liquidity-based cash management. At the same time, it should also be noted that while the cash funds have shrunk, government guarantees have increased (see chapter 5).

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<sup>5</sup> The most important tasks of the State Treasury cash asset management is to ensure central government liquidity.

Cash funds are a source of credit risk for central government. It is minimised by spreading the credit risk to various counterparties and by selecting low-risk options when investing cash funds. However, ensuring liquidity is always a key consideration.

**Figure 5. Changes in central government cash funds 2005–2016, EUR million**



Sources: General government financial accounts; State Treasury

### 3.2 State Pension Fund

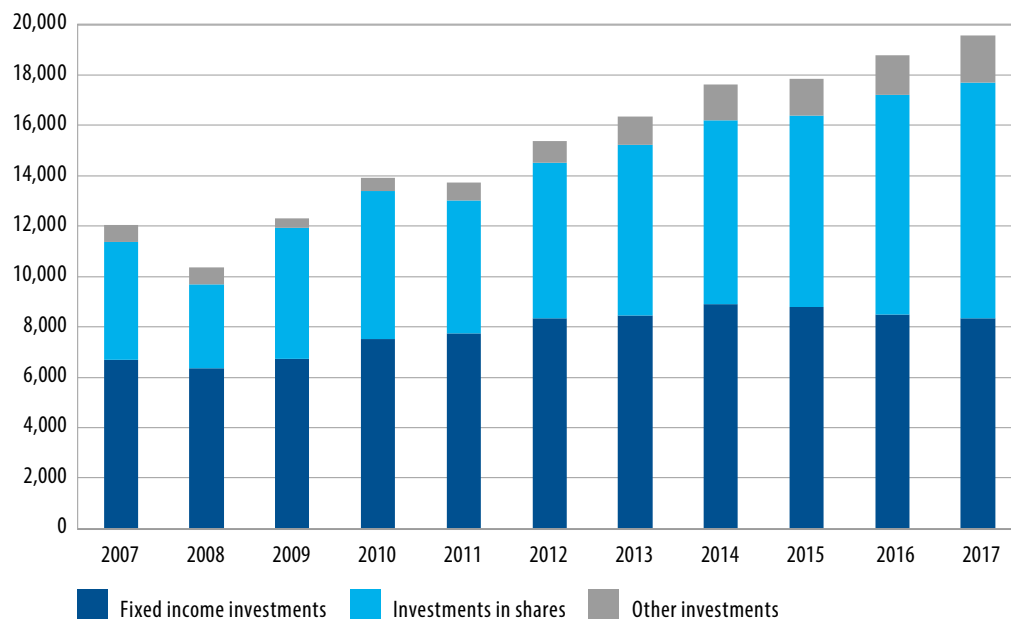
The State Pension Fund (VER) is an off-budget buffer fund. The purpose of the fund is to ensure that the Republic of Finland can also pay pensions in the future and to even out differences between annual pension expenditure. The task of VER is to invest the assets entrusted to it in a profitable and secure manner. No pensions are paid out from the fund as Keva pays all pensions coming under the scope of the state pension system from the appropriations allocated for the purpose in the state budget. A total of 40% of the annual state pension expenditure is transferred from the fund to the state budget.

The assets held by VER are state assets but they are in the name of the fund, which also manages them. The costs arising from the operations are paid from the assets managed by VER. The revenue of VER comprises the pension contributions and other fees paid to the fund and the return on the investments made by it.

In 2017, the total return on the investments was 6.6% (compared with 6.7% in 2016). The real rate of return was 6.0% (compared with 5.6% in 2016). The average of the nominal returns for the past ten years is 5.0% and that of real returns 3.5%. On average, the nominal returns have been 2.8 percentage points higher than the average cost arising from central government debt servicing. At the end of 2017, the market value of the investments stood at EUR 19.6 billion (compared with EUR 18.8 billion in 2016). Of the investments, 40.0% were fixed-income investments and 47.5% investments in equities while the remainder consisted of alternative investments and impacts of derivatives.

The financial assets of VER entail market risks (currency, credit and interest rate risks, as well as the risk arising from the price of securities). VER has taken measures to manage these risks by extensive diversification of its investment portfolio, geographically and by type of securities.

**Figure 6. Changes in VER's investments 2007–2017, EUR million**



Source: State Pension Fund

### 3.3 Other state holdings in listed companies

State ownership in Finnish listed companies is the responsibility of the Ownership Steering Department of the Prime Minister's Office. At the end of 2017, the market value of the state ownership in listed companies totalled about EUR 23.8 billion. The Republic of

Finland has a direct stake in three listed companies (Finnair Plc, Fortum Plc and Neste Plc), and the ownership in these companies is based on a strategic state interest. The market value of the state ownership in these three companies totalled EUR 15.2 billion at the end of 2017.

In addition to direct ownership, the Republic of Finland has an indirect stake in listed companies through the investment company Solidium Oy. Solidium holds shares of 12 listed companies in its portfolio<sup>6</sup>. At the end of 2017, Solidium's portfolio had a market value of EUR 8.6 billion. The total returns on Solidium's investment amounted to 12.9% during 2017.

The State Business Development Company (Vake Oy) was established in 2016. Its task is to make the capital invested by the state in the companies circulate more actively. The idea behind this arrangement is to sell existing holdings and use the sales proceeds to create new business or to consolidate the capital structure of the companies already held in the portfolio. There are plans to transfer to Vake Oy state holdings in eight companies<sup>7</sup>.

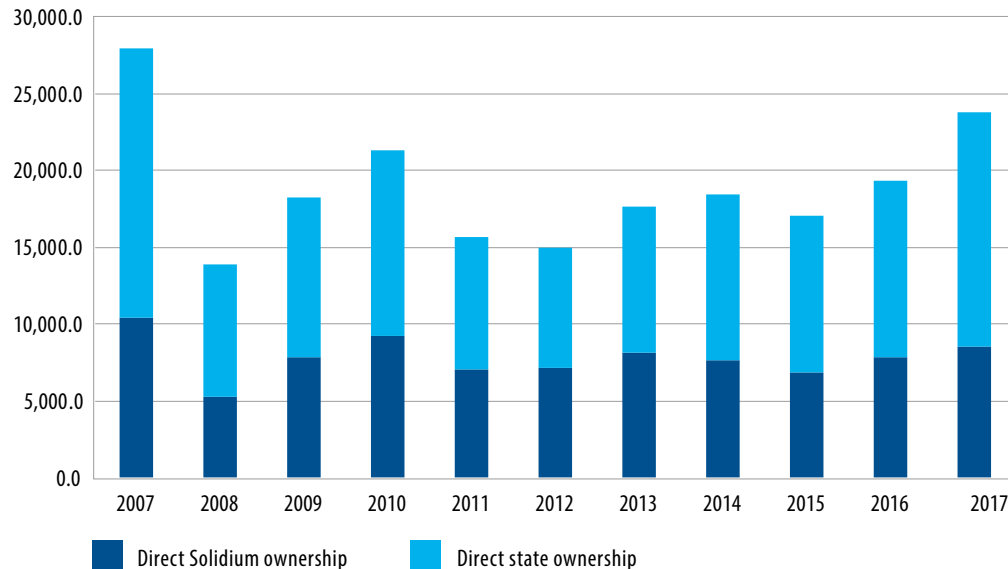
The value of the state shareholdings is associated with a price risk. In fact, there has been considerable fluctuation in the value of the portfolio over the past 11 years. As a result of the financial crisis, the portfolio lost about 50% of its value but since then it has rebounded and the value is now close to what it was before the crisis.

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6 Ahtium Plc, Elisa Plc, Kemira Plc, Konecranes Plc, Metso Plc, Outokumpu Plc, Outotec Plc, Sampo Plc, SSAB AB, Stora Enso Plc, Tieto Plc and Valmet Plc.

7 State holdings in Altia Plc, Arctia Oy, Kemijoki Oy, Neste Plc, Nordic Morning Plc, Posti Group Plc, Raskone Oy and Vapo Oy.

**Figure 7. Changes in the value of central government holdings in listed companies 2007–2017, EUR million**



Source: Prime Minister's Office

### 3.4 Loan receivables of the National Housing Fund

The loan receivables of the National Housing Fund comprise the Arava loans granted for state-subsidised housing construction. Most of the loans have been granted to rental housing and right-of-occupancy corporations. The maximum loan period for Arava loans is 45 years. No new loans have been granted since 2007. Nowadays, state subsidies for housing construction is in the form of interest subsidies and as guarantees for loans granted by credit institutions. At the end of 2017, the loan receivables of the National Housing Fund totalled EUR 4.6 billion and the guarantee portfolio amounted to EUR 13.7 billion, which means that the housing funding liabilities totalled EUR 18.3 billion. From the credit risk perspective, the state is in the same position in direct and indirect funding.<sup>8</sup>

There are several reasons for the credit risk associated with Arava loan receivables. Long loan periods and tail-end repayment programmes mean more risks as the loans are not repaid at the same rate with the wear and tear of the properties. The need for renovation funding will arise before an adequate proportion of the construction loans has been repaid. The highest external risk associated with the loan receivables affects areas

<sup>8</sup> Government guarantees in housing funding are discussed in more detail in chapter 5.1.2.

suffering from depopulation where declining occupancy rates cause payment problems to rental housing corporations.

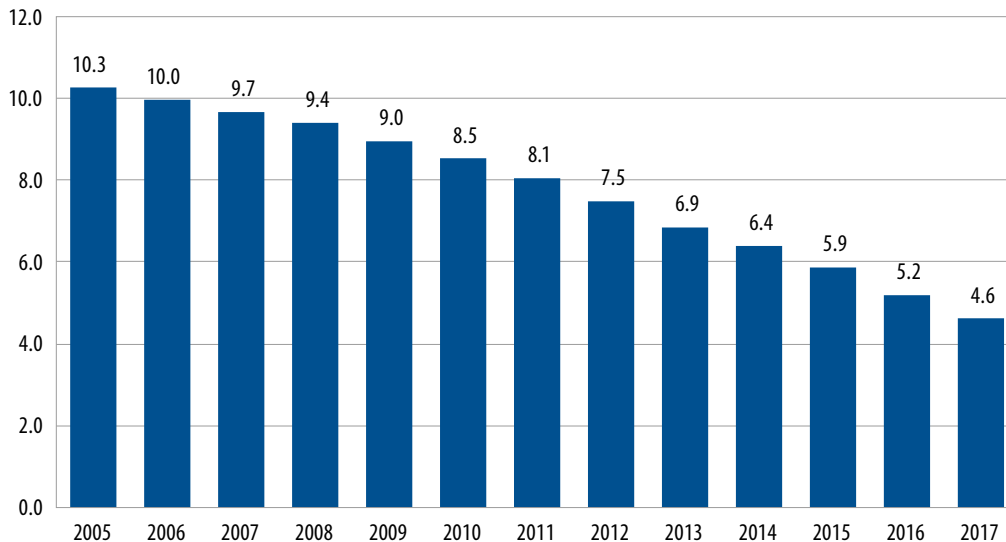
A total of 25.3% (EUR 1.17 billion) of the loan receivables are located in high-risk municipalities. The risk content of the loan portfolio will increase as the population is concentrating in a smaller number of growth centres.

The high loan-to-value ratio (90–95%) also increases the risk content of the Arava loan portfolio as there is no secure collateral margin in the funding relationship. There has been a rapid decline in property values in areas affected by depopulation, which means that the properties held as collateral do not fully cover state receivables in insolvencies.

The risks associated with the loan portfolio are managed through state-supported restructuring measures and funding arrangements in which the aim is to minimise losses by taking managed and systematic measures instead of initiating bankruptcy proceedings and forced sales of properties held as collateral. The year 2017 saw the publication of the report compiled by the AAKE working group reviewing the development of the housing stock and housing conditions outside growth centres. In its report, the working group, appointed by the Ministry of the Environment, proposed more effective measures to reduce the financial and loan portfolio problems of rental housing corporations in areas affected by depopulation<sup>9</sup>.

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<sup>9</sup> Asuntokannan ja asuinolojen kehittäminen kasvukeskusten ulkopuolella (Developing the housing stock and housing conditions in areas outside growth centres). Ministry of the Environment reports 23/2017. [YMrä\\_23\\_2017.pdf \(1.344Mt\)](#)

**Figure 8. Changes in loan receivables of the National Housing Fund 2005–2017**

Source: State Treasury

### 3.5 Other loan receivables

In addition to the loan receivables from the National Housing Fund, the Republic of Finland also has substantial loan receivables from Finnish Export Credit Ltd, the Greek Government and companies funded by the Innovation Funding Centre Business Finland. Under the temporary refinancing scheme for export projects between 2009 and 2012, Finnish Export Credit Ltd provided refinancing for buyer credits for exports of Finnish capital goods provided on OECD terms by domestic and foreign credit and financing institutions. The refinancing was carried out by means of loans granted to Finnish Export Credit Ltd by the Republic of Finland. At the end of 2017, these loan receivables totalled about EUR 1.6 billion.

In addition to the financial aid granted through EFSF, ESM and IMF (Box 3), Finland and other euro area member countries have also granted bilateral loans to Greece. After the debt crisis had spread to Greece in 2010, it was decided in the Eurogroup that the country would be granted bilateral loans as part of more comprehensive financing arrangements. Within the framework of bilateral loan arrangements, Finland has loan receivables from Greece with a nominal value of about one billion euros.

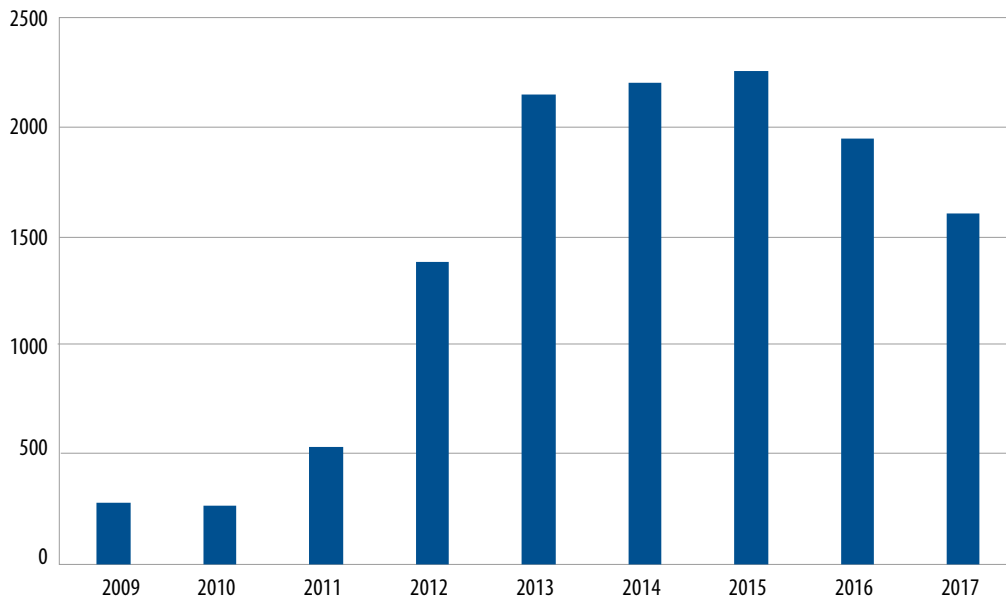
Business Finland (formerly Tekes) provides companies with grants and loans for research and development projects. The purpose of these activities is to promote the development of internationally competitive products and services. The loan receivables of the Republic



of Finland through product development loans granted by Business Finland totalled almost EUR 900 million at the end of 2017. The loan portfolio has grown substantially over the past ten years.

Most of the product development loans are provided as debt instruments. New equity loans are no longer granted and for this reason, their proportion of the total loan portfolio has gradually declined.

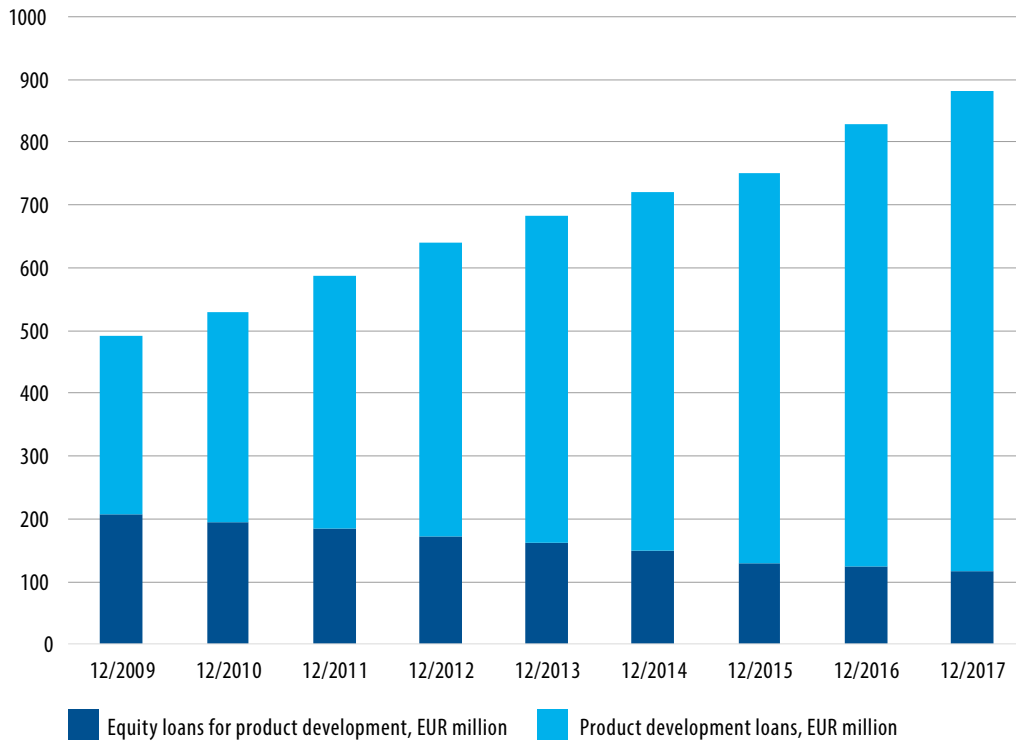
**Figure 9.** Loan receivables of the Republic of Finland from Finnish Export Credit Ltd, EUR million



Source: State Treasury

Product development loans are risk loans and most of them are granted without collateral. Most of the funding goes to young growth-oriented companies that have not yet progressed beyond the product development stage and have no revenue or very little revenue relative to the expenditure.

**Figure 10. Product development loan portfolio of Business Finland, EUR million**



Source: State Treasury

## 4 Direct financial liabilities of central government

The direct financial liabilities of central government are reviewed in this chapter. The most important of them are central government debt, contractual obligations in Public-Private Partnership (PPP) projects based on the law and the state pension liabilities based on statutory obligations.

### 4.1 Central government debt

#### 4.1.1 Changes in central government debt

In the section below, changes in central government debt are examined on the basis of the concept used by the State Treasury for on-budget debt. Within the framework of the Ministry of Finance guidelines, the management of this debt is the responsibility of the State Treasury and indicators describing the debt structure are comprehensively available<sup>10</sup>.

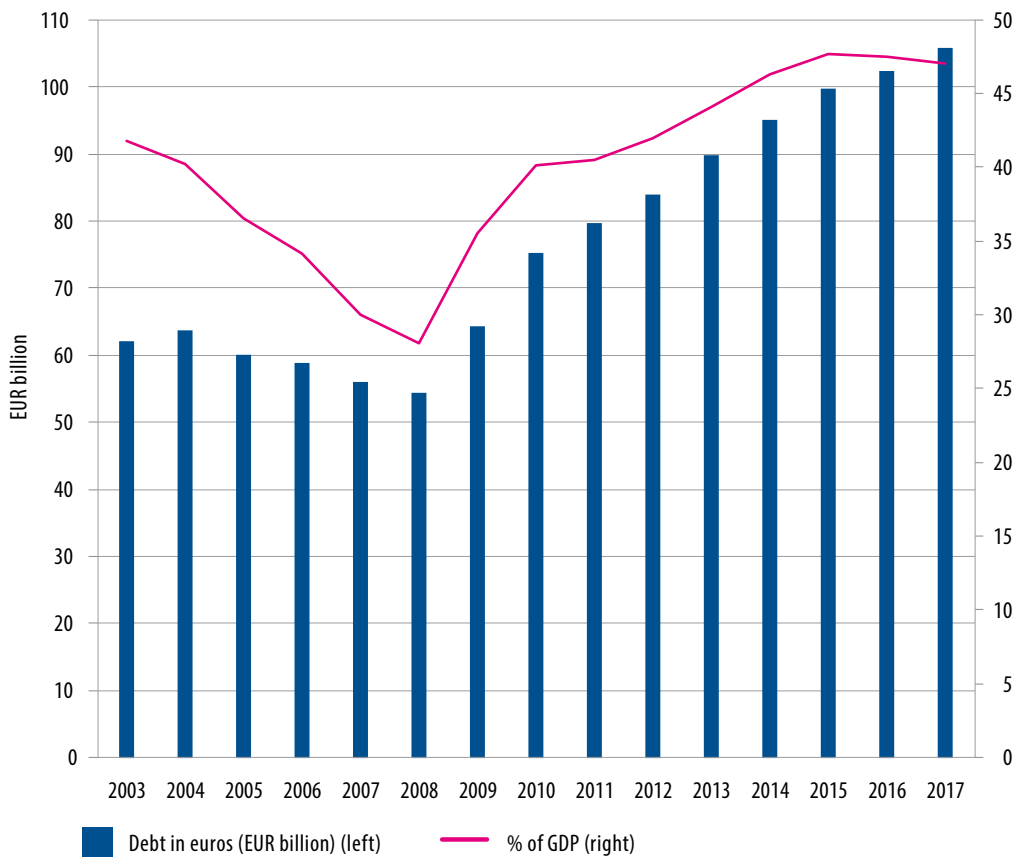
Central government debt has grown substantially in recent years (Figure 11). In 2008, it totalled about EUR 54 billion but by the end of last year, it had already reached about EUR 105 billion. This means that the debt burden has almost doubled over the past decade. Central government debt has also increased substantially relative to the national economy during the years of weak economic growth after the financial crisis. The central government debt to GDP ratio fell below 30% just before the financial crisis but it then grew rapidly, exceeding the 47% limit in 2015. There has been a slight decrease in the debt-to-GDP ratio since then.

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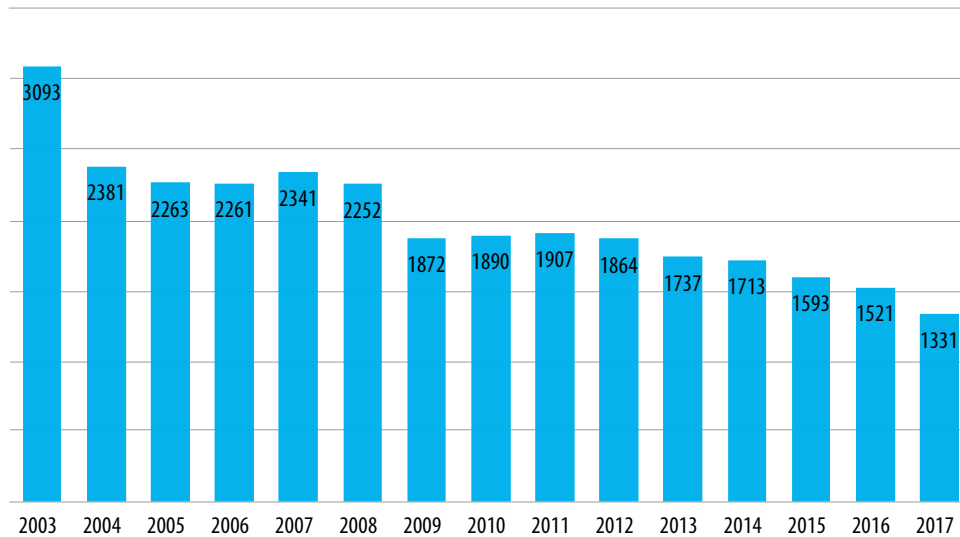
<sup>10</sup> The second commonly used debt concept is the general government debt calculated and published by Statistics Finland. For more information on the differences between these two debt concepts, visit the State Treasury website on central government debt, at [http://www.treasuryfinland.fi/en-US/Statistics/Central\\_government\\_debta](http://www.treasuryfinland.fi/en-US/Statistics/Central_government_debta).

Despite the upward trend, there has been little growth in interest expenditure during the period in review (Figure 12). This is because of the historically low market rates. For this reason, the interest expenditure arising from central government debt was lower in 2017 than in 2008 even though the amount of debt has almost doubled during the same period.

**Figure 11. Changes in central government debt**



Source: State Treasury

**Figure 12. On-budget interest expenses, EUR million**

Source: State Treasury

#### 4.1.2 Risks arising from central government debt

Central government debt involves both financial risks and market risks. Financial risks include risks associated with the availability or terms of financing. Exceptional market conditions or the lowering of the State of Finland's creditworthiness may cause debt servicing expenses to increase or, ultimately, lead to insolvency.

Financing risk is divided into liquidity risk and refinancing risk. Liquidity risk means a situation where the sources of financing available to central government are insufficient to allow the central government to cost-efficiently meet its payment obligations in the next 12 months<sup>11</sup>. Refinancing risk concerns a longer-term risk associated with the acquisition of new funding.

Issuing of central government debt is associated with an interest rate risk. This means the deviation from the expected long-term costs arising from central government debt as a result of the changes in interest rates. The Republic of Finland also issues debt in foreign currencies but exchange rate risks are hedged through derivative contracts. Thus, there is no exchange rate risk associated with Finnish central government debt.

<sup>11</sup> Central government cash assets are discussed in more detail in chapter 3.1.

There are also other risks associated with central government debt servicing (such as legal risks, operational risks, credit risk and model risk). However, these risks are not discussed in detail in this report.

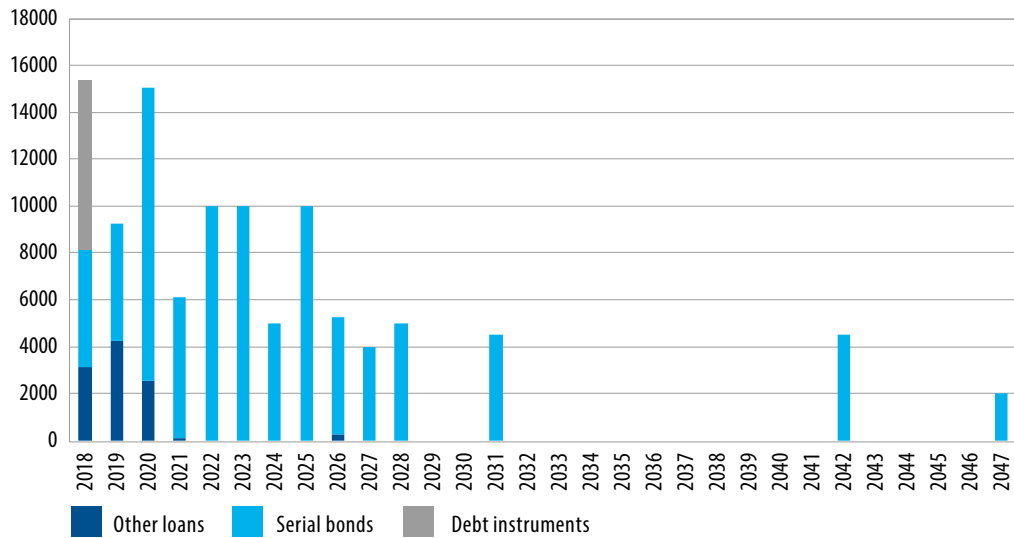
### **4.1.3 Risk position of central government debt**

The risk position of central government debt is discussed below and the focus is on the financial risk and the interest rate risk.

The refinancing risk arising from central government debt is managed by maintaining a sufficiently broad range of fundraising channels and by ensuring that the capital cash flows connected with the loans are of equal size each year. Information about the amortisation of central government debt over the coming two decades is given in Figure 13.

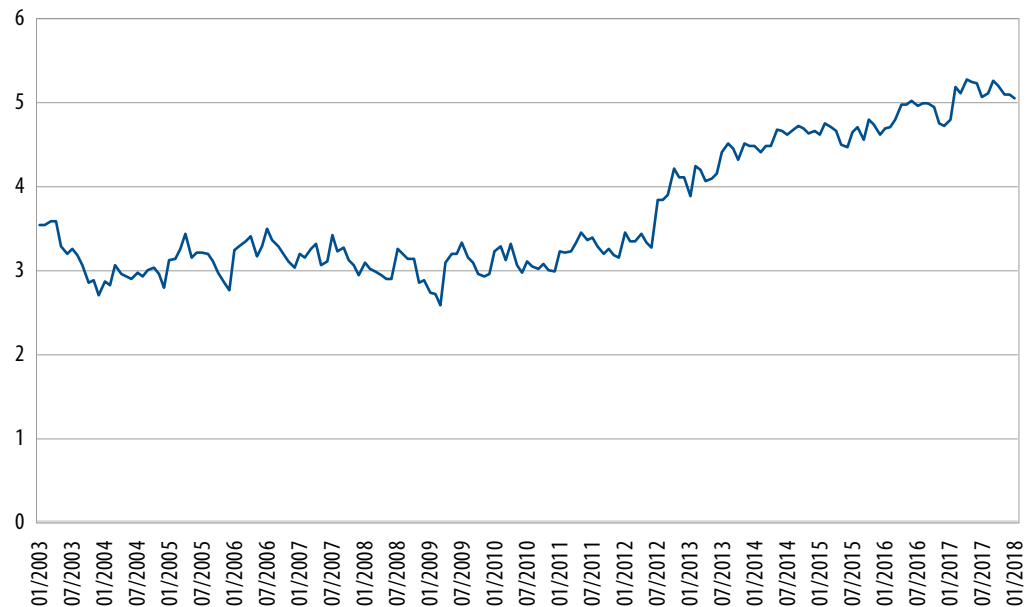
Figure 14 provides information on changes in the interest sensitivity of the central government debt (measured using the average refixing year). The indicator gives the average year during which the debt portfolio is repriced. The Figure shows that after 2012, the average repricing interval has been extended from three to five years. This can be interpreted so that the government has endeavoured to reduce the interest rate risk associated with the central government debt.

**Figure 13. Amortisations of central government debt 2018–2047, EUR million<sup>12</sup>**



Source: State Treasury

**Figure 14. Changes in the interest rate risk position of central government debt, average repricing year**

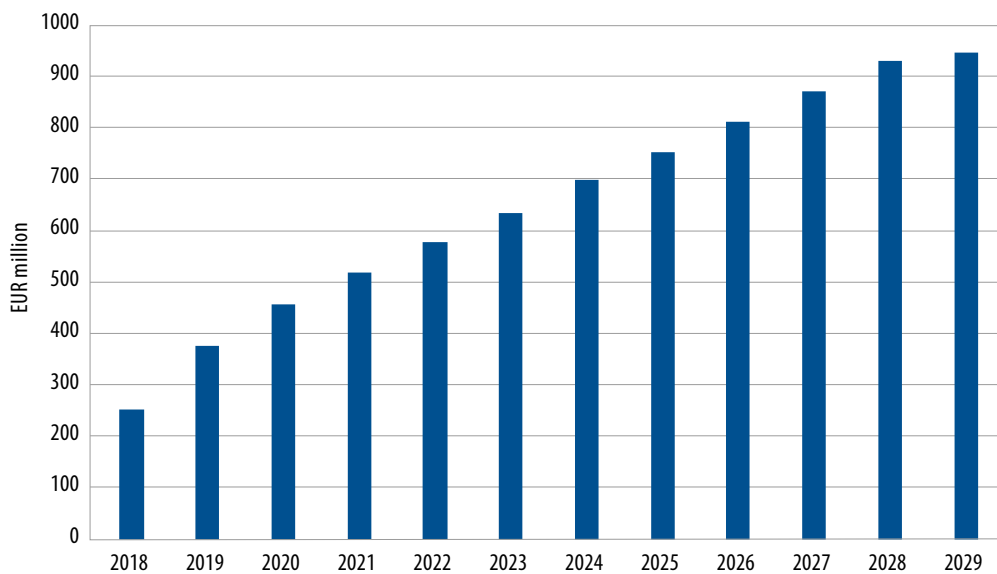


Source: State Treasury

12. Serial bonds are book-entry bullet loans with fixed interest for which the coupon interest is paid once a year. Debt instruments are discount-based promissory notes of a maximum of one year. Other loans include private placements issued as part of the EMTN programme.

The interest rate risk associated with central government debt can also be analysed using the concept of budgetary risk; this involves examining the change in interest expenses when the general interest level rises permanently by one percentage point. As shown in Figure 15, this would increase forecast interest expenses of central government through current debt repricing so that in 2020, for example, the annual interest expenditure would be about EUR 455 million higher than projected<sup>13</sup>.

**Figure 15. Changes in net interest expenditure when interest rates rise by one percentage point, 2018– 2029, EUR million**



Source: State Treasury

#### 4.1.4 Central government debt risk management

State Treasury reviews interest rate risks on the basis of the ‘Cost at Risk’ analysis in which the interest rate cash flow variance is examined. This includes systematic modelling of the interest sensitivity of the debt, and comparison of the costs of different debt management strategies using analysis models. The purpose of the strategic interest rate risk target selected on the basis of the analyses is to minimise expected long-term interest expenditure at selected risk levels.

Derivative instruments play a central role in the management of the interest rate risk in Finland. They allow the separation of the interest rate risk management from the management of the refinancing risk.

<sup>13</sup> Any increases in the amount of debt is not considered.



The overall aim of financial risk management is to ensure that central government is able to meet its payment obligations, irrespective of the market conditions. This can be achieved by maintaining sufficient cash funds and liquid investments in the short term. In the long term it is important to ensure that there are no time-related financial risk concentrations and that the state does not rely too heavily on a small number of funding sources.

## 4.2 Contractual liabilities associated with the Public-Private Partnership (PPP) model

In the Public-Private Partnership (PPP) model, a service provider (project company) funds, plans, carries out and maintains a project for between 15 and 25 years, as laid out in a contract. In this model, the public sector actor mainly acts as the customer and project supervisor.

The PPP model has been used in a small number of road projects (Table 2). In them, the Finnish Transport Agency is authorised by Parliament to carry out a life-cycle project as part of the state budget. The authorisation includes the costs of the actual road construction, and the service fee for road maintenance payable to the road infrastructure company. For this purpose, Parliament decides annually on the agreed appropriations.

Generally speaking, the risks involved in a PPP model include, in addition to financial risk, an increase in building costs, delays and quality issues in construction work, maintenance quality and cost risk, as well as the counterparty risk associated with the project company. Any termination of the contract may also involve substantial termination costs.

The PPP model ties up central government funds for decades, making it more difficult for Parliament to launch new projects in the future. In the 2019–2022 budget planning period, life-cycle projects will account for between 26% and 36% of appropriations allocated under key transport infrastructure items.

**Table 2. PPP projects in the state budget, EUR million**

PPP projects: 31.10.79	Authorisation	2008–2022	2023–2026	2027–2035	2008–2035
E18 Muurla-Lohja	700.0	530.9	113.6	85.5	730.0
E18 Koskenkylä-Kotka	650.0	454.8	195.2	0.0	650.0
E18 Hamina-Vaalimaa	660.0	180.0	123.0	297.0	600.0
Fixed link to Hailuoto*	116.9	24.0	28.8	64.1	116.9
<b>Total</b>	<b>2,126.9</b>	<b>1,189.7</b>	<b>460.6</b>	<b>446.6</b>	<b>2,096.9</b>

Source: Ministry of Transport and Communications

\* The timetable for the fixed link to Hailuoto is not yet final and it will be specified during 2018.

### 4.3 Other multi-annual government liabilities

The Republic of Finland also has other multi-annual contractual liabilities under which it has a direct payment obligation under law. By far the biggest such multi-annual liability in on-budget finances is the central government pension liability (see Appendix 2).

Pension liabilities mean the amount required, including expected future investment income, to cover the costs of pension benefits accumulated. Central government pension liabilities indicate the total cost of the government's pension commitment to former and present employees included in the government pension system.

Besides the expected return on investment, other factors affecting pension liabilities include the life expectancy of the insured, the retirement age, and the number of people retiring due to disability. In practice, pension liabilities changes annually: those employed continue to earn more pension, new people retire, and people entitled to pension die. Calculation of the central government pension liabilities is the responsibility of Keva. Central government pension liabilities totalled about EUR 92.6 billion at the end of 2017.

With the help of VER described in chapter 3.2, central government has made arrangements to prepare for pension payments in the coming years and to even out annual pension expenditure. At the end of 2017, the ratio between the market value of VER's investment portfolio and the imputed central government pension liabilities was about 21%.

The funding base of central government pension expenditure involves risks, which are associated with the prospect that the wage bill on the one hand and the investments assets and the returns on investment on the other do not grow at the expected rate. The development of pension expenditure also involves uncertainties. While a decrease in the

wage bill would weaken VER's income base and reduce the assets available for investment, from the central government perspective it would cut direct labour costs and curb the growth of pension liabilities. Realisation of the risks would increase the need for direct on-budget financing in the payment of central government pensions if VER was not able to provide 40% of the central government pension funding for the state budget, as is currently the case.

Other multi-annual liabilities included the need for budgetary appropriations required under authorisations (EUR 9.2 billion in 2017), leases concluded by central government agencies, accident and motor liability insurance compensations paid by the state, basic transport infrastructure maintenance contracts and purchasing contracts (EUR 5.8 billion in 2017).

The other multi-annual liabilities of off-budget entities and unincorporated state enterprises are relatively small. Central government liabilities for the loans taken out by Senate Properties totalled about EUR 1.5 billion at the end of 2017. The Senate Properties has a high equity ratio: 65% in the financial statements for 2017, with strong income financing. The Senate Properties hedges against interest rate risks in accordance with the interest rate risk policy prepared by the company's Board of Directors.

## 5 Contingent financial liabilities of central government

The off-balance-sheet liabilities of central government are reviewed in this chapter. They include government guarantees, callable capital with international financial institutions, implicit liabilities in the banking sector and local government as well as the contingent liabilities concerning state-owned companies and environmental and chemical safety.

### 5.1 Government guarantees

Government guarantees in effect totalled EUR 52.1 billion at the end of 2017. This total has grown significantly over the past few years; as recently as 2010, it amounted to EUR 23.1 billion.

The notification practice concerning the maximum government guarantees available changed in 2017. Until then, the total based on a Government decision was given as the maximum amount available. Under the new practice, the maximum amount set out in the law or authorised by Parliament is the maximum given.<sup>14</sup>

The maximum government guarantees available under the new practice totalled EUR 93.5 billion at the end of 2017. Using the same notification practice, the maximum amount at the end of 2016 totalled EUR 83.6 billion.

The biggest liabilities arise from Finnvera's export guarantee activities, management of international financial crises and housing funding. In 2017, the biggest increase in the

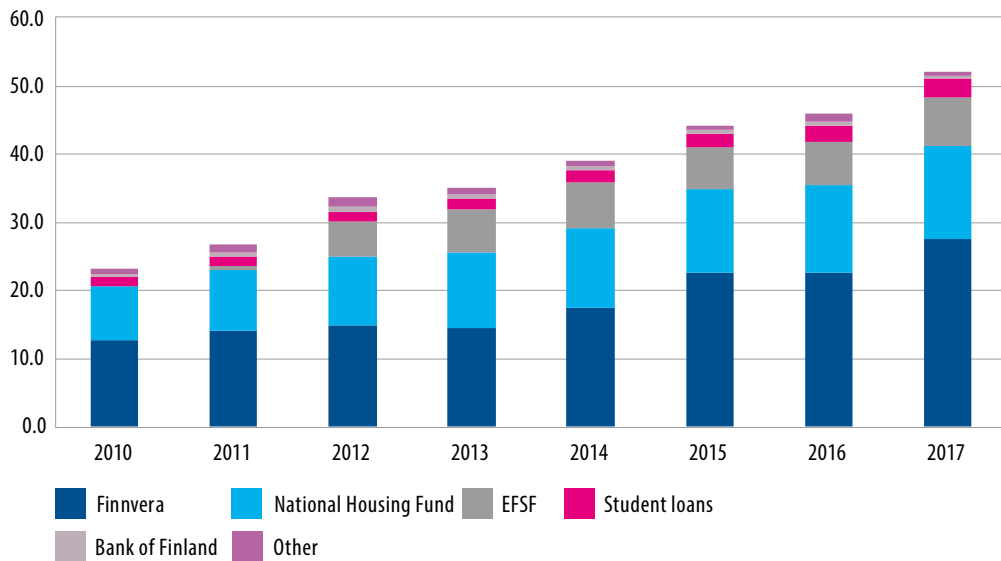
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<sup>14</sup> The figures do not contain the emergency insurance guarantee schemes for which the statutory upper limit approved by Parliament is EUR 10 billion.

liabilities (in euro terms) concerned export guarantees, which grew by about EUR 3.7 billion (Figure 16 and Appendix 3).

In the chapter below, the focus is on the financially most important government guarantees and the risks associated with them.

**Figure 16. Changes in the amount of government guarantees in effect, EUR billion**



Source: State Treasury

### 5.1.1 Export financing by Finnvera plc

There are three types of public export financing instruments in Finland: government export guarantees, interest equalisation and export and ship credit. Export financing is provided through Finnvera plc, a special financing company wholly owned by the state, and Finnish Export Credit Ltd, a wholly owned subsidiary of Finnvera. Finnvera also provides financing for SMEs in Finland.<sup>15</sup>

The parliament grants authorisations as a means of regulating the scope of public export financing activities. The current government has stated in its Government Programme that export financing elements and the level of funding will be set at least at the level of the main competitor countries.

<sup>15</sup> Liabilities for domestic SME financing have not increased in step with those relating to export financing. The statutory liability portfolio subject to an obligation to cover credit and guarantee losses in domestic financing totalled about EUR 2.1 billion at the end of 2017.

In fact, export financing authorisations have been increased on several occasions over the past few years. At the end of 2017, the maximum export financing authorisations were as follows: i) EUR 27 billion to Finnvera plc for export guarantees and hedging arrangements; ii) EUR 22 billion to Finnish Export Credit Ltd for export and ship credit; iii) EUR 22 billion for interest equalisation<sup>16</sup>; iv) EUR 5 billion for the guarantee authorisation for special risk-taking; v) EUR 15 billion of government guarantees on Finnvera's funding programme; vi) and EUR 3 billion government credit facility to Finnvera. Under the latter facility the state can grant loans to Finnvera if the company is unable to raise funds on reasonable terms on account of the situation prevailing in the financial market.

The risks for export guarantees and guarantees for Finnvera's fundraising may be realised as a result of various factors. However, the liabilities are not cumulative so that they could be realised in the combined full amount. The risk associated with the repayment of the export credits granted by Finnish Export Credit Ltd, which is a part of Finnvera Group, is covered by an export guarantee granted by the parent company Finnvera plc. As a rule, the government's liability for this guarantee is 95%. Furthermore, where funding guaranteed by the government has been applied towards financing export credit, the government's liability is not doubled because by repaying export credits, the debtors are also repaying state-guaranteed debts.

Total central government liabilities for export financing have grown substantially over the past few years, as shown in Figure 16 and Appendix 3. The increases in maximum export financing authorisations also indicate that central government liabilities will continue to grow in the coming years.

Finnvera's operations are associated with credit, guarantee, collateral, liquidity, market and operational risks. When determining Finnvera's risk appetite, the company's Board of Directors aims to ensure that it is able to maintain sufficient equity and other risk buffers relative to the level of risk.

Finnvera uses the statistical VaR model (Value at Risk) to assess its credit risks. The credit risk model is based on an assessment of the probability of insolvency, the expected losses, and the amount of exposure at the time of insolvency. Risks associated with individual counterparties and concentrations are partially hedged through reinsurance. Another risk indicator estimates expected loss, or average annual losses. The aim is to cover expected losses through annual income.

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16 In April 2017, the Government decided to increase the maximum guarantees for Finnvera's fundraising programme from EUR 6 billion to EUR 11 billion.

Losses from Finnvera's export financing are covered through two reserve funds, which had assets totalling almost EUR 1.4 billion on 31 December 2017 (before appropriations for 2017). Finnvera's result (in retained earnings) for 2017 totalled EUR 98 million. Losses from export guarantee activities are primarily covered from the reserve for export guarantee and special guarantee operations in Finnvera's balance sheet, which amounted to EUR 688 million and secondarily from an off-budget State Guarantee Fund, which had an equity of about EUR 673 million.<sup>17</sup> If the two reserve funds turn out to be insufficient, Finnvera's export financing and domestic financing losses are ultimately covered from the state budget.

Export financing is also associated with concentration risks. The operations are highly concentrated in three sectors. Shipping and shipbuilding, data communications and forestry sectors account for 84% of the corporate liabilities. This exposes the company's risk management to the model risk, if the realisation of various corporate liabilities correlates more strongly than anticipated.<sup>18</sup>

This issue was also highlighted in the international evaluation of Finnvera's export financing in 2016. At the end of 2017, the three largest recipients of buyer financing accounted for 41% (EUR 7.8 billion) of the company's total export guarantee and special guarantee liabilities. At the same time, the ten largest recipients accounted for 70% (EUR 13.4 billion) and the 20 largest 83% (EUR 15.7 billion).

Finnvera is in the process of developing its VaR analysis framework so that better consideration could be given in the credit risk model to the concentration risk associated with its operations.

There are pressures to make the export financing terms as competitive as possible as a result of which the company will incur indirect liquidity and market risks. As an export financing provider, Finnish Export Credit Ltd commits to pre-agreed terms of credit (incl. Commercial Interest Reference Rates, CIRR<sup>19</sup>) over a long delivery time. At the same time, it may be necessary to offer the customer options with respect to loan withdrawal, terms of interest and currency, due to the competitive situation.

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17 Provisions are also made for losses from domestic financing activities. In accordance with its credit and guarantee loss undertaking, the state has pledged to primarily cover 50% of the losses arising from SME and midcap financing from 1 January 2018. Any losses beyond this government compensation will be covered from Finnvera's domestic operations reserve, which held EUR 214 million at the end of 2017.

18 Any development with a significant impact on the profitability of shipping companies may result in the realisation of the liabilities. This might be the creation of excess capacity in the market or substantial decline in demand.

19 The CIRR interest is based on the return on long-term government bonds, plus a fixed margin.

Finnvera's aim is to primarily cover the liquidity risk with a prefunded liquidity buffer. The company's liquidity risk is also covered by the EUR 1 billion credit facility included in the state budget. The maximum amount authorized for such a facility was raised by Parliament to EUR 3 billion in 2016.

The interest rate risk associated with fixed-rate export credits is transferred to the state by means of interest equalisation agreements. If the interest rate is set at a very low level in accordance with the OECD export credit agreement, for competitive reasons, it may be impossible for the state to fully hedge against interest rate risk without incurring losses, depending on the terms and conditions of the transaction and the market conditions.

Market-based pricing should be applied as the practice in the pricing of the credits so that all market risks are priced in a transparent manner and included in the loan costs so that hedging against interest rate risks would be possible without causing losses to the state. The opportunities for providing market-based export credit are generally limited by competitive factors, as Finnvera aims to offer terms similar to those provided by public export financing institutions in competitor countries. For risk management purposes, one of the key objectives is to work to modify OECD credit loan agreement terms so that there would be greater consistency with market terms.

In 2017, the impairment and guarantee losses from Finnvera's receivables accounted for EUR 24.7 million of the credit portfolio and EUR 14.2 million of the guarantee portfolio, which puts the total at EUR 38.9 million. Guarantee losses arising from export guarantee and special guarantees totalled EUR 2.3 million in 2017.

The operating principle of Finnvera plc is to charge appropriately for the risks associated with its funding. In 2017, Finnvera received a total of EUR 106.2 million in commission income for export guarantee and special guarantees, while the figure for SME and midcap funding was EUR 44.6 million.

Finnvera's liability portfolio is spread over many years because, especially in connection with the orders placed by shipping companies, financing agreements extending for as long as 2023. As the credits granted by the company are on an annuity basis, the outstanding amount of the raised credits at any time (the liability portfolio that may give rise to credit losses) is lower than the gross liability figure; at the end of 2017 this total amounted to EUR 9.1 billion. The liabilities taken out totalled EUR 9.7 billion at the end of 2016.

At the end of 2017, the maximum amount of Finnvera's refinancing compensations in effect totalled about EUR 0.9 billion or 10% of the liabilities taken out.



## 5.1.2 National Housing Fund

The Republic of Finland currently has 11 off-budget funds. In terms of the liabilities, the National Housing Fund accounts for most of the funds' guarantee portfolio.<sup>20</sup>

The guarantees held by the National Housing Fund comprise the state guarantees for loans granted to housing construction, renovation and housing purchases. Most of the loans granted to construction and renovation go to rental housing and right-of-occupancy corporations. The guarantee portfolio for private households comprises the limited state guarantees for housing loans granted by financial institutions.

In addition to guarantees, the contingent liabilities of the National Housing Fund also include the interest subsidy payments of the interest subsidy loans granted for housing construction and purchases. Most of the loans granted to corporations for housing construction and renovation and provided with a state deficiency guarantee are interest subsidy loans. ASP loans intended for first time home buyers account for the majority of the interest subsidy loans granted to private households. Grants for housing construction, housing stock and economic restructuring of rental housing corporations are also paid out by the National Housing Fund.

The guarantee payments based on guarantee liabilities and, from the start of 2018, the expenses associated with the securing of the loan receivables are also paid by the National Housing Fund. If necessary, the fund also uses its assets for loan amortisation and interest payments. However, the National Housing Fund does not currently have any debts.

Long-term Arava loans granted to rental housing and right-of-occupancy corporations before 2008 account for most of the receivables in the balance sheet of the National Housing Fund.<sup>21</sup> The Fund's revenue consists of Arava loan repayments and interest, and various payments associated with government guarantees.

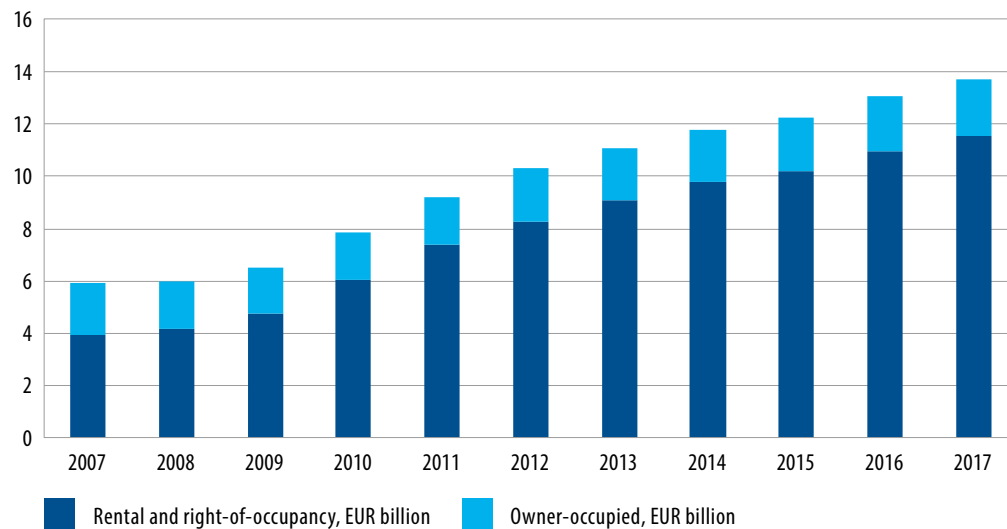
The housing funding guarantee portfolio has increased substantially over the past ten years (Figure 17). The guarantee portfolio totalled EUR 5.9 billion in 2007. By the end of 2017, it had grown to EUR 13.7 billion. Guarantees for corporate loans accounted for EUR 11.6 billion and state guarantees for housing loans taken out by private households for EUR 2.1 billion of this total. The end of the direct housing funding by the state and substantial increases in guarantee authorisations after the start of the financial crisis have

<sup>20</sup> Government guarantees are also held by the Development Fund of Agriculture and Forestry, the National Emergency Supply Fund and the State Guarantee Fund.

<sup>21</sup> The receivables of the National Housing Fund are discussed separately in chapter 3.5.

helped to boost the guarantee portfolio for housing lending. Between EUR 1.5 and 1.7 billion was spent on housing construction guarantee authorisations in the peak years 2008 and 2009. In the 2010s, an average of EUR 1.2 billion has been allocated to guarantee authorisations each year.

**Figure 17. Changes in housing loan guarantee portfolio 2007–2017, EUR billion**



Source: State Treasury

The guarantees granted for housing loans are deficiency guarantees in which the property or apartment in question serves as the first-demand guarantee. If in a insolvency situation, the loan receivables of the financial institution cannot be covered with the realisation price payable for the object of collateral, the state will pay the financial institution a statutory guarantee compensation. No guarantee compensations were paid in connection with corporate loans in 2017. An average of EUR 0.56 million in guarantee compensations for housing loans taken out by private households have been paid each year in the 2010s. In 2017, the payments totalled EUR 0.32 million.

In most of the housing loans, no guarantee fees are charged. The guarantee fee income from the guarantees of corporate loans total between EUR 0.6 and 1.0 million each year, while the figure for the guarantees of private households amounts to between five and six million euros.

As a rule, the deficiency guarantees granted in state-subsidised housing construction involve intentional risk taking because in housing construction loans, lending accounts for between 85% and 95% of the construction costs and the loan periods may be as long as

45 years. With such terms, market-based funding would only be available with additional guarantees.

Areas affected by depopulation where rental housing corporations struggle with declining occupancy rates constitute a growing credit risk in housing financing. Direct loans granted to the high-risk areas total about EUR 1.2 billion, while the guarantee portfolio for these areas amount to about EUR 2.0 billion. This accounts for about 20% of the liability portfolio for the financing of rental housing and right-of-occupancy corporations.

Until now, credit and collateral risks have mainly concerned direct housing lending (the Arava loan stock). However, in the future they can be expected to apply to the state-guaranteed loan portfolio as well. In addition to the occupancy rate gaps in properties, the risk is also increased by the fact that housing loans come with tail-end payment arrangements and the largest repayments take place at a time when the buildings are often in need of renovation. Furthermore, the collateral and market values of properties located outside growth centres are also declining, which means that in insolvencies, the collateral does not necessarily provide adequate cover for loan repayment.<sup>22</sup>

The operations of the National Housing Fund are also associated with concentration risks. At the end of 2017, the three largest customers accounted for 26%, the 10 largest customers for 37% and the 20 largest customers for 42% of all exposures.<sup>23</sup>

The guarantee portfolio for the financing of right-of-occupancy corporations totalled EUR 2.6 billion at the end of 2017. The proportion of financing for right-of-occupancy housing of the guarantees for corporate loans has increased from 15.5% in 2010 to 22.8% in 2017. On account of the limitation provisions, financing of right-of-occupancy housing involves collateral challenges, which make it more difficult to take out renovation loans and to realise the properties.

So far, only a small number of compensation claims concerning the guarantees for corporate loans have been received but the risks are increasing. Risks may also arise from the indirect impacts of the health, social services and regional government reform on service corporations that have taken out state-guaranteed loans. As a rule, the debts

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22 The year 2017 saw the publication of the report compiled by the AAKE working group reviewing the development of the housing stock and housing conditions outside growth centres. In its report, the working group, appointed by the Ministry of the Environment, proposed more effective measures for reducing the financial and loan portfolio problems of rental housing corporations in areas affected by depopulation. Ministry of the Environment reports 23/2017. [YMrä\\_23\\_2017.pdf \(1.344Mt\)](#)

23 The percentage of customer concentrations has been calculated from the combined loan and guarantee portfolio of rental housing and right-of-occupancy corporations. This total amounted to EUR 16.2 billion on 31 December 2017.

transferred from joint municipal authorities to counties will be granted state guarantees without a collateral requirement. Thus, the guarantee is absolute and differs from the guarantees for state-funded housing construction, in which the state guarantee is in the form of a deficiency guarantee. Risk management of the guarantee liabilities involves challenges that are more substantial than those arising from direct lending when the debt relationship is between the financial institution and the customer and in which case the guarantor, as the bearer of the credit risk, is not in a position to make concrete credit arrangements.

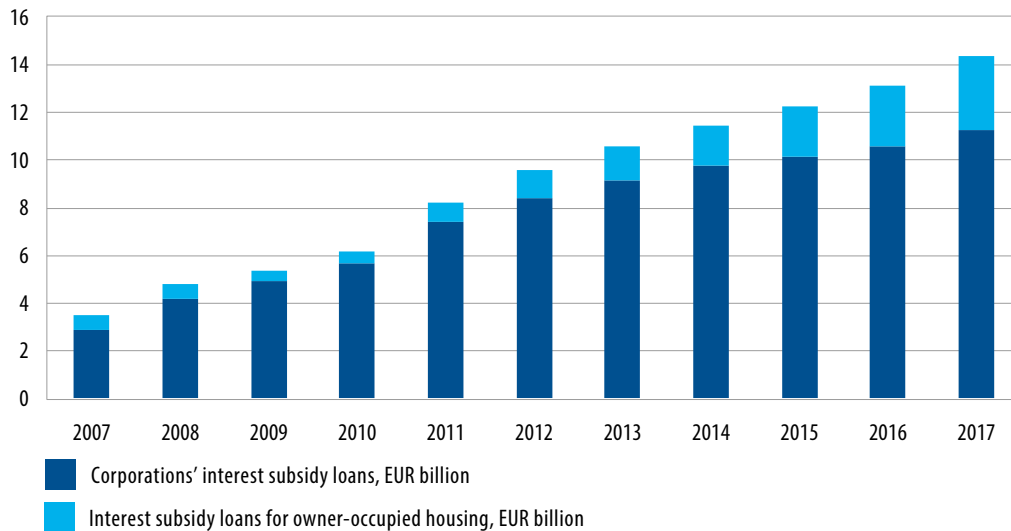
Most of the state-subsidised financing for housing construction is interest-subsidised financing in which the loan relationships are between the customers and financial institutions and the state pays interest subsidies for the part exceeding the deductibility of the interest laid down in the law. In interest-subsidy loans, the deductibility varies between 1.0% and 3.8%. Interest subsidies are paid for periods between 10 and 24 years.

The loan portfolio of the interest-subsidised housing financing has grown from EUR 6.2 billion (at the end of 2010) to EUR 14.4 billion (in 2017) (see Figure 18). Because of the generally low interest rates, the interest-subsidy payments for housing financing currently only amount to about EUR 3.7 million each year. However, the substantial growth in interest-subsidised lending contains a potential interest rate risk for the state in the long term. Rise in interest rates and the low deductibility of the interest paid in certain loan categories increase the risk that more interest-subsidy payments will have to be made. If the interest on an interest-subsidy loan is 5%, the annual interest-subsidy expenses would amount to about EUR 246 million.<sup>24</sup>

In recent years, growth in interest-subsidy housing loans has been particularly rapid in ASP housing lending for private households. The loan portfolio has grown from EUR 346 million (at the end of 2010) to EUR 3.1 billion (at the end of 2017). The number of new ASP savings accounts opened during the past few years indicate that the interest-subsidised ASP loan portfolio will continue to grow at a rapid rate for at least three or four years.

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<sup>24</sup> Source: Simulation of the interest-subsidy payments made by the State Treasury.

**Figure 18. Changes in interest-subsidised loan portfolio 2007–2017, EUR billion**

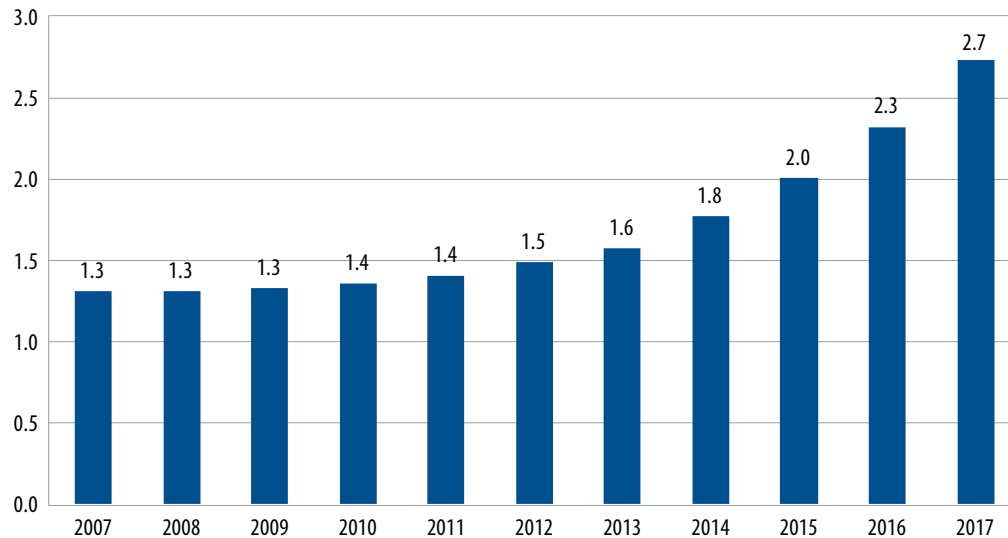
Source: State Treasury

### 5.1.3 Student loans

The state-guaranteed student loan portfolio has grown from EUR 1.3 billion (in 2007) to EUR 2.7 billion (in 2017).

In 2017, guarantee liability receivables being collected through a recovery procedure totalled EUR 122.0 million and loans repayable to banks by the government under its guarantee commitment amounted to EUR 13.0 million.<sup>25</sup> There was a continuous reduction in guarantee liability receivables and loans repayable by the state between 2000 and 2016. Annual revenue from recovery procedures has been close to the annual guarantee liability expenditure. The revenue totalled EUR 17.2 million in 2017. In 2017, the collection process involved a total of about EUR 10.2 million in payment exemptions and depreciation.

<sup>25</sup> Average guarantee fee was EUR 4638

**Figure 19. Changes in state guarantee portfolio covering student loans 2010–2017, EUR billion**

Source: Kela, State Treasury

### 5.1.4 European Financial Stability Facility

The European Financial Stability Facility (EFSF) is a limited liability company founded by the euro area member countries in Luxembourg in 2010. Its purpose has been to serve as a temporary crisis management instrument by providing conditional financial aid to euro area member countries facing financing problems. The fundraising of EFSF is guaranteed by the euro area member countries. The guarantee also covers interest and over-guarantee and no guarantee fees have been charged for it. The maximum amount of the EFSF funding programme approved in February 2012 remains EUR 241 billion and it has been used to provide loans to Greece, Ireland and Portugal. No new loans has been provided by EFSF after 30 June 2013. For this reason, Finland's share of the guarantees for EFSF's fundraising has remained unchanged in recent years. Finland's share of guarantees in the funds raised by EFSF, including interest and over-guarantees, totalled about EUR 7 billion on 31 December 2017.

If a country granted financial aid is unable to repay the loans provided by EFSF or make interest payments, Finland will have to make a contribution to EFSF in accordance with its share of the guarantees. EFSF's fundraising strategy also involves operational risks as well as counterparty and market risks which may, to some extent, materialise regardless of the beneficiary's ability to pay.

The Republic of Finland requested and received collateral to limit the risk associated with the loans provided as part of the second EFSF programme for Greece.<sup>26</sup> The value of the collateral arrangement represents 40% of Finland's imputed share of the loan. The market value of the collateral for the second programme for Greece now totals about EUR 924 million. The collateral payments, made in euro, have been invested in government bonds in euro countries with high credit ratings (Finland, the Netherlands, Austria and France).

### 5.1.5 Bank of Finland

The state guarantees granted to the Bank of Finland by the Government are part of the financial arrangements of the International Monetary Fund (IMF). No guarantee fees have been charged for the state guarantees. The guarantee liabilities connected with IMF's funding comprise the member's quota, the NAB<sup>27</sup> arrangement and a bilateral loan. These total about EUR 8.2 billion after the 14th member's quota review. About 10% of the funding granted by Finland to the IMF has been used in recent years.

Government guarantees associated with the member's quota and the NAB arrangement are given in the IMF's accounting currency, SDR (special drawing right). Any compensation to the Bank of Finland on the basis of government guarantee would be paid in euros. Consequently, the euro-denominated value of the guarantee depends on the exchange rate of euro. The EUR/SDR exchange rate effective at the given time will be used to calculate the guarantee liabilities in euros.

The IMF financing involves, first and foremost, credit risks associated with the beneficiary countries' solvency. To limit these credit risks, debt sustainability analyses are carried out before any financing is granted, various economic policy conditions are imposed on lending, and financing is offered in tranches, with disbursement tied to the implementation of an adjustment programme. The status of IMF as a preferred creditor also reduces the credit risk associated with the financing granted by the institution. In its 70 years in existence, the IMF has resorted to debt write-downs, mainly in the poorest member countries, as part of more extensive debt relief programmes.

### 5.1.6 Other guarantees

In 2015, the Government granted the Unemployment Insurance Fund (TVR) a guarantee of EUR 770 million for a syndicated loan arrangement with banks to cover the fund's

<sup>26</sup> Finland also received collateral for the Spanish aid programme. The programme was, however, funded through ESM.

<sup>27</sup> New Arrangements to Borrow

deficit. In 2017, the Government granted an extension for a guarantee for TVR's stand-by credit line of EUR 400 million. TVR has not yet made any use of these guarantees.

In 2017, Parliament granted the Government authorisation to grant Terrafame Oy an absolute government guarantee to a maximum amount of EUR 107 million. No counter guarantee is required for this guarantee, which serves as a counter guarantee for environmental guarantees related to waste processing. Based on the parliamentary authorisation, the Government granted a guarantee of EUR 68 million as a counter guarantee for the bank guarantee granted to Terrafame Oy by Danske Bank. The government guarantee covered 80% of the maximum amount of the bank guarantees. In May 2018, Terrafame's environmental guarantees were rearranged and the Government made a decision to replace the counter guarantee with a new counter guarantee of EUR 58.5 million. A consortium of three international credit insurance companies is the beneficiary in this counter guarantee. In the new guarantee arrangement, the counter guarantee provided by the state covers 45% of the total amount of the guarantee arrangement. One-off payments (at the withdrawal date) and annual guarantee fees have been paid for the guarantees. The guarantee will expire on 9 February 2022 at the latest.

In 2008 and 2009, the Government granted guarantees totalling EUR 13.5 million for the loans taken out for the renovation of Finland House of the Saint Petersburg Foundation in St Petersburg. The foundation declared bankruptcy in June 2017. As the guarantor, the government had to amortise the loan with a total of about EUR 3.6 million in the years 2012–2016 and in June 2017, the government repaid the remaining loan sum of EUR 8.4 million to Danske Bank. Based on the guarantee compensations paid, the total receivables of the Republic of Finland from the bankruptcy estate of the Saint Petersburg Foundation amount to about EUR 12.5 million. At the end of 2016, the Finnish and Russian Prime Ministers agreed that the Republic of Finland would acquire the Finland House from the Russian Federation. The parties intend to conclude the sale during 2018.



## BOX 2. GUIDING GOVERNMENT GUARANTEES WITH GUARANTEE FEES

The general rules on government guarantees are contained in the Act on State Lending and State Guarantees (hereafter referred to as the 'State Guarantee Act'). The State Guarantee Act is secondary as it is only applied if there are no provisions differing from it in special acts on specific guarantees. Under the State Guarantee Act, as a default option, a fee should be charged for state guarantees authorised by Parliament. When the guarantee fee is imposed, consideration must be given to any payment obligation arising to the state from the guarantee, the type and scope of the activities and economy affected by the risk, length of the guarantee period, creditworthiness of the debtor whose obligations are guaranteed, country risk, and other matters impacting the risk to be covered, and competitive factors.

Provisions on the levels of the guarantee fee are laid down by a Government decree. The guarantee fees are collected as one-off fees and annual fees. The one-off fee is at least 0.25% of the capital of the guaranteed credit or the guarantee liability. The annual fee is at least 0.50% of the capital of the guaranteed credit or the guarantee liability each year.

Under the State Guarantee Act, the Government may, for special reasons, decide not to impose a guarantee fee. Such special reasons were not specified in any detail in the preparation of the legislation. However, the State Guarantee Act by default involves the collection of a guarantee fee, which is why the special reasons referred to in the act should be considered exceptional relative to the objectives generally set for the guarantees. For example, the favourable terms of the funding made possible by the guarantee or the fact that the guarantee is connected with a positive societal objective cannot therefore be considered a special reason for not collecting the guarantee fee. Yet in practice, the Government has deemed special reasons to apply to almost all guarantees falling within the scope of the guarantee fee provisions contained in the State Guarantee Act, effectively turning what was intended as an exception into a rule.

Market disruptions and market failures in which the chances of operators to obtain funding has been disrupted have been a key justification for providing guarantees. In that case, providing guarantees would provide a basis for an activity or project that would otherwise have to be abandoned because no funding is available. The guarantees can also be used to support specific activities or projects as they help to reduce financing costs. The assumption is that in such cases, collecting the correctly priced guarantee fee will ensure that the guarantees are used in situations where they are needed most. If the benefits achieved through the guarantee are lower than the guarantee fee itself, there is no particular need to provide guarantees. Considering the role of the guarantee fee as a tool for guiding the use of guarantees and the provisions laid out in the State Guarantee Act under which the guarantee fee should, as a rule, be paid, the Government should make less use of the option of not collecting the guarantee fee.

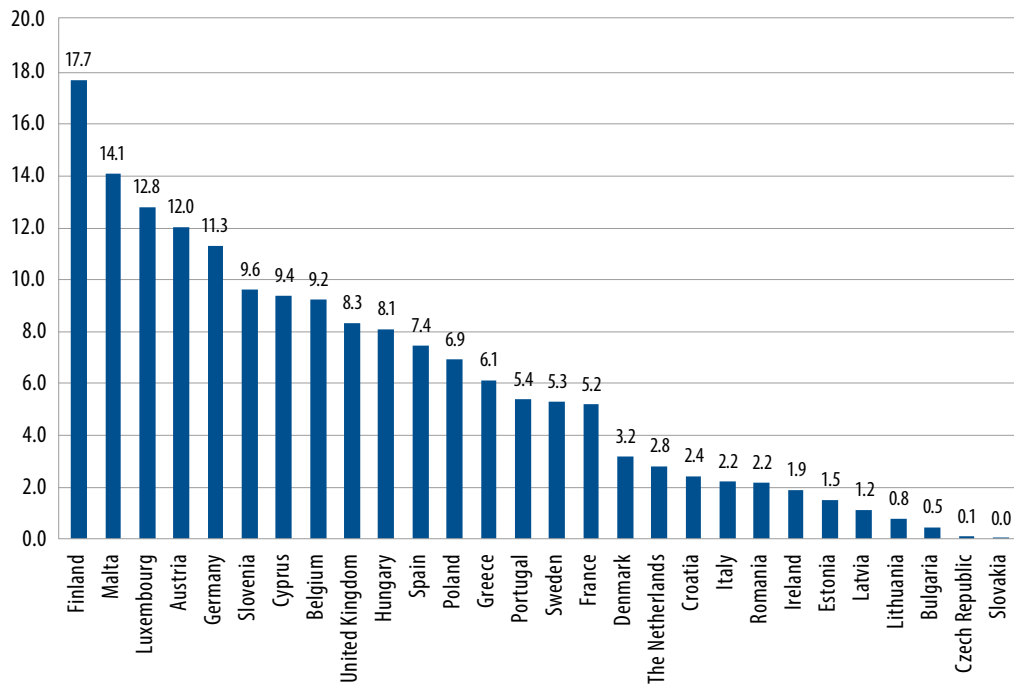
Even though there are more than just fiscal objectives behind the collecting of the guarantee fee, the sums involved are also substantial. If the assumption is that the guarantee fee decree in effect is applied to the entire government guarantee and collateral portfolio, the state would receive at least EUR 260 million in guarantee fees each year (0.5% of EUR 52 billion). In addition to this, the state would also receive a one-off fee for each new government guarantee or collateral.

### 5.1.7 International comparison of government guarantees

In European comparisons, the ratio of the guarantees granted by the Republic of Finland to the Finnish GDP is high. Different reporting practices, among other reasons, make it difficult to compare the nominal values of guarantees between countries. According to the 2016 figures collected by Eurostat, the ratio of the guarantees held by the Republic of Finland to the Finnish GDP is 17.7%, which is the highest rate in the EU.<sup>28</sup>

The guarantees held by the Republic of Finland have grown rapidly over the past few years. Between 2013 and 2016, the Finnish guarantee portfolio grew faster than the portfolio in other EU countries. Under the period in review, the government guarantee to GDP ratio for Finland grew by 4.7 percentage points. Luxembourg came second (3.9 percentage points). However, in that country, the guarantee portfolio to GDP ratio at the end of 2016 was 12.8% or substantially lower than in Finland. In other EU countries, the change was close to zero or the portfolio had been reduced.

**Figure 20. Government guarantees held by EU countries in 2016, % of GDP<sup>29</sup>**

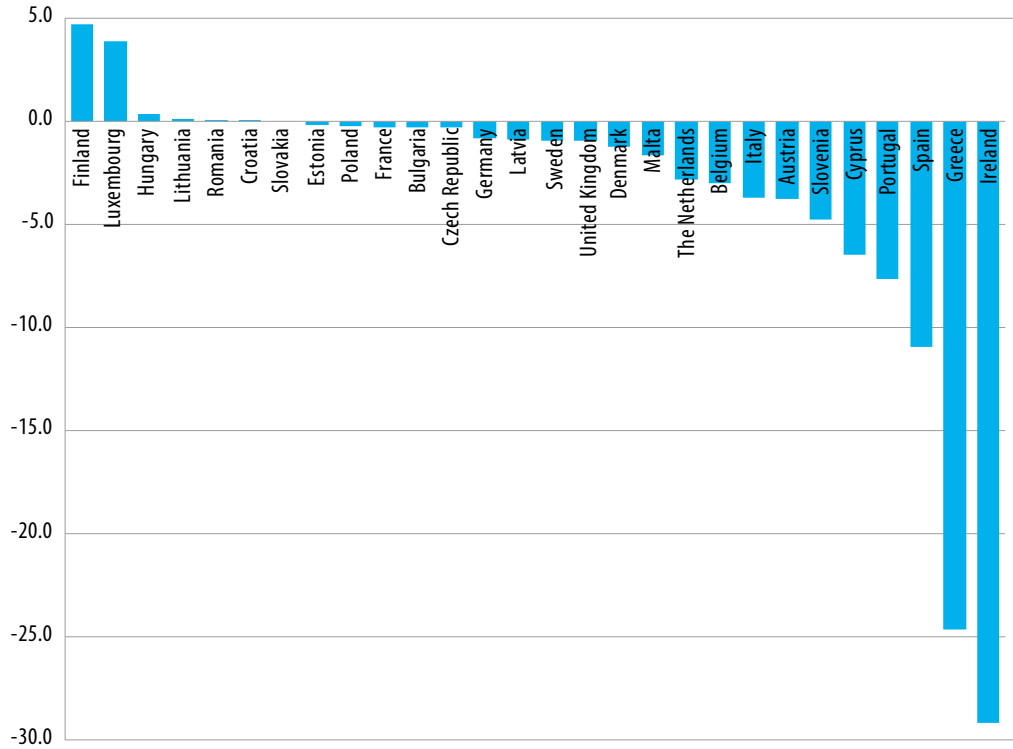


Source: Eurostat

<sup>28</sup> Eurostat

<sup>29</sup> The figures do not include the liabilities of the European Financial Stability Facility (EFSF).

**Figure 21. Changes in government guarantee to GDP ratio in EU countries between 2013 and 2016 (percentage points)<sup>30</sup>**



Source: Eurostat

<sup>30</sup> The figures do not include the liabilities of the European Financial Stability Facility (EFSF).

### **BOX 3. RECEIVABLES, LIABILITIES AND RISKS OF THE REPUBLIC OF FINLAND ARISING FROM THE MANAGEMENT OF THE EURO AREA DEBT CRISIS**

As a member country of the euro area, Finland took part in the measures supporting the financial stability of the euro area between 2008 and 2017. The arrangements have been carried out as part of jointly agreed economic adjustment programmes, which involve different types of financial support.

The funding of the first programme for Greece in 2010 was in the form of bilateral loans from other euro area countries to the Greek government. The funding of the programmes for Ireland and Portugal as well as the funding of the second programme for Greece were carried out through the European Financial Stability Facility (EFSF) and the European Financial Stabilisation Mechanism (EFSM). The European Stability Mechanism (ESM), which started operations in autumn 2012, was responsible for the funding of the programmes for Cyprus and Spain and the third programme for Greece. The financial aid programme for Greece is still continuing and loan instalments are being paid as part of the programme. The programmes for Portugal, Ireland, Spain and Portugal have ended. No new loan instalments are paid to these countries any more. Ireland, Portugal and Greece have started the repayment of their IMF loans.

Most of the Finnish liabilities are government guarantees for EFSF funding, totalling about EUR 7 billion. Loans totalling about one billion euros were paid to Greece from the state budget between 2010 and 2012. This sum is a receivable from the Greek government. The Republic of Finland has also paid a total of EUR 1.44 billion in 2012 against the capitalisation of the European Stability Mechanism (ESM). Finland's share of the callable ESM capital is EUR 11.14 billion. The Republic of Finland also has indirect (imputed) liabilities through the loans granted to the euro area programme countries by EFSM and the IMF.

Any new loans provided to euro area member countries would primarily be through the European Stability Mechanism (ESM). The loan decisions made by ESM do not increase the liabilities of the State of Finland and in ESM any decisions on capital increases are made separately on a mutual consent.

The description of the receivables and liabilities says little about the risks associated with them and these risks are closely connected with the supported countries' ability to repay the loans granted to them and the interest on time. Assessing these risks is difficult and a high degree of uncertainty is a characteristic of crisis management. The risks associated with the financial support have been minimised through debt sustainability analyses, economic policy conditions attached to the aid and the collateral arrangements made by Finland. The value of the collateral held by Finland in connection with the Greek EFSF programme and the Spanish ESM programme totalled about EUR 1.22 billion at the end of 2017.

With its own actions, the Eurosystem (ESCB) has also made a significant contribution to the financial stability of the euro area. In addition to the ordinary interest rate policy, the measures have also included securities purchases programmes. The Outright Monetary Transactions (OMT) programme, targeting government bond markets, was established in autumn 2012. No purchases have been made under the OMT programme. The securities

purchase programme was expanded in January 2015 so that both private and public sector bonds would be purchased. By the end of January 2018, bonds of euro area member countries and European institutions worth about EUR 1,900 billion had been purchased under the programme. A total of 20% of the purchases are made at shared risk by the euro area, while the remaining 80% are purchased by national central banks at their own risk. The programme is expected to continue at least until the end of September 2018, depending on inflationary trends.

The Bank of Finland reports on its monetary policy operations, the collateral policy connected with them and its total risk independently in its annual reports. The Bank of Finland published its annual report for the 2017 fiscal year in March 2018.

## 5.2 Callable capital in international financial institutions

Capital liabilities refer to callable capital to international financial institutions (IFIs) in the event that capital is required to cover losses or to prevent their insolvency. Several international financial institutions have increased their capital in recent years, causing also a rise in their callable capital. By far the most significant increase in capital liabilities was, however, caused by the establishment of the European Stability Mechanism (ESM). Finland share of the callable ESM capital is EUR 11.14 billion.

**Table 3. Callable capital in IFIs, EUR billion**

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Asian Development Bank (AsDB)*	0.12	0.12	0.40	0.41	0.40	0.38	0.41	0.44	0.44	0.49
African Development Bank (AfDB)*	0.11	0.10	0.11	0.35	0.35	0.33	0.35	0.38	0.38	0.35
Inter-American Development Bank (IDB)**	0.11	0.11	0.12	0.12	0.13	0.14	0.18	0.22	0.25	0.22
European Bank for Reconstruction and Development (EBRD)	0.18	0.18	0.18	0.30	0.30	0.30	0.30	0.18	0.30	0.30
World Bank Group (WBG) <sup>1**</sup>	0.70	0.68	0.74	0.76	0.79	0.87	0.97	1.15	1.29	1.09
European Investment Bank (EIB)	2.00	2.82	2.82	2.82	2.82	2.82	2.82	3.10	3.10	3.10
Council of Europe Development Bank (CEB)	0.04	0.04	0.04	0.06	0.06	0.06	0.06	0.07	0.07	0.07
Nordic Investment Bank (NIB)	0.69	0.69	0.69	1.01	1.01	1.01	1.01	1.09	1.09	1.09
European Stability Mechanism (ESM)	0.00	0.00	0.00	0.00	11.14	11.14	11.14	11.14	11.14	11.14
<b>Total</b>	<b>3.96</b>	<b>4.75</b>	<b>5.10</b>	<b>5.83</b>	<b>17.01</b>	<b>17.06</b>	<b>17.25</b>	<b>17.77</b>	<b>18.05</b>	<b>17.85</b>

\* Capital expressed in SDR (\*\*USD), converted into euros at the closing exchange rate for the year.

\*\*\* Includes the International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC) and the Multilateral Investment Guarantee Agency (MIGA).

Sources: Financial statements, Ministry of Finance, Ministry for Foreign Affairs

## 5.3 Implicit liabilities of the banking sector

The government does not have any statutory obligation to guarantee the continuity of banks' operations or their liabilities held by their creditors. At the same time, however, the history of banking crises<sup>31</sup> has shown that the social costs of severe banking crises are so high that the public sector has been forced to take support measures to ensure the continuity of the financial services essential to society.

In Finland, too, the government had to provide the banking sector with substantial support during the banking crisis of the early 1990s. According to an estimate made by the IMF, the direct costs amounted to nearly 13% of the GDP. The indirect macroeconomic costs generated by the crisis were also substantial.

Again in 2009, the Finnish government was prepared, with the authorisation by the Parliament, to guarantee funding by credit institutions to the amount of EUR 50 billion, if necessary, and grant capital support to the amount of four billion euros. However, in the end, there was no need to resort to these measures and the commitments expired.

At the same time, however, in Cyprus, Ireland and Spain, the problems affecting the banking sector caused the governments of these countries to even lose their own creditworthiness in 2010–2012. These governments had to seek external financial support from other euro area countries and the IMF in order to stabilise the situation.

Efforts have been made to change this situation with the establishment of the EU Banking Union and the introduction of the new crisis resolution regime for the banks. In the Banking Union, the supervision of banks and crisis resolution are centralised. Bank resolution tools have also been enhanced and the Single Resolution Fund (SRF) jointly financed by the banking sector through fees has been established.

The Member States and the European Parliament are currently discussing a Commission proposal for a joint European Deposit Insurance Scheme (EDIS). The aim is to strengthen the Economic and Monetary Union (EMU) by breaking the doom loop between governments and their banks. This loop was a key reason why the financial crisis developed into a prolonged debt crisis in some of the euro area member countries.

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<sup>31</sup> According to IMF's calculations, there were 147 systemic global banking crises between 1970 and 2011 (Laeven and Valencia 2012). In a systemic crisis, deposit flight is a common phenomenon and banks sustain major losses, while the authorities are forced to support the banks' liquidity, provide guarantees on the banks' debts, or to nationalise or capitalise banks. Major reorganisation of the banking sector is another repercussion of the crisis.

### 5.3.1 Structural changes in the banking sector

In addition to the establishment of the Banking Union, significant structural changes have also taken place in the Finnish banking sector in recent years. Last year, the Nordea Group changed its legal structure, adopting the branch model. Under this model, the group has one balance sheet, which means that supervision and crisis resolution are the responsibility of a single authority each. In March 2018, the bank's annual general meeting decided to move its head office to Finland before the end of the year (Box 4). Danske Bank also announced that it would take similar restructuring measures but that its head office would remain in Copenhagen. The bank will adopt the new operating model from the start of 2018.

As a result of the Banking Union and structural changes, the Finnish banking scene will look very different from what it was a few years ago. At that time, all major operators were under Finnish supervision, had to observe Finnish deposit guarantee regulations and were subject to the crisis resolution regime in effect at the time. Next year, two of the three largest credit institutions will be supervised by European authorities, while the third one will be under the supervision of the Danish authorities. The Finnish authorities will only be supervising less significant domestic credit institutions.

A high degree of concentration, lending risk clusters and strong links with other Nordic countries will remain typical features of the banking sector in the coming years. The Nordic connections will also make the sector more sensitive to shocks from abroad. In fact, the Finnish banking sector suffers from a systemic risk arising from its structure. A structural systemic risk and risks generated by cyclical developments are often mutually reinforcing factors.

Advances in financial technology and the entry of non-traditional players in the market also seem likely. Banks are in the state of transition and the OP Group is a good example of this trend. Business operations are gradually expanded to sectors outside the traditional financial and insurance model. Supervision of the new actors and operating practices pose new challenges to the financial market authorities.

### 5.3.2 Financial situation of the banks operating in Finland

Despite the weak economic growth in recent years and the extremely low interest rates, the financial situation of the banks operating in Finland has, on average, remained fairly good. It should be noted, however, that there is variation among individual banks with regard to their risk indicators.

At the end of 2017, the banks' combined Common Equity Tier 1 (CET1) capital stood at EUR 18.1 billion (EUR 26.2 billion at the end of 2016) while own funds totalled EUR 20.2 billion (EUR 29 billion at the end of 2016).<sup>32</sup> The risk weighted Core Tier 1 ratio of the banking sector averaged 21% and the total adequacy ratio 23.4% at the year's end.

The Core Tier 1 ratio of the credit institutions in the EU averaged 15% at the end of September 2017. The banks' combined own funds exceeded the general minimum requirement by EUR 9.1 billion at the end of 2017.

The non-risk weighted leverage ratio improved slightly, from 5.8% at the end of 2016 to 6.8% at the end of last year, after the figures for Nordea were no longer included in the calculations. The binding minimum leverage ratio requirement of 3% will probably be introduced in the EU from the start of 2022. At the moment, only the reporting requirement applies to the leverage ratio.

The credit risk is by far the most important source of risks: it accounts for about 84% of all risk-weighted items, while market or operational risk account for the remaining 16%. The realised risks of the Finnish banks (impairment losses on receivables and non-performing loans) have remained at a very low level. At the end of September 2017, non-performing loans accounted for about 1.2% of all receivables. (The EU average was at 4.4%).

Finnish banks have been able to obtain funding and maintain good liquidity position without any problems. In December 2017, the Finnish banks' market funding requirement (lending minus deposits) came to about EUR 77 billion and funding was primarily obtained by means of longer maturity bonds, about half of which are secured. The banks' liquidity buffers exceed the liquidity requirements introduced in October 2015. The Financial Supervisory Authority nonetheless reported significant variance among the banks during 2017.

Despite robust growth in the world economy, the Finnish financing system remains sensitive to any problems affecting the Nordic market and the euro area.

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<sup>32</sup> The decrease in the Common Equity Tier 1 capital was caused by the adoption of the branch model at Nordea and for this reason, most of the last year's figures for the group are shown in Swedish statistics. The situation will change at the end of the current year when the figures for the group as a whole are shown in the statistics for the Finnish banking sector.



### 5.3.3 Crisis resolution in the Banking Union

The new crisis resolution legislation for banks entered into force at the start of 2015 and the Single Resolution Mechanism (SRM) of the participating member states of the Banking Union came into effect at the start of 2016. The key principle in the new crisis resolution regime is that the losses incurred by a bank must be covered by its owners and creditors and that the bank is also capitalised internally, if necessary by converting creditors' claims into new equity.

The Single Resolution Fund (SRF) of the Banking Union serves as the second buffer in the resolution funding of problem banks. The funding for SRF comes from the fees paid by the banking sector and it is expected to be ready in 2023, when it should have assets totalling EUR 55 billion. The purpose is to minimise need for tax payer funds in the restructuring of problem banks.

However, thus far little experience have been gained in the application of the new regime. The last year's events in Italy have shown that the threshold for fully applying the new bail in regulation in concrete cases without government involvement may be high.

Under the Banking Union, deposit guarantee schemes remain the responsibility of the national authorities. In 2016, the European Commission proposed the establishment of a joint European Deposit Insurance Scheme (EDIS) but the negotiations between the Member States have made little progress. In Finland, the Financial Stability Authority (RVV) is responsible for deposit guarantee coverage for Finnish deposit banks. At the end of 2017, the deposit guarantee fund managed by RVV held assets of about EUR 147 million, in addition to which the old deposit guarantee fund (VTSR) holds funds of about EUR 926 million that will be available in case payments are needed.

If the deposit guarantee fund is unable to pay a depositor, the fund may obligate its member banks to pay an additional contribution equal to 0.5% of covered deposits. When even this proves insufficient, the fund may borrow from its members in proportion with covered deposits. Under the by-laws of the fund, members may not refuse a request to borrow.

At the end of this year, after the completion of the structural changes in Nordea and Danske Bank, the covered deposits under the responsibility of the Finnish deposit guarantee fund will total about EUR 126 billion. The combined assets of the fund (incl. VTSR) and the additional contribution would total about EUR 1.7 billion. In this scenario, any covered deposits in excess of this sum would need to be financed by means of loans from member banks. Under difficult market conditions where more than one bank is likely to experience financing problems due to the interconnectedness of the system, it

may prove a challenge to make any significant loan to the fund without government support.

### 5.3.4 Nordic cooperation

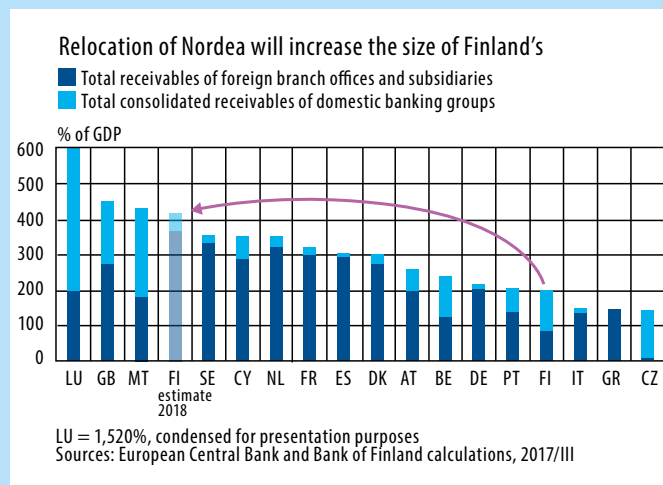
Structural changes will bring new challenges for the Nordic financial market authorities in terms of cross border cooperation. The new structure may strengthen the links between the financial markets between Nordic countries. A bank operating in more than one country is still subject to a single balance sheet and one set of capital adequacy requirements. The balance sheet may serve as the conduit whereby trouble in one country of operation is transmitted to another country in the form of contraction in lending, for example.

This underscores the importance of cooperation and information sharing between the supervisory authorities of Finland, other Nordic countries and the EU. In a severe crisis, correctly timed and comprehensive coordination between the European Central Bank (ECB), the Single Resolution Board (SRB) and the Nordic authorities to minimise economic damage and to ensure the continuation of critical functions plays a key role in the risk management.

The Nordic and Baltic financial market authorities have updated their voluntary procedures for crisis situations, which are mainly based on information sharing (Memoranda of Understanding). There is a risk that under circumstances of extreme pressure, the parties will be unable to adhere to what has been agreed. This would prove problematic for operations of the Finnish market and the real economy.

**BOX 4. RELOCATION OF NORDEA’S HEADQUARTERS TO FINLAND**

On 15 March 2018, the annual general meeting of Nordea Bank decided that the bank’s headquarters will be relocated from Sweden to Finland before the end of the year. The main motivation behind the relocation was that, unlike Sweden, Finland is a member of the Banking Union. As a result, the Finnish banking sector size will grow by about EUR 600 billion as the entire balance sheet of the Nordea Group will be transferred to Finland. This will boost the size of the Finnish banking sector to more than 400% of the country’s gross domestic product (<https://www.bofbulletin.fi/en/2018/2/financial-stability-lowering-the-loan-cap-will-reduce-the-risks-associated-with-debt/>).



The relocation means that the supervision and potential crisis resolution for Nordea will become the responsibility of the supervisory and crisis resolution authorities of the Banking Union. The European Central Bank will become the supervisor of Nordea’s financial position and it will be assisted in this task by the Finnish Financial Supervisory Authority.

In the new situation, the Single Resolution Board (SRB), assisted by the Finnish Financial Stability Authority, would be responsible for the resolution of any crises affecting the bank. In addition to the bail in tool, SRB could also use the Single Resolution Fund (SRF) in any resolution financing affecting Nordea so that the negative external impacts associated with the process could be minimised. SRF aims to have funds totalling EUR 55 billion by the end of 2023. After SRF has achieved its target level, a common backstop arrangement, on which negotiations are currently under way, might also be available and this arrangement would provide last-resort support for the fund’s financing capacity.

With the relocation, all deposits in the Nordea Group will also be covered by the Finnish deposit guarantee scheme. Furthermore, the Financial Stability Authority will also be responsible for the operational aspects of the deposit guarantee scheme that apply to Nordea’s customers in the entire Nordic area. This means that in the future, Nordea will have to pay deposit guarantee contributions to the Finnish scheme for all deposits in the group. Negotiations on a single deposit guarantee scheme

for the Banking Union are also under way. If such a scheme were to be established and Nordea's parent company were located in the area of the Banking Union, the bank would be covered by the European deposit guarantee scheme.

The purpose of the current crisis resolution legislation is to transfer the responsibility for crisis resolution funding to private entities (shareholders, creditors and, more broadly, to the banking sector). However, little use of this legislation has been made so far and the pressure towards using public funds remains strong. Moreover, a number of authorities in the Banking Union have continued to approve the use of public funds for crisis resolution.

It is difficult to assess the implicit risks for the state associated with the deposit guarantee scheme. Placing large banks such as Nordea into an ordinary insolvency procedure and paying deposit guarantee compensations to depositors is an unlikely crisis resolution strategy, compared with the placing of the bank under resolution in which it could continue its operations after restructuring. At the same time, it should be taken into account that the assets of the deposit guarantee fund could also be needed when a bank is placed under resolution. It is clear that for large banks, the statutory level of ex ante funds under the deposit guarantee scheme (0.8% of covered deposits) is low and the need for additional funding cannot be ruled out.

At least in the short run, the relocation of Nordea's head office is not expected to have any major impact on employment or tax revenues in Finland. The situation may of course change in the longer run as the company considers the location of its operations in different countries.

Because of the above, indirect fiscal risks to government finances cannot be ruled out when the risks associated with structural changes in the banking sector are assessed. At any rate, it would seem that the relocation of Nordea's head office to Finland would underline the benefits of the European deposit insurance scheme as part of the Banking Union from the perspective of Finnish depositors and general government risk management.

## 5.4 Local government

Under section 121 of the Constitution of Finland (731/1999), Finnish municipalities have extensive self-government. Central government is not responsible for the financial liabilities of municipalities. Local government finances are, however, part of general government finances and thus also closely connected with central government finances. Problems in local government finances also impact central government finances in one way or another.

Municipalities are responsible for providing services for their residents, including the basic municipal services. These include social welfare, health care, education and culture, and technical services. Municipalities perform two types of tasks: statutory and those assigned by the municipalities themselves. The majority of municipal tasks are based on law. To assign new tasks and duties to municipalities, or to remove existing tasks or rights, the government is required to pass a law to that effect.

As a rule, municipalities can use their discretion to determine how the services are provided. If the municipality's own service provision system is unable to meet the needs or the operations are ineffective, the local council will consider other service provision alternatives.

Municipalities may enter into agreements to perform their duties jointly. They may agree to assign specific duties to one municipality on behalf of one or more municipalities. Such an agreement may pertain to setting up a joint public position, procuring some official duties as a service, or establishing a joint municipal authority. A joint municipal authority, whose establishment requires local councils to sign an agreement, is the most important form of intermunicipal cooperation. Membership in a joint municipal authority may be voluntary or mandatory<sup>33</sup>.

Financing of municipal services and investments requires stable economic growth. Unexpected changes in local government finances affect the ability of municipalities to manage their finances and provide basic services. This may also have an impact on central government finances (for example the credit rating of the Republic of Finland). Furthermore, an increase in the municipal tax rate could have a negative impact on economic growth. Municipal investments and consumer behaviour also affect the current status and development of the economy.

According to municipal accounting, the annual contribution margin has been positive but, aside from a few exceptional years, insufficient to cover depreciation and net investments. This has resulted in an increase in municipal indebtedness.

At the same time, municipalities have been forced to raise their local tax rates to ensure the availability of funds needed to guarantee basic services. The weighted average local tax rate for all Finnish municipalities has risen from 18.13% (in 2014) to 19.89% in 2017.

### 5.4.1 Municipal loan stock

According to the final accounts estimate for 2017, municipal loan stock fell by about EUR 53 million and the total stood at about EUR 16 billion at the year's end. Municipal loan growth remained slow and steady for many years but took a sharp upward turn in 2003 with loans growing from about EUR 5.5 billion to the present level.

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<sup>33</sup> There are three types of statutory joint municipal authorities: hospital districts (20), special care districts (16) and regional councils (18). In addition to these, municipalities also have a large number of voluntarily arranged joint municipal authorities. In 2017, the total number of joint municipal authorities was 134. Joint municipal authorities account for about 25% of all local government spending.

The total loan stock of municipalities and joint municipal authorities stood at about EUR 18.2 billion at the end of 2017. Total loans of the local authority corporation<sup>34</sup> amounted to about EUR 33.7 billion at the end of 2016.

Between 50% and 60% of the municipal loans are provided by Municipality Finance. Currently, about 65% of new loans and 75% of the financing for government-subsidised social housing construction is provided by Municipality Finance. Municipality Finance is a credit institution owned by municipalities, municipal companies and the local government pension institution Keva, with the Finnish government holding a 16 percent stake. Other funding providers include commercial banks and the European Investment Bank.

The Municipal Guarantee Board guarantees the fundraising of Municipality Finance in international and domestic financial markets. Under the Guarantee Board Act, the member municipalities of the Municipal Guarantee Board are jointly and relative to their population, responsible for the commitments and expenditure of the Guarantee Board that it cannot cover otherwise. All Finnish municipalities outside Åland are members of the Guarantee Board.

The guarantees provided by the Municipal Guarantee Board have grown on a par with the operations of Municipality Finance. Its guarantee portfolio has multiplied in less than ten years: from slightly more than EUR 5 billion in 2005 to about EUR 30.6 billion in 2017.

The shared mission of Municipality Finance and the Municipal Guarantee Board is to ensure competitive funding for the local government sector and for social housing construction in all market conditions. Because of the clean credit history of Finnish municipalities and legislation that addresses the financial problems of individual municipalities, the Finnish municipal sector has been able to maintain a high credit standing in the financial markets.

As a result, there are no major differences between municipalities in the pricing of the loans taken out through the joint municipal fundraising system (or in the prices of loans granted by banks and credit institutions). This may involve risks as financially weaker municipalities can also borrow money on reasonable terms, and the loans may then be used to maintain liquidity instead of making financially sound investments aimed at ensuring basic services.

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34 Under chapter 1, section 5(1) and section 6 of the Accounting Act, the group relationship between a municipality and another entity is based on control. A Group relationship may be formed on the basis of the majority of voting rights or some other situation involving effective control.

The risks are managed using an assessment procedure based on the final accounts of municipalities, which allows the Ministry of Finance to monitor the finances of individual municipalities and, if necessary, provide them with guidance. Very weak finances and the lack of restructuring potential may result in a municipality being merged with another municipality with stronger finances.

However, the inability of a municipality to repay its loans is very unlikely and would be the result of highly exceptional circumstances. If a municipality were in such financial hardship that loan repayment is impossible, the lender would incur a credit loss regardless of whether the lender was within the municipalities' joint funding scheme or a private credit institution.

The government is also permitted under the existing legislation to address the financial problems of municipalities and to make use of a range of legal provisions, as was the case with the town of Karkkila and its inability to repay its loans during the recession of the 1990s.

The annual increase in total municipal loans, coupled with growing indebtedness of the public sector as a whole, could pose problems when the markets assess Finland's ability to manage its finances and to repay its loans in accordance with its commitments.

On the whole, the municipal loan portfolio cannot in all likelihood be deemed to constitute a material risk factor for the government or local government finances. However, the growth trend and the rate of growth are a cause for concern. Financial statements for the last four years show that the increase in loans is already translating into a decline in the municipal equity ratio and in the debt-to-equity ratio.

The ability of the municipalities to borrow money regardless of their capacity to manage their finances may pose an additional risk to the local government finances due to lack of sufficient coordination in major investment projects and competition between municipalities for high-income residents. Easy access to loans may 'blind' municipal decision-makers and lead to unnecessary investments and falsely optimistic estimates of the annual costs of investments. Investments are not limited by a deficit coverage requirement, nor are any checks in place to prevent overlapping investments.

## **BOX 5. HEALTH, SOCIAL SERVICES AND REGIONAL GOVERNMENT REFORM**

The objectives of the health, social services and regional government reform are to reduce inequities in wellbeing and health between people, improve the availability and equality of services, and to manage costs and help bridge the sustainability gap in general government finances. The aim is that in 2030 health and social services would cost three billion euros less each year than would be the case without the reform. Under the government proposal submitted to Parliament in summer 2017, responsibility for organising health and social services will be transferred from municipalities and joint municipal authorities to 18 counties on 1 January 2020. The future multisectoral counties will mainly be established on the basis of the existing regional division. In addition to healthcare and social welfare, effective as of 1 January 2020, the counties will also assume responsibility for rescue services and environmental healthcare, the duties of the regional councils, regional development duties and tasks related to the promotion of business enterprise, and regional planning and steering. Within the counties, the organisation and provision of services would be divided into two separate functions. At the same time, the government's scope for steering the healthcare and social welfare for which the counties are responsible will also be broadened.

The activities of counties would be mainly financed from central government and partly from service fees from clients. The transfer of the financing responsibility from local authorities to central government means that the central government revenue must be increased and, at the same time, the revenue of local authorities reduced to the amount of about EUR 17.6 billion (the funding responsibility transferred from the municipalities). Central government tax revenue will be increased by introducing higher state income tax rates. To prevent the total tax rate from rising, all local authorities would be obligated to reduce the local income tax. Current estimates put the reduction at 11.71 percentage points in all municipalities or about EUR 11.1 billion. The municipalities' share of corporate tax revenue will also be decreased by 9.02 percentage points, or by EUR 0.6 billion, and the central government's share will be increased correspondingly. The reforms will have significant impacts on the system of central government transfers for municipal basic services.

These transfers will be reduced by about EUR 6.0 billion in reflection of the duties no longer performed by the municipalities.

The point of departure in modifying the system of central government transfers is to introduce equalisation measures in order to moderate effects at the level of municipality: a limitation of 'automatic changes' resulting purely from the transfer of health and social services duties, and a transitional equalisation in which all changes in financial position are taken into account.

In the year in which the reform enters into force, this transitional equalisation will limit the change in the balance of municipal finances to zero and as of 2024, the change is to be made permanent and capped at +/- EUR 100 per resident.



The reform will also result in the dissolution of statutory joint municipal authorities, which will as a rule be transferred to the county in which the authority's member municipalities are located. The holdings of the joint municipal authorities inclusive of assets, debts and commitments follow responsibility to organise and will remain in the use for which they were originally acquired. According to the 2016 financial statements, the buildings owned by the hospital district joint municipal authorities have a balance sheet value of about EUR 2.5 billion while their other non-current assets are valued at about EUR 1.1 billion. The hospital districts' debts for which the counties will assume liability are about EUR 1.6 billion according to the preliminary estimates of the 2017 financial statements. Based on the investment dispensations granted to the hospital districts by the Ministry of Social Affairs and Health to date, the debt is projected to rise by at least EUR 2.9 billion. A government guarantee will be granted to these debts transferring from joint municipal authorities to counties. Counties will lease the premises used by municipalities' basic healthcare, specialised medical care, social services and rescue services for at least three years. In this situation, municipal debt remains unchanged while the local authority corporation's debt is reduced by the aforementioned amount. As part the reform, joint municipal authorities are required to cover by 2018 any deficit they may have in their balance sheet. This may undermine the finances of some municipalities.

#### 5.4.2 Municipal guarantees

Guarantees granted by municipalities have also grown: financial statements for 2016 show that total municipal guarantees amounted to EUR 8.0 billion, EUR 1.3 billion of which were paid to extra-Group entities<sup>35</sup>. In 2008, municipal guarantees totalled EUR 5.5 billion, EUR 0.9 billion of which was for extra-Group entities.

The total amount of the guarantees provided by joint municipal authorities was significantly lower. In 2016, their guarantees for intra-Group entities amounted to about EUR 393 million and for others EUR 9 million.

An examination of the municipal guarantee practices reveals that small municipalities in particular have given significant guarantees in relation to their fiscal capacity. Realisation of the guarantee obligations could put the municipality's operations and the provision

<sup>35</sup> The analysis above does not include the municipal liabilities for guarantees of the about EUR 30.6 billion issued by the Municipal Guarantee Board. Municipalities' share of these liabilities is calculated on a euro-per-capita principle, which means liabilities amounted to about EUR 5,600 per capita in each municipality. This sum includes EUR 15 billion in guarantees issued by Municipality Finance, which is recorded as local government debt in statistics. It consists of government-guaranteed loans for non-profit housing construction totalling about EUR 8 billion and investment assets of EUR 7 billion associated with the liquidity of Municipal Finance. In the information supplied by Statistics Finland to Eurostat, most of the guarantees provided by the Municipal Guarantee Board have been merged. According to the figures, the guarantees provided by local government amounted to EUR 22.3 billion (10.4% of the GDP) in 2016.

of basic services at risk. In some municipalities, the guarantee liabilities are equivalent to a full year's operating expenses in the social and health care sector. If an individual guarantee obligation is realised, municipalities typically cover the losses by taking out a loan.

### 5.4.3 Municipal PPP projects

In recent years, municipalities have also opted for a PPP model for investments instead of borrowing.

The estimated value of PPP projects carried out by municipalities and joint municipal authorities in 1997-2016 is about EUR 0.5 billion. This consists of about ten different projects, primarily involving the construction of schools. Data on PPPs is scattered, and no extensive data is available on the number of projects or their costs to municipalities.

According to estimates, the PPP model has not become more widespread. Reasons for the slow adoption may include the novelty of the PPP model, and comparisons between financial costs, particularly against the municipality's own funding costs.

## 5.5 Implicit liabilities of state-owned companies

State-owned companies are part of central government financial assets (see chapter 3). However, they may also generate indirect financial liabilities for the state. The government may decide to provide loss-making companies or companies facing difficulties with capital injections or other financial support measures. Ownerships in companies may also lead to the realisation of other types of liabilities, one example of which is the environmental damage caused by the Talvivaara mine.

There are two types of state-owned enterprises: state-majority owned companies in which the state holds the majority of voting rights, and state-associated companies in which the state holds at least 10% and no more than 50% of the voting rights carried by the holdings. Ownership steering is carried out by the Prime Minister's Office and different ministries.

State ownership policy and ownership steering are governed by the State Shareholdings and Ownership Steering Act (1368/2007). The Act applies to decision making involving state shareholdings and shareholder control in both state majority-owned companies and associated companies. In addition to the companies coming under the State Shareholdings and Ownership Steering Act, a number of state-owned companies are

subject to special legislation governing the field of activity involved, such as the acts on the state-owned specialist financing company and the legislation on alcoholic beverages. The activities of all limited companies are governed by the Limited Liability Companies Act. Additionally, listed companies are required to comply with the Securities Markets Act and the guidelines issued by the Financial Supervisory Authority and the Helsinki Stock Exchange.

Information regarding the risks involved in the operations of these companies and risk management is provided to external stakeholders in an annual report, which the companies are required to prepare under the Limited Liability Companies Act (624/2006). In addition, the Accounting Act (1336/1997) contains specific provisions regarding the obligation of companies to prepare a report on operations, and regarding its content. Under chapter 6(2) of the Limited Liability Companies Act, the Board of Directors is responsible for organising the company administration and the proper conduct of its operations. Consequently, the Board of Directors has overall responsibility for internal control and risk management.

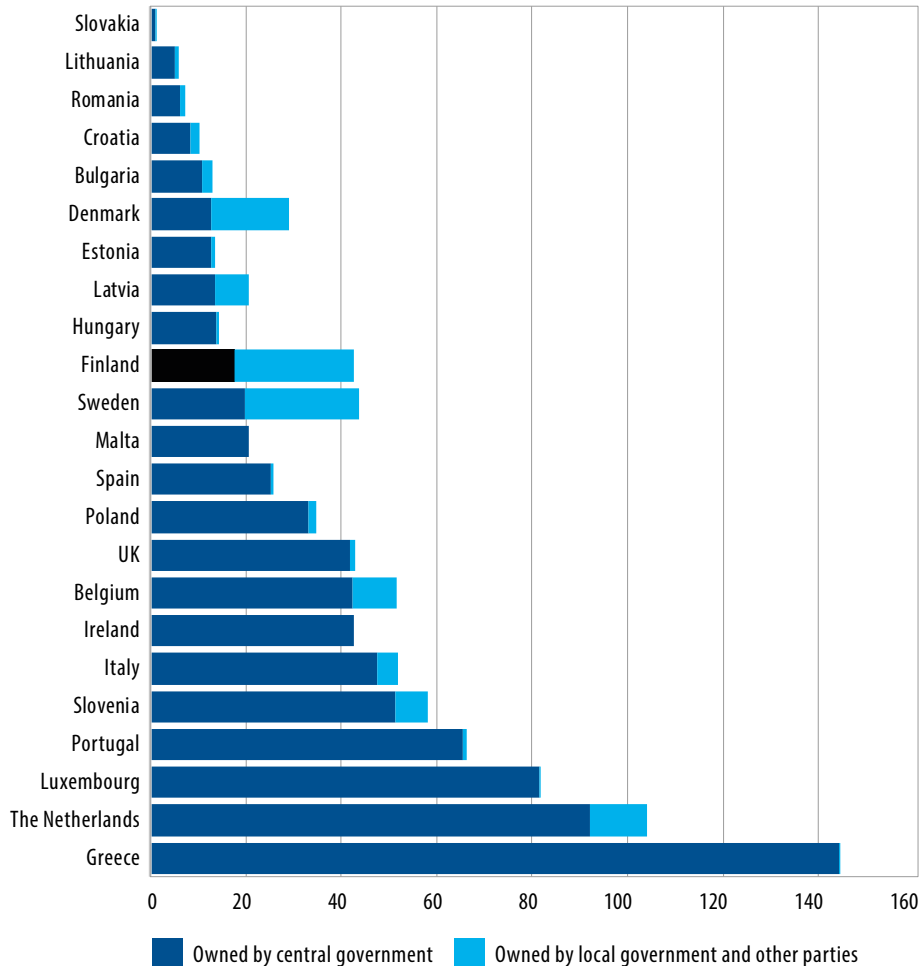
There are 69 companies directly owned by the state<sup>36</sup>. According to the enterprise statistics of Statistics Finland, in 2016, there were 233 companies where the state held the controlling interest, directly or indirectly. The debt held by Finnish companies with majority state-ownership was about 18% of the GDP in 2016<sup>37</sup>, which is a low figure compared to other countries. When the debts between state-owned public companies are consolidated, the debt-to-GDP ratio falls to about 11% (EUR 23 billion). Of this total, about EUR 9 billion is debt owed to state-owned financial companies and about EUR 15 billion to companies in other sectors. Loss-making companies had debts amounting to about EUR 6 billion.

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36 Appendix 4 to Government's annual report 2017

37 Source; Eurostat, government contingent liabilities and potential obligations. The statistics are in accordance with the central government sector of the national accounts and thus, the debts of the companies considered as part of central and general government are not included in the total as they are part of central government debt. For example, companies such as Solidium Oy, Vake Oy, Senate Properties (and its subsidiaries) and SoteDigi Oy are part of central government.

**Figure 22. Debts of publicly owned companies relative to GDP in 2016**



Source: Eurostat, non-consolidated debts

## 5.6 Liabilities associated with environmental damage

The purpose of secondary environmental liability systems is to prepare for the need to pay compensation for environmental damage and to eliminate environmental risks in situations where the party causing the damage or risks is insolvent, unknown or unavailable. In Finland, these systems comprise the compulsory insurance and the Oil Pollution Compensation Fund based on the Environmental Damage Insurance Act (81/1998). The state budget represents last-resort financing.

Since 2012, at least four incidents have occurred in which the government has been forced to assume financial responsibility for ensuring environmental and chemical safety

following an operator's bankruptcy and in the absence of the actual guilty party. This illustrates how the existing secondary environmental liability systems and securities do not cover all situations and are not optimal.

A working group<sup>38</sup> has proposed more extensive coverage in environmental damage insurance, the establishment of a fund similar to the Oil Pollution Compensation Fund for environmental damage, or the introduction of a tax collected from companies to replace the insurance, and an equivalent appropriation.

## 5.7 Other contingent contractual liabilities

The government is responsible for the achievement of emissions targets in the non-ETS sector, or what is called the burden-sharing sector (transport, agriculture, housing). It seems that the current emissions reduction obligation (-16% from the 2005 level by 2020) will be met. If the emissions development were to take an unfavourable turn, the government would be forced either to decide on new actions to reduce emissions in the sectors involved or to acquire emission allowances from the markets to cover the reduction obligation. This would be a possible scenario, if economic growth was stronger than anticipated, translating into higher emission volumes from transport in particular. There would not necessarily any similar pressures in the housing and agriculture sectors.

Nuclear liability is specified in the Nuclear Liability Act. Nuclear liability refers to liability of the nuclear power plant licensee for damage to third parties. The act on the temporary amendment to the Nuclear Liability Act entered into force at the start of 2012. Under the act, the licensee of a nuclear power plant located in Finland has unlimited liability for nuclear damage in Finland. Maximum liability for damage incurred outside Finland is 600 million SDR, equivalent to about EUR 720 million with current exchange rates. The licensee is required to have insurance of 600 million SDR to cover these liabilities. Finland is a party to international agreements under which the contracting countries agree to compensate for damage exceeding the maximum level of the facility operator's liability. Under these agreements, damage shall be further compensated to a maximum of 125 million SDR (about EUR 150 million).

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38 Ministry of the Environment Reports 23/2014, Development of Secondary Environmental Liability System

## 6 Stress test scenario

The impacts of an external macroeconomic shock on general government finances are examined in this stress test scenario. The stress test is based on the macroeconomic risk scenario used by the European Banking Authority (EBA) in the stress testing of banks<sup>39</sup>. In the scenario, the shock caused by political turbulence and its spreading to the financial markets and further to the real economy will weaken Finnish GDP growth by 8.4% during a three-year period relative to the baseline<sup>40</sup>.

In addition to the direct and conditional impacts of the macroeconomic shock, the stress test for general government finances also examines the impacts of contingent liabilities on the revenue and expenditure of central and local government as well as social security funds. However, the shock is not expected to trigger off the need to restructure domestic banks or other financial institutions or require government support measures, considering the assessment made by EBA in its 2016 stress test<sup>41</sup>. Furthermore, it is not expected to reignite the euro area debt crisis again in a manner that would lead to the realisation of Finland's guarantee liabilities connected with the financial support programmes for euro area countries.

### 6.1 Macroeconomic scenario

In the stress test, a global financial market disturbance triggered off by political uncertainty and geopolitical tensions will increase the risk premium for loans and cause share prices to collapse. The shock originating from the United States will spread to Europe through the weakening of the financial markets and lower export demand.

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39 <https://www.eba.europa.eu/documents/10180/2106649/Adverse+macroeconomic+scenario+for+the+EBA+2018+Stress+Test.pdf/56989522-f7e5-413e-acc5-c39d23fdffa>

40 The baseline used in this calculation corresponds to the forecast published by the Ministry of Finance in its spring 2018 economic survey.

41 <http://www.eba.europa.eu/documents/10180/1532819/2016-EU-wide-stress-test-Results.pdf>

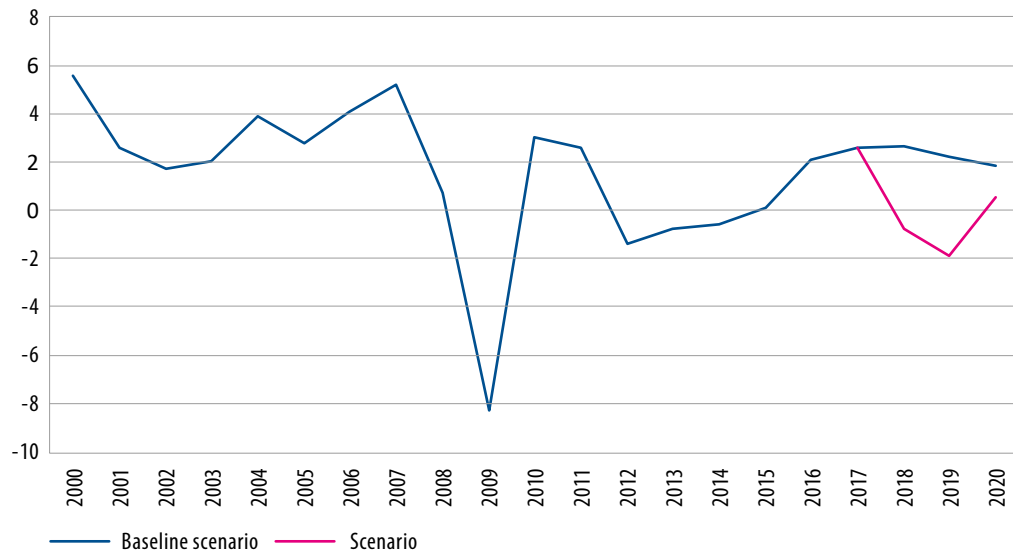
The shock will also affect Finland through weaker export demand and higher price for credit. Weaker export demand, higher financing costs and growing uncertainty will lead to a fall in exports and investments. The economic downturn will lead to higher unemployment and weaker company profits, which will both have a negative impact on private consumption, housing prices and prices of business premises (Table 4). The assumption in this scenario is that wages will not react to the weaker economic situation in 2018-2019 as the wage rises for these years have already been set<sup>42</sup>. In 2020, wage rises will be 2.7% below the baseline, which corresponds to real wages remaining at previous year's levels. In the scenario, Finnish GDP growth will be 3.4% slower than in the baseline in the first year, and 4.1 and 1.3% below the baseline growth in the two years after that.

In terms of its size, the macroeconomic shock is similar to the downturn in Finland that was triggered off by the euro area debt crisis in 2012. However, its impacts would be much smaller than those of the financial crisis that began in 2008 (Figure 23).

**Table 4. Difference between scenario assumptions and the baseline, %**

	2018	2019	2020
GDP growth	-3.4	-4.1	-1.3
Growth in private consumption	-1.2	-1.4	-0.5
Inflation	-0.2	-1	-1.7
Unemployment rate	0.5	1.9	3.1
Wages and salaries	0.0	0.0	-2.7
Interest on government loans	0.6	0.9	1.1
Housing prices	-11.6	-12.5	-4
Business premises	-16.1	-11.8	-5.5
Share prices	-27.5	-25.1	-19.9

42 The changes in wages and private consumption assumed in the scenario are based on the Ministry of Finance's estimates in similar shocks because the EBA scenario does not contain explicit assessments of changes in wages and private consumption.

**Figure 23. GDP growth**

## 6.2 Impact on general government finances

The macroeconomic shock will have a substantial impact on general government revenue, expenditure and debt<sup>43</sup>. Weaker economic growth will slow down the growth in tax revenue, while higher unemployment will mean higher public spending. Furthermore, higher interest rates on government loans and the debt burden augmented by growing deficits will mean higher interest expenditure. At the same time, falling share prices will lower the value of the shares held by the state and pension funds. The assumption in the scenario is that the fiscal policy will remain unchanged, which means that there will not be any adjustment or stimulation of general government finances with respect to the baseline. However, automatic stabilisers are allowed to function unhindered.

Lower employment rates and slower wage rises will mean a lower wage bill, which will decrease central and local government income tax receipts as well as the social security contributions collected by social security funds. At the same time, lower private consumption and slower inflation will have a negative impact on the receipts of indirect taxes, such as the value added tax. The sales proceeds received by the public sector will also decrease slightly relative to the baseline. Lower share prices and weaker company profits will push down the dividend income of the public sector. Even though higher

43 The impacts of the shock on general government finances have been estimated with the general government scenario model developed in the Ministry of Finance by comparing it to the forecasts made by the ministry in its spring 2018 economic survey.



interest rates will boost the interest income of central government and pension funds, overall property income will be lower than in the baseline. As a whole, in 2020 general government revenue will remain more than EUR 5 billion below the level set out in the baseline.

As the unemployment is increasing, general government expenditure will be mainly boosted by the growth in unemployment expenditure and other current transfers in the social security sector. At the same time, as a result of a slower inflation, index-linked current transfers will grow slightly more slowly throughout the period in review, while slower wage rises will mean less growth in public sector wage expenditure in 2020. Higher interest rates on central and local government loans and growing debts will boost interest expenditure as maturing loans and growing deficits will have to be financed through higher interest rates. As a whole, the overall direct impacts of a weaker economic situation will increase public spending by about two billion euros at 2020 level relative to the baseline.

### 6.3 Contingent liabilities

According to the scenario, in addition to resulting in direct spending increases, the realisation of contingent liabilities will also increase central government spending. The role of the contingent liabilities in the stress test is examined by focusing on Finnvera and the National Housing Fund. Most of the indirect state liabilities are liabilities associated with these two bodies (Figure 16).

The assumption in the scenario is that a global downturn would push Finnvera's largest guarantee customer into insolvency. The purpose of the assumption is to illustrate the concentration risk associated with export financing exposures and it has nothing to do with the solvency of the largest customer. Even though the collateral covers 43% of the guarantee receivables of this customer, total losses would nevertheless amount to EUR 1.4 billion<sup>44</sup>. The losses would deplete both export financing risk buffers (Finnvera's export guarantee and special guarantee reserve as well as the State Guarantee Fund). Depletion of the State Guarantee Fund would increase the general government deficit but would not increase public debt. The losses incurred by Finnvera's export guarantee and special guarantee reserve would not increase central government deficit but the depletion of the reserve would make it more difficult to provide new guarantees.

44 The scenario repeats the risk scenario presented in 2017 by the international group assessing Finland's export financing arrangements. (<http://tem.fi/documents/1410877/2145521/Assessment+Export+Credits+01022017/9e748614-334c-4698-a44e-b9f07b43abd8/Assessment+Export+Credits+01022017.pdf>)

The government does not have any formal obligation to provide Finnvera with capital injections and, formally, the export guarantee would not be triggered off as the reserves would cover the losses. The assumption in this scenario is that the state would nevertheless provide the company with a capital injection by replenishing the buffers to half of their current value (EUR 700 million). This would be considered necessary so that the trust of investors and credit rating agencies in the company could be maintained after a major credit event. The capital injection would be carried out over a period of three years between 2018 and 2020 in instalments of EUR 233 million. Capitalisation of the export guarantee and special guarantee reserve would increase general government spending, and consequently, public debt (EUR 700 million).

It is not assumed in the scenario that during the period in review, a large group of Finnvera customers would face payment difficulties, the guarantees provided for Finnvera's funding would fall due or that the company would have to resort to the state credit line available to it.

For the National Housing Fund, the assumption in the scenario is that a fall in housing prices would drive a customer with an exposure of EUR 1.4 billion into insolvency. Guarantee liabilities account for EUR 1.2 billion and direct loan receivables EUR 0.2 billion of this sum. Realisation of property collateral would cover 50% of the liabilities, which means that credit losses would total EUR 700 million. The realisation of a large housing mass would, however, be a slow process and for this reason, the entire guarantee liability of EUR 1.4 billion would fall to the National Housing Fund in 2018 and the general government deficit would be increased by the same amount. The assumption is that the property collateral will be realised in 2019 and 2020 and the sales proceeds will improve central government budgetary position by EUR 0.35 billion in both years. The National Housing Fund has cash assets totalling EUR 1.7 billion, which means that it does not require any budget funding to cover the guarantee liabilities and there is no need for capital injections either. Even though the triggering off of the guarantee liabilities does not have any direct budgetary impacts, it will cause central government cash funds to shrink as the cash reserves of the National Housing Fund are connected with the overall cash funds of central government. Replenishing central government cash funds would increase the borrowing requirement by EUR 700 million and increase the debt by the same amount.

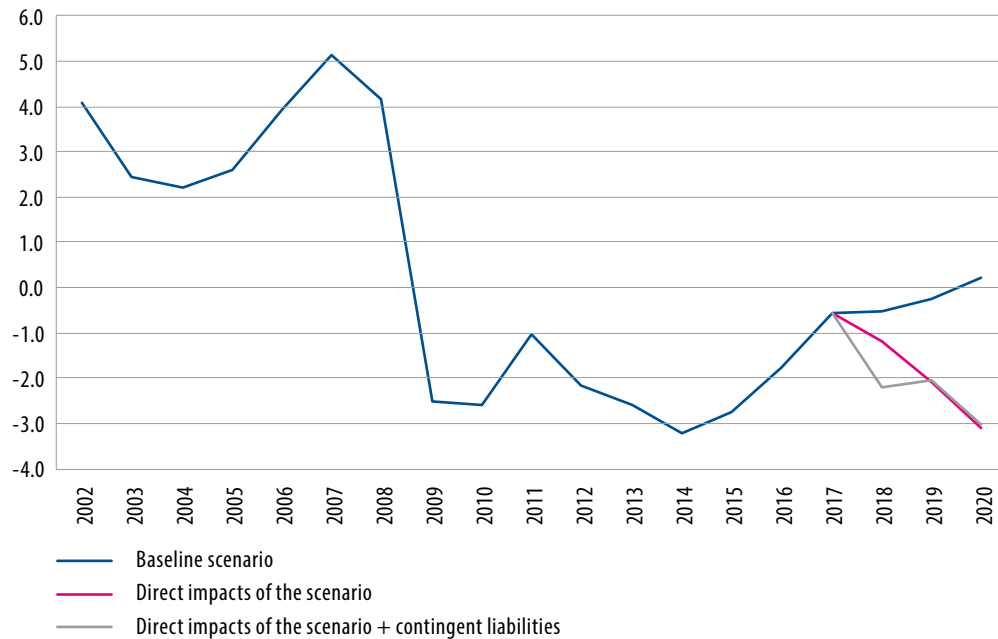
In total, indirect liabilities would cause losses of EUR 2.1 billion at 2020 level after the realisation of the collateral material. Growth in general government spending will widen the deficit by EUR 2.3 billion (or 1% of GDP) in 2018 relative to the baseline (The EUR 0.7 billion deficit to the State Guarantee Fund arising through Finnvera, EUR 0.23 billion capital injection to the export guarantee and special guarantee reserve and the losses of EUR 1.4 billion incurred by the National Housing Fund). Realisation of the National

Housing Fund property collateral will improve general government finances by EUR 0.35 billion in 2019 and 2020, whereas the capitalisation of the export guarantee and special guarantee reserve would increase the deficit by EUR 0.23 billion in the same period (Figure 24). Realisation of the indirect liabilities will not directly increase general government debt as the dissolution of the reserves does not have any debt impacts and the money flow required for the capitalisation of Finnvera can be covered by realisation of the National Housing Fund's property collateral. Replenishing central government cash funds to baseline levels would, however, require additional borrowing totalling EUR 700 million (Figure 25).

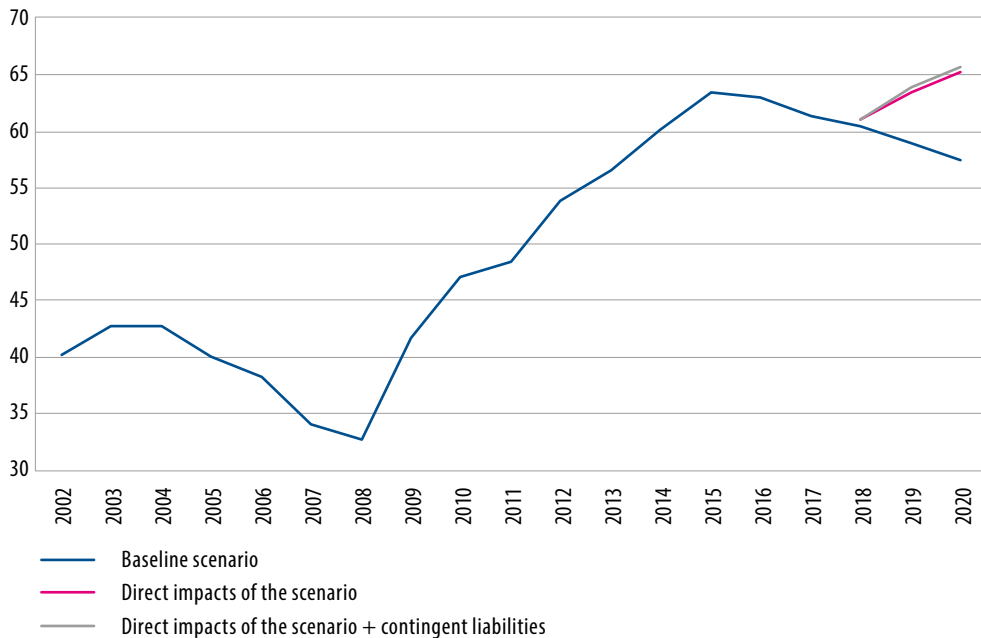
## 6.4 General government financial balance

The combined impact of lower revenue and higher expenditure will weaken general government budgetary position by more than EUR 7 billion (3.2% of GDP) in 2020. Growth in the deficit and a decline in nominal GDP would increase the debt-to-GDP ratio by 8.5 percentage points relative to the baseline by the year 2020. In fact, the debt-to-GDP ratio would reach almost 66% over a period of three years whereas in the baseline, it is expected to fall to 57%.

**Figure 24. General government budgetary position, % of GDP**



**Figure 25. Figure 25. Public debt, % of GDP**



## 6.5 Summary

The stress test shows that, despite recent improvements in general government finances, general government is not yet fully prepared to face the negative macroeconomic shock described above. The shock would push the general government deficit close to the deficit limit set out in the Stability and Growth Pact (3% of GDP) and the 60% debt criterion would be exceeded. In addition to having direct impacts on general government finances, the triggering off of the contingent liabilities would lead to a significant reduction in buffer reserves and a need for capital injections. In fact, the consolidation of general government finances should continue and careful consideration should be given to government guarantee risks so that, should shocks occur, it would not be necessary to tighten fiscal policy in order to slow down indebtedness and to finance guarantee liabilities.

## Appendices

### Appendix 1. Classification of government financial liabilities

Liability / obligation	Direct Obligation in any event	Contingent should an event occur Obligation
Explicit Liability recognised by a law	<ul style="list-style-type: none"> <li>• budgetary expenditure</li> <li>• loan, interest</li> <li>• service fees under the PPP model</li> <li>• other statutory or contractual obligations</li> </ul>	<ul style="list-style-type: none"> <li>• government guarantee (including export guarantee)</li> <li>• callable capital in international financial institutions</li> <li>• climate change liabilities</li> <li>• nuclear liabilities</li> </ul>
Implicit A social / moral obligation	<ul style="list-style-type: none"> <li>• citizens' basic social security</li> </ul>	<ul style="list-style-type: none"> <li>• deposit guarantee and other support to the banking sector</li> <li>• capitalisation of state-owned companies or ensuring their solvency</li> <li>• financial aid to the municipal sector</li> <li>• environmental liabilities, catastrophes, external and internal security</li> </ul>

Source: Ministry of Finance

## Appendix 2. Other multi-annual liabilities of the government 2007–2017, EUR billion

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Liabilities / on-budget entities*	93.57	96.13	99.48	103.34	110.43	116.96	115.38	130.40	128.30	126.89	125.46
Other multi-annual liabilities, appropriations required**	-	-	-	-	6.79	8.69	8.95	7.48	6.81	6.26	5.80
Government pension liabilities	82.70	85.60	88.40	90.60	89.70	92.60	94.00	95.40	95.70	93.00	92.60
Appropriations required following the exercise of authorisations	10.87	10.53	11.08	12.74	12.76	14.50	11.28	10.00	9.28	9.62	9.20
Liabilities / off-budget entities***	-	-	-	0.32	0.39	0.53	0.58	0.74	0.92	1.20	1.59
Other multi-annual liabilities, appropriations required	-	-	-	-	0.05	0.06	0.06	0.07	0.16	0.13	0.06
Investment commitments	-	-	-	0.32	0.34	0.47	0.52	0.67	0.76	1.07	1.54
Liabilities / unincorporated state enterprises	-	-	-	1.40	1.50	1.50	1.80	1.80	1.60	1.40	1.24
Senate Properties' loans	0.84	1.08	1.29	1.00	1.06	1.20	1.22	1.35	1.08	1.69	1.53
Rental liabilities	-	-	-	0.27	0.25	0.25	0.26	0.26	0.36	0.38	0.38
Leasing liabilities	-	-	-	0.01	0.01	0.01	0.01	0.01	0.01	0.07	0.02
Investment commitments	-	-	-	0.13	0.15	0.06	0.13	0.14	0.20	0.10	0.07

\*\* Does not include capital liabilities, which are discussed in chapter 5.2.

\*\* Does not include government guarantees and collateral for off-budget entities, which are discussed in chapter 5.1.

Source: State Treasury

### Appendix 3. Breakdown of government guarantees 2007–2017, EUR billion

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Change 2017
Finnvera*	7.20	10.52	13.40	12.75	14.03	14.80	14.58	17.49	22.61**	22.56	27.68	22.7%
Total liabilities arising from export guarantees and special guarantees	4.98	8.29	9.67	8.93	10.37	11.20	11.00	12.60	16.28	15.31	18.97	23.9%
Domestic liability portfolio	2.22	2.22	2.65	2.79	2.77	2.68	2.53	2.32	2.25	2.23	2.13	-4.5%
Government liabilities for fundraising	-	-	1.09	1.03	0.89	0.92	1.06	2.55	3.94	4.85	6.48	33.6%
Student loans	1.31	1.31	1.33	1.37	1.44	1.53	1.62	1.77	2.01	2.33	2.74	17.6%
EFSF	0	0	0	0	0.49	5.13	6.23	6.61	6.23	6.28	7.01	11.6%
Bank of Finland	3.75	3.86	3.80 <sup>45</sup>	0.43	0.64	0.78	0.69	0.59	0.46	0.61	0.41	-32.8%
Government funds	5.60	5.70	6.30	7.91	9.15	10.20	11.17	11.84	12.31	13.19	13.84	4.9%
National Housing Fund	5.60	5.70	6.30	7.85	9.08	10.15	11.12	11.80	12.26	13.06	13.70	4.9%
Development Fund of Agriculture and Forestry	-	-	-	0.01	0.02	0.02	0.03	0.03	0.04	0.11	0.13	18.2%
State Guarantee Fund	-	-	-	0.05	0.04	0.03	0.03	0.00	0.00	0.00	0.00	0%
Others	0.23	0.35	1.16	0.71	1.04	1.24	0.75	0.86	0.63	1.09	0.45	-58.7%
<b>Total</b>	<b>18.09</b>	<b>21.73</b>	<b>25.98</b>	<b>23.15</b>	<b>26.79</b>	<b>33.67</b>	<b>35.04</b>	<b>39.17</b>	<b>44.24</b>	<b>46.06</b>	<b>52.11</b>	<b>13.1%</b>

\* The figures for Finnvera have been updated in respect of 2009–2015 to correspond to Appendix 12 to the final central government accounts. The government guarantee granted for the EMTN loan programme also covers interest swaps and currency swaps. Derivative contracts are concluded within the framework of the standard international ISDA Master Agreement and a Credit Support Annex (CSA) related to the collateral arrangement and serving to reduce credit risk is also incorporated into the agreement. The figures for Finnvera include the liabilities in effect. Overlapping liabilities for different guarantees have been eliminated. Unlike in the 2015 and 2016 risk reviews, government liabilities for derivative contracts have been excluded from the figures for Finnvera. The liabilities associated with export guarantees and fundraising are not cumulative so that they could be realised in the combined full amount. The risk associated with the repayment of the export credits granted by Finnish Export Credit Ltd, which is a part of Finnvera Group, is covered by an export guarantee granted by the parent company Finnvera plc. As a rule, the government's liability for this guarantee is 95%. Where the debt guaranteed by the government has been applied towards financing export credit, the government's liability is not doubled.

\*\* The 2015 figure for Finnvera has also been adjusted as follows: the figure is EUR 1,010 million lower than what was reported in the 2015 financial statements. The adjustment is due to change in manner of reporting, Appendix 12

Sources: Ministry of Economic Affairs and Employment, Ministry of Justice, State Treasury

<sup>45</sup> Shows the maximum amount available up to the year 2009 and not the amount in effect that particular year. Caused by changed reporting practices.



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