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# Overview of Central Government Risks and Liabilities 2015

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# 1 Introduction

Fiscal risks refer to a range of factors that have an unanticipated effect on government finances. Since the government has the ultimate responsibility for ensuring that the social system remains functional, its responsibilities reach far and wide, which, in turn, means that the risks affecting the government finances can emanate from countless sources. Economic and fiscal risks are typically divided into two categories: unanticipated macroeconomic disturbances and contingent liabilities. Macroeconomic disturbances include situations such as a disruption of the financial markets originating outside Finland, which through various channels causes a decline in our domestic economic activity. Contingent liabilities include government guarantees and collateral whose amount and time of realization depends on events beyond the government's control.<sup>1</sup>

Similarly, fiscal responsibilities, and thereby risks, may emanate from decentralised sources within the government (e.g. the state budget economy), other public finance (e.g. government funds, State enterprises, municipalities), the private sector (e.g. government-controlled enterprises), or the financial markets (e.g. the banking sector). It is therefore necessary to adopt a wider perspective when assessing risk sources, even if not all of the financial risks a government may face can ever be identified.

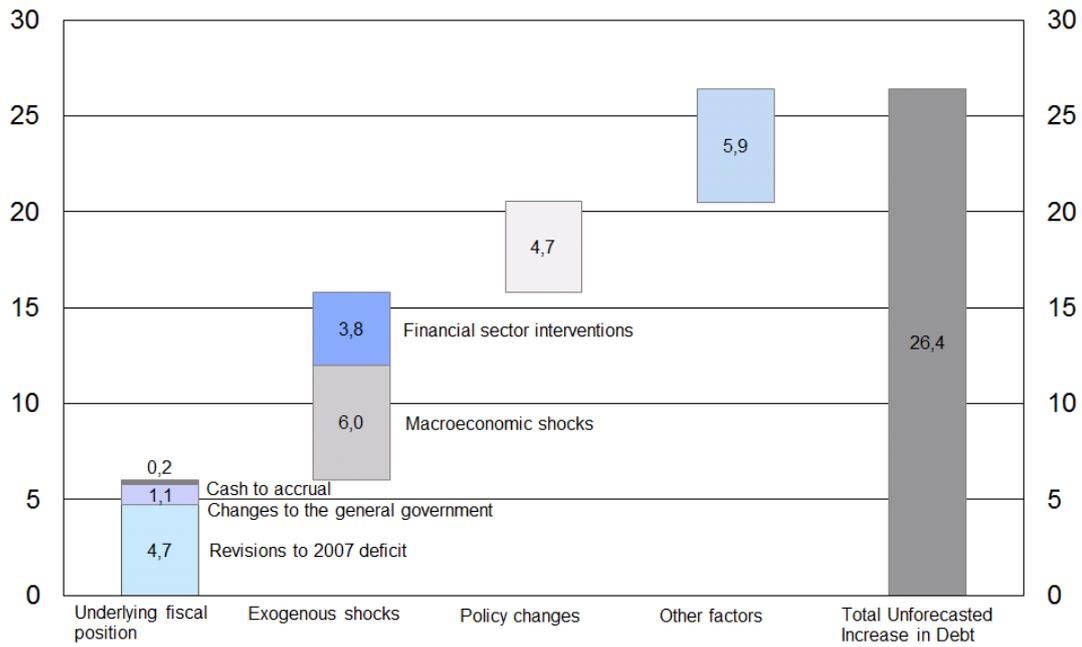
On a global scale, there has been a dramatic increase in government liabilities. One of the contributing factors is the global financial crisis which began in 2008 and spread across the euro area, escalating into an economic crisis that threatens the stability and sustainability of both member states and, ultimately, the entire euro area. To deal with the financial crisis, governments have been forced to maintain the stability of the financial system by assuming various levels of responsibility for the banking system and by taking part in the financial support arrangements offered to the most affected states. But this is not the only reason for growing liabilities. Governments have also given more guarantees to activities governed directly by domestic decision-making. Government guarantees and borrowing associated with off-budget entities are not included in all the deficit or debt figures typically used to prepare fiscal policy rules and limitations, creating an incentive for similar operations at a time when countries are forced to pursue fiscal consolidation.

Following the 2008 financial crisis, the public finances in many countries plummeted and government debt-to-GDP ratios climbed sharply. Last year, the general government debt-to-GDP ratio of developed countries was at its highest since the Second World War. Automatic fiscal stabilisers affecting revenue and expenditure, and the realisation of other financial risks, have racked up more debt.

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<sup>1</sup> Government guarantee refers to a legal commitment by the state to assume liability for the debt of another party. Meanwhile, government collateral is a legal commitment to compensate for the losses arising from certain activities. Below, the term government guarantee will be used collectively for both of these.

**Figure 1** Unanticipated general government debt growth, % of GDP

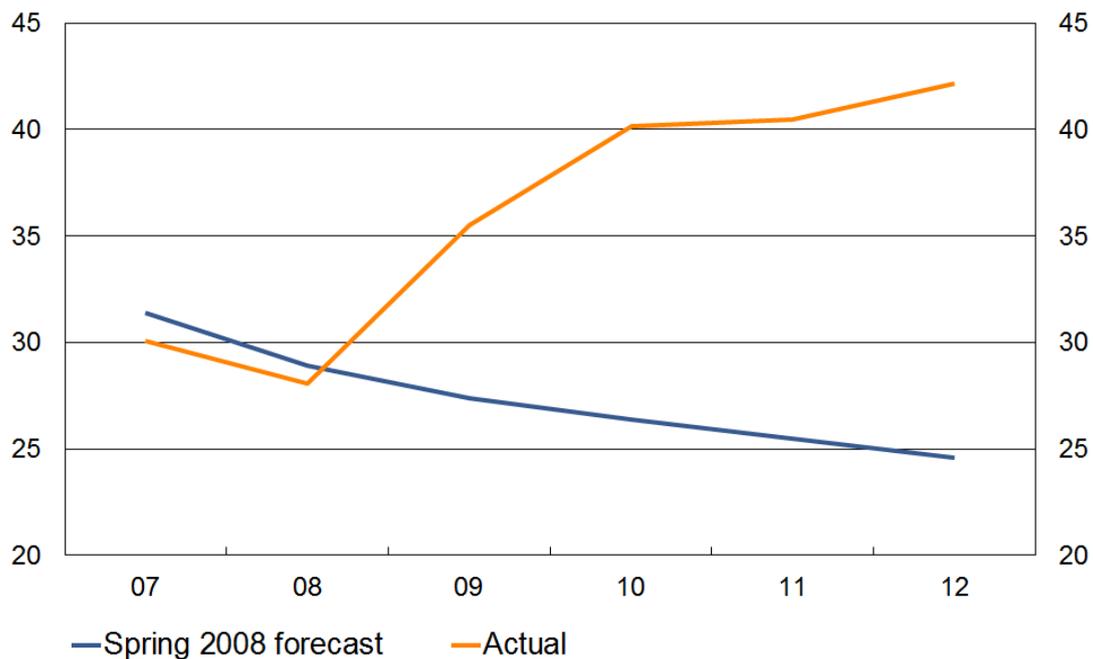


Source: IMF

Underlying the unanticipated debt growth is the inability of countries to understand and prepare for the risks emerging from various directions. In 2010, the debt ratio was approximately 26% higher than the 2007 forecast.<sup>2</sup> About a fourth of this growth in debt could be attributed to shortcomings related to government data on deficits and debt and hidden or implicit obligations, while an unexpected output decline and financial market support measures account for a third of the increase. The impacts of fiscal stimuli or austerity policy explain one fifth of the growth.

<sup>2</sup> Applies to the ten countries showing the largest unanticipated increase in the debt ratio: France, Germany, the Netherlands, Spain, Portugal, Great Britain, the United States, Greece, Ireland and Iceland. Cf. IMF (2012).

**Figure 2** Unanticipated central government debt growth in Finland, % of GDP



Source: Ministry of Finance

The crisis significantly weakened also Finland's fiscal position. The central government debt-to-GDP ratio in 2012 was nearly 20 percentage points higher than the pre-crisis estimate. This means that the risks associated with macroeconomic development were realised in Finland too. As a result, our ability to withstand new economic disturbances is now materially lower than before. At the same time, as explained in the government liabilities section of this report, the government's liabilities have, in recent years, grown dramatically, further undermining Finland's fiscal position if the government were required to settle even some of its liabilities. The instability of the external environment places a special emphasis on the careful monitoring and management of the risks to which the government is exposed. Budgetary and fiscal risks are also a component affecting the assessments made by international credit rating agencies.<sup>3</sup>

Assessing the risks involved in government liabilities is by no means a simple task. The least complicated system used by many countries in their government risk reviews involves reporting the nominal value<sup>4</sup> of liabilities, possibly as a ratio of a key figure, such as the state budget or nominal GDP. The nominal value of liabilities indicates the maximum loss if the government were required to settle all of the liabilities shown in full, assuming no provisions, such as a funding system, had been made. A complementary, but a more challenging method would involve calculating the market value (fair value) of liabilities, which would show the amount a state would need to pay for transferring its liabilities to a third party.<sup>5</sup> Meanwhile, the value

<sup>3</sup> Cf. Moody's (2013), Standard & Poor's (2014) and Fitch Ratings (2014).

<sup>4</sup> E.g. New Zealand, Australia and the Netherlands.

<sup>5</sup> E.g. the United States

at risk and cash-flow at risk indicators show how much a state can lose in guarantees at a certain probability over a selected period.<sup>6</sup>

The further development of methods of describing different risks and liabilities should be encouraged in Finland. In this report, the nominal values of liabilities are primarily used, with different sensitivity analyses and key indicators elaborating the significance of risks and liabilities as far as possible. Besides indicating the nominal values, this report seeks to explain the provisions made for losses potentially arising from liabilities.

The diagram below illustrates the fiscal risks and liabilities assessment process.<sup>7</sup> To fully understand the government's overall liabilities, a systematic identification of risks and liabilities is required in all administrative branches. Reliable and extensive reporting is essential to enabling decision-makers to base their decisions on accurate information. Transparent reporting of government liabilities will add credibility to the government's fiscal policy in the eyes of the markets and citizens, which, in turn, will create a firm foundation for the effective management of risks and liabilities.



Finland's deficient reporting and management practices with regard to risks and liabilities has come to the attention of external observers. The National Audit Office of Finland (VTV) criticised the government for its failure to duly present the aggregate of liabilities for decision-making purposes and to factor it into the government's fiscal decision-making process and follow-up. Meanwhile, the International Monetary Fund (IMF) has criticised Finland for the lack of coherence in its fiscal risk reporting.<sup>8</sup>

This report provides an overview of the government's risks and liabilities, and seeks to provide a detailed explanation of the risks involved in the government's macroeconomic development, and fiscal liabilities, including a risk assessment as applicable. The report is intended to be updated and published annually as an Annex to the General Government Fiscal Plan.<sup>9</sup>

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<sup>6</sup> E.g. Chile.

<sup>7</sup> Cf. Cebotari et al. (2009).

<sup>8</sup> VTV (2011), IMF (2015).

<sup>9</sup> It is based on the Ministry of Finance's working group report "Development of the government's financial risk reporting and management" (available only in Finnish).

## 2 An overview of government risks and liabilities

### 2.1 Risks associated with macroeconomic development

Information on future economic prospects is essential for fiscal 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, the predicted cyclical fluctuations 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. Public debt has clearly outgrown projections, particularly in times of deep recession and depression.

Following the financial crisis, the change in Finland's national economy, measured by the change in total output, was almost as dramatic as during the recession of the early 1990s. The table below indicates the projections made in 2008 for general government debt in 2012, and the factors contributing to stronger-than-expected debt growth. Instead of the predicted 34.6 per cent, debt ratio rose to 52.8 per cent in 2012. The most important individual factor behind this development was the significantly weaker-than-expected economic activity. In 2008–2012, total output growth cumulatively fell 13% short of the forecasts made in autumn 2008. Furthermore, the support measures associated with the European debt crisis caused an unanticipated increase in Finland's borrowing. The figures in the table below are indicative only, but they show that an overly positive macroeconomic outlook forecast was the key contributor to unanticipated debt growth. Weaker-than-anticipated development in economic activity therefore poses a major risk to the government budget.

**Table 1** Unanticipated change in general government debt 2012, % of GDP

	2012
<b>GG debt in 2012 as forecast in December 2008</b>	<b>34.6</b>
Changes in the definition of debt (a)	0.6
Production shock (b)	6.5
Impact of unanticipated interest expenditure (c)	-0.3
Support measures associated with the European debt crisis (d)	2.5
Policy measures (unanticipated) (e)	1.3
Other factors (f)	2.6
Impact of bigger-than-expected debt (a+b+c+d+e+f)	13.3
Impact of weaker-than-expected GDP growth (g)	4.9
Difference between forecast and actuals (a+b+c+d+e+f+g)	18.2
<b>Actual GG debt</b>	<b>52.8</b>

Source: Ministry of Finance

## **Macroeconomic development a major element in budget planning**

Macroeconomic scenarios provide a starting point for tax revenue forecasts. Tax revenue forecasts are based on estimates of the development of variables such as private consumption, salary and pension income, and corporate revenues. Forecasts reflect the impact of known changes in the tax basis on tax revenue. The GDP growth rate is the key indicator of economic activity. To a large extent, national economic output determines how income is generated and provides the financial basis for the public finances.

A study commissioned by the Parliament's Audit Committee in 2009 examined the accuracy of the tax revenue forecasts prepared by the Ministry of Finance. The study concluded that the forecast errors made by the Ministry of Finance were not materially different from errors made by other forecast organisations in Finland. An analysis of tax revenue accumulation over a period of 20 years indicated that although tax revenue was, in most cases, underestimated, the forecast error was not systematic because in some years overestimates had been significant. Typically, major over- or underestimates of tax revenue occur at turning points of the economic cycle, 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-linked expenditure. Forecasts of the general price and earnings level affect the development of current transfers to private households and municipalities. Similarly, interest expenditure is becoming a significant expense item. Despite rapid debt growth, interest expenses have remained fairly modest due to the exceptionally low interest rate level.

## **Sensitivity of general government finances to economic cycles**

The sensitivity of Finnish government finances to economic cycles has been assessed by organisations such as the OECD. Due to the size of its government finances and the structure of its national economy, Finland is more sensitive to macroeconomic developments than many other EU countries. In Finland's case, total output remaining at one percentage point lower than anticipated would translate into an almost 0.6% decline in general government finances in relation to total output. The impact on government finances is strongest in the case of tax revenues sensitive to economic cycles, and that of unemployment-related expenditure. Using the above example, the central government's fiscal position in relation to total output would be 0.3–0.4% weaker than forecast. Most of the effects materialise through tax revenue. The sensitivity of different tax types to changes in economic activity varies, corporation tax paid by companies and capital income tax paid by natural persons being the most sensitive. This is because the financial results of companies and capital income, such as sales gains, tend to fluctuate very strongly in response to changes in financial activity. For instance, capital income fell by 21% in 2009 as a result of the financial crisis. Capital income tax revenue decreased by more than EUR 500 million from the previous year, and corporation tax revenue by more than EUR 1,100 million (21%).

Table 2 illustrates the sensitivity of different tax types to changes in the tax base.

**Table 2** Budget sensitivity and economic development

Tax type	Tax base	Change	Change in tax revenue, EUR million	Taxes collected in 2013, EUR million
Income tax	Earned income	1 %	127	4239
	Pension income	1 %	29	670
Capital income tax	Capital income	1 %	29	2168
Corporation tax	Operating surplus	1 %	25	3227
VAT	Value of private consumption	1 %	121	16434
Vehicle tax	No. of new passenger cars sold	in 1,000	7	932
Energy tax	Electricity consumption (tax class I)	1 %	10	689
	Petrol consumption	1 %	13	1296
	Diesel consumption	1 %	14	1272
Tax on alcoholic beverages	Alcohol consumption	1 %	14	1336
Tobacco tax	Cigarette consumption	1 %	7	848
Expense type	Basis of payment	Change	Change in expenses (government), EUR million	Expenditure in 2013, EUR million
Unemployment-related expenditure	Unemployment rate	1 p.p.	312	2529
Salary expenditure	Salary level	1 %	47	4662
Interest expenditure	Interest level	1 p.p.	164	1737

Source: Ministry of Finance

Overall, automatic stabilisers are clearly less significant on the expenditure side than on the revenue side. During a recession, other factors, besides automatic stabilisers, which may increase expenditure include any discretionary public intervention measures needed. The effects of the cyclical fluctuation on government finances and borrowing may vary depending on which factors contributed to the weaker or stronger-than-anticipated development. The more economic activity is affected by domestic demand, the stronger the effect on government finances.

However, using average elasticity – calculated from time series using statistical methods – as a sensitivity indicator may provide an unrealistic picture of the risks associated with macroeconomic development. In a situation where total output is shrinking, as was the case during the early 1990s recession or following the financial crisis in 2009, negative effects on government finances and borrowing may become much stronger than can be expected on the basis of average, normal cyclical

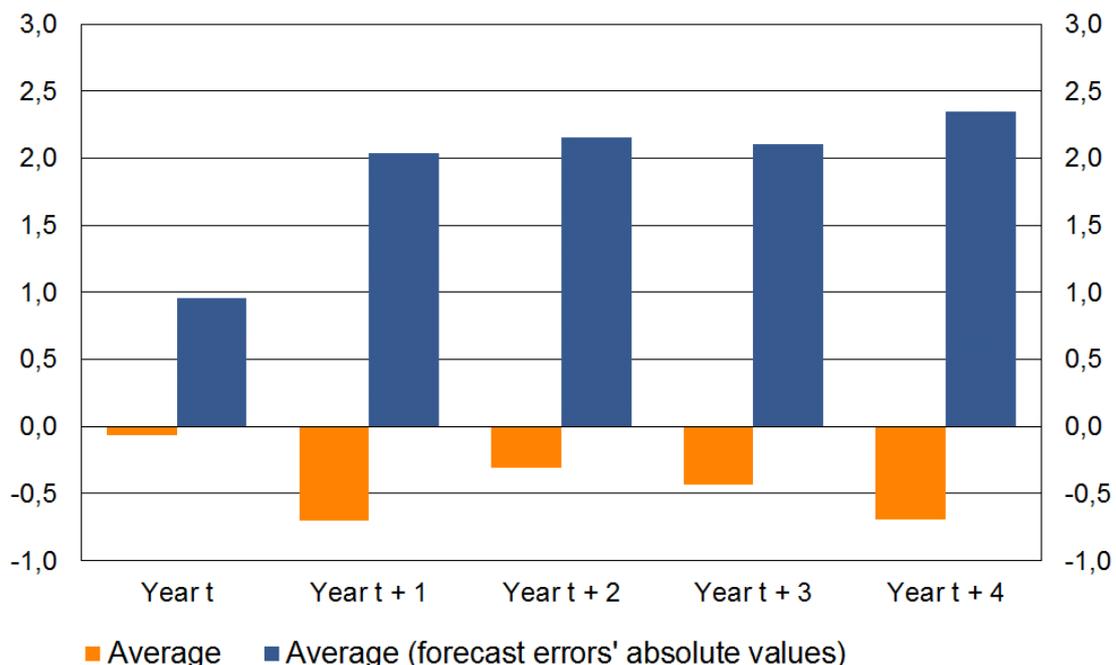
fluctuation. In the early 1990s, the general downward trend in economic conditions had a negative impact on government finances, which was further aggravated by the costs of the banking crisis. Meanwhile, in connection with the financial crisis, active financial policy measures and a range of solidarity measures taken to address the acute debt crisis in Europe resulted in more borrowing.

### Actual economic cycles and forecast errors

The reasons for deviations between the forecast and actual development may include false initial assumptions and/or an inaccurate picture of the interaction between economic players or sectors. For example, if assumptions concerning export market growth or interest rates turned out to be weaker than anticipated, the outcome would be more-modest-than-expected economic activity.

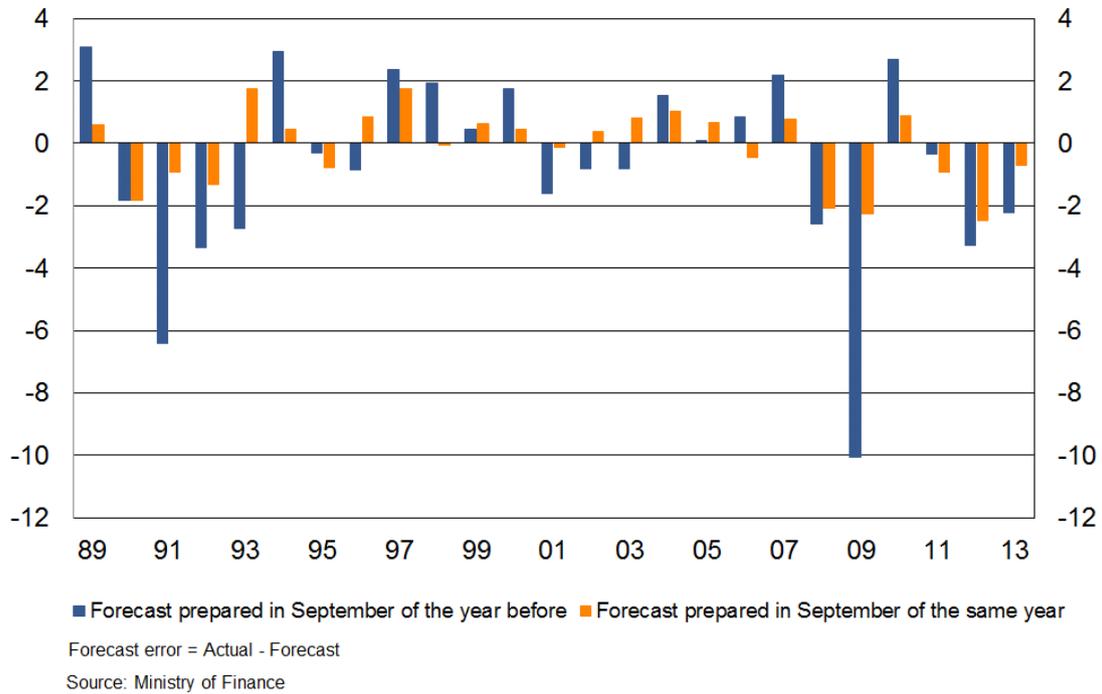
Figure 4 below illustrates the accuracy of the cycle forecasts published by the Ministry of Finance in September 1988–2013 in terms of gross domestic product growth in the current (forecast preparation year) and the following year. These forecasts were used for planning the government budget for the following year. An examination reveals that forecast errors have been more significant than usual during deep recessions and depression. Above-zero values indicate an underestimate of the economic development, while below-zero values show overestimates. In terms of GDP growth, the average forecast error in the period 1988–2013 was -0.7%, which means economic growth was forecast to be stronger than it actually was. In addition to the average forecast error, the diagram below also provides an average of the absolute values of forecast errors. The accuracy of the forecast typically deteriorates as the time span lengthens. The average of the forecast error indicates the potential direction and scale of the bias. Key figures in diagram 3 below were calculated for forecasts covering the forecast preparation year and the following four years.

**Figure 3** Average GDP growth forecast error and average for the absolute values of errors, %



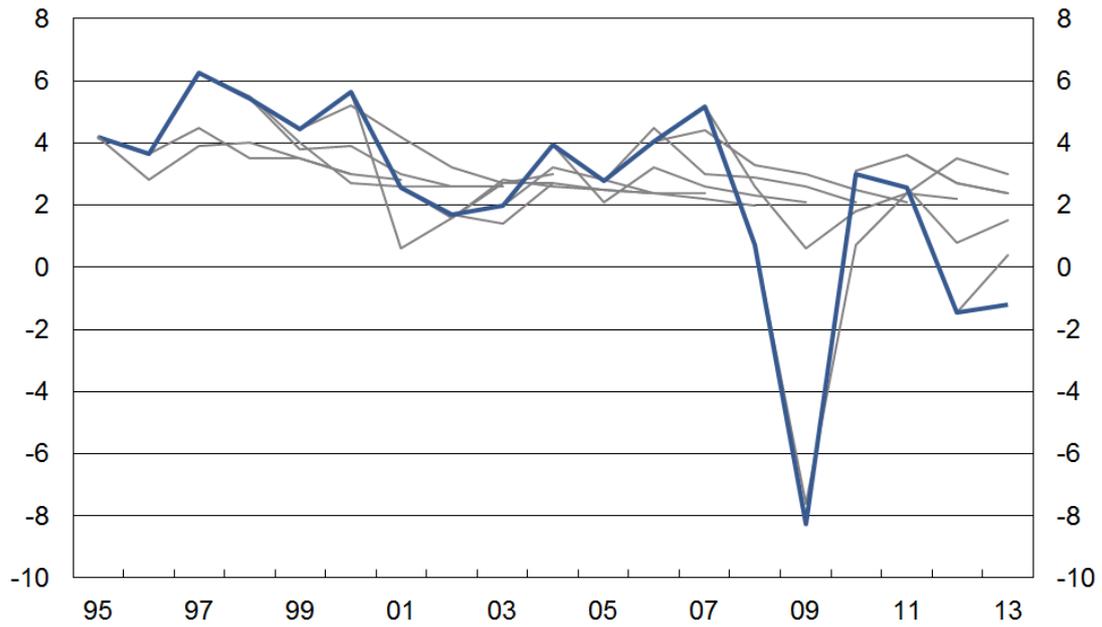
Source: Ministry of Finance

**Figure 4** GDP % growth forecast errors (forecast published in 1988–2013 September)



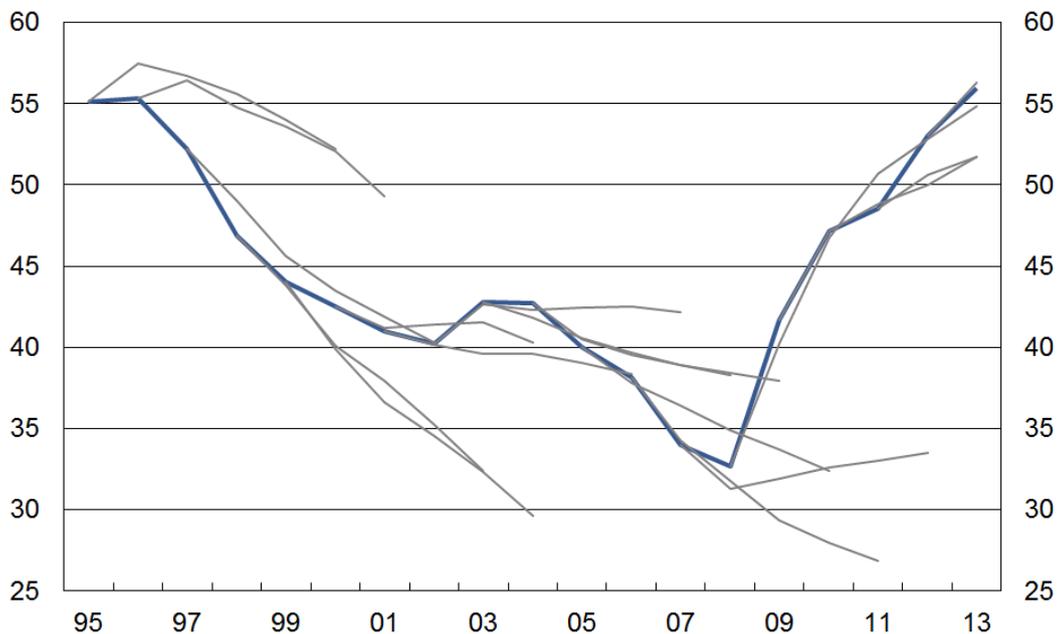
Figures 5 and 6 below illustrate the accuracy of the scenarios shown in the convergence and stability programmes prepared in 1996–2013. The stability programme, in which the euro area countries express their views on medium-term development, is drawn up annually. The longer the time span covered by the economic outlook forecast, the greater the uncertainty. Other factors complicating the preparation of medium-term scenarios include lack of information, at the time the government finance calculations were prepared, to information on all fiscal policy measures affecting government finances and taken by the government during the forecast period. Compared to short-term forecasts, a quantitative analysis of medium-term development is, by nature, a technical review often involving an assumption of a constant revenue and expenditure basis in the government finances.

**Figure 5** GDP % change



Source: Statistics Finland, Ministry of Finance

**Figure 6** Public debt-to-GDP ratio, %



Source: Statistics Finland, Ministry of Finance

Scenarios presented in stability programmes have at times been weak in accurately predicting public debt development trends. During times of economic growth, GDP growth may have been overestimated and, correspondingly, the conditions for decreasing the public debt have been deemed more favourable than they actually were. In recent years, economic growth has fallen behind forecasts, and as a result, the public debt ratio has continued to grow faster than anticipated.

## Risks associated with macroeconomic development and alternative scenarios

For forecasting purposes, views and perceptions regarding economic prospects must be condensed into a single quantitative assessment, which should represent the most likely scenario. However, any forecasts used as a basis for financial planning inevitably involve uncertainties and do not typically enable account to be taken of events that are difficult to predict, such as war, natural disaster, or banking crises. When realised, such events may have a profound impact on economic development. Although it is not possible to include these types of events in a basic forecast, the risks involved must be assessed using alternative scenarios and sensitivity analyses. Alternative scenarios can be used to describe the significance of individual background assumptions for the forecast and the sensitivity of government finances with respect to unexpected events in macroeconomic development.

### 2.2 Government liabilities

The financial liabilities of a government are often described using the fiscal risk matrix shown here.<sup>10</sup> In the matrix, liabilities are divided as follows:

- Are the liabilities recognised by some law, contract or other similar reason, or do they represent social/political obligations, in which case the government considers it necessary to take action to avoid any disruption to the national economy or society?
- Do the liabilities represent an obligation in all circumstances, or is the government only required to fulfil its obligation if a particular event occurs?

**Table 3** Government liabilities

<b>Liability / Obligation</b>	<b>Direct</b> Obligation in any event	<b>Contingent</b> Obligation if a particular event occurs
<b>Explicit</b> Liability recognised by a law	<ul style="list-style-type: none"> <li>- loan, interest</li> <li>- public-private-partnership (PPP)</li> <li>- other contractual obligations</li> <li>- legal obligation to pay</li> <li>- budgetary expenditures</li> </ul>	<ul style="list-style-type: none"> <li>- government collateral</li> <li>- government guarantee</li> <li>- export financing obligations</li> <li>- obligation to cover SMEs' credit and guarantee losses</li> <li>- callable capital in international financial institutions</li> <li>- climate change liabilities</li> <li>- nuclear liabilities</li> </ul>
<b>Implicit</b> 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</li> <li>- other support to the banking sector</li> <li>- state enterprises (increase in share capital to maintain ownership or to ensure business capability)</li> <li>- municipal sector</li> <li>- environmental liabilities, disasters, external security</li> </ul>

<sup>10</sup> Cf. Polackova (1989) and Polacova Brixi and Mody (2002).

This division allows liabilities to be examined as explicit direct liabilities (such as a government loan), explicit contingent liabilities (such as government guarantees or capital in international financial institutions), or implicit contingent liabilities (such as support for the banking sector, or the municipal sector).<sup>11</sup> The analysis presented here mainly follows this division.

### 2.2.1 Debt and life cycle projects

#### **The concept of debt**

On-budget nominal debt has grown by more than EUR 40 billion in six years, totalling EUR 95 billion at the end of 2014. Similarly, municipalities and joint municipal authorities have almost doubled their debt to EUR 17 billion. There is a risk of both state and municipal debt continuing to grow, and not just nominally but relative to GDP. So far, extrabudgetary debt does not represent a similar risk.

Generally speaking, government debt refers to the debt recorded by the State Treasury. The objective of Prime Minister Katainen's Government Programme, to reverse the government debt ratio during the parliamentary term, was based on this concept of debt. The debt recorded by the State Treasury has been used as the basis for objective-setting because of its simplicity.

Nevertheless, it should be pointed out that the coverage of this debt is less extensive than debt as understood in national accounting terms. Debt recorded by the State Treasury includes budgetary and extrabudgetary debt, but not the debts of other units included in the government sector in national accounting. Other off-budget entities include the universities, Solidium Oy, Yle Oy, Senate Properties, and the real estate companies of universities. The total debt of these off-budget entities amounts to EUR 3 billion, with real estate companies accounting for the majority of the debt. Life cycle projects are also excluded from this definition of debt.<sup>12</sup>

In 2012, Finland paid a capital contribution of EUR 1.4 billion into the European Stability Mechanism, directly increasing government debt. Similarly, the loan of EUR 1 billion granted to Greece directly impacted on government debt. In addition, borrowing by the European Financial Stability Facility (EFSF) has built up Finland's public debt by more than EUR 3.5 billion. In total, Finland's participation in the management of the euro crisis has caused an increase in public debt of EUR 6 billion, or approximately 3% of GDP.<sup>13</sup>

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<sup>11</sup> Implicit direct liabilities are excluded from this analysis.

<sup>12</sup> Incorporating items included in EDP debt (excessive deficit procedure) into the State Treasury's definition of debt produces what is known as the central government EDP debt. It includes loans granted to beneficiary countries by the European Financial Stability Facility EFSF, received cash collaterals related to derivative contracts, the capital of the Nuclear Waste Management Fund, debts generated from investments in central government's PPP (public-private partnership) projects, and coins that are in circulation.

<sup>13</sup> Based on Eurostat's decision, EFSF's lending is recorded in the public debt of the individual countries giving guarantees. This is to reflect the idea that loans granted to recipients by the EFSF are recorded in statistics as if they were issued by the countries giving guarantees, and these countries, in turn, owe the corresponding amount to the EFSF. More information regarding government debt and the related forecasts is available in chapter 2.1.2. of the Economic Survey of the Ministry of Finance (cf. e.g. [https://www.vm.fi/vm/fi/04\\_julkaisut\\_ja\\_asiakirjat/01\\_julkaisut/02\\_taloudelliset\\_katsaukset/20140915Taloud/nam\\_e.jsp](https://www.vm.fi/vm/fi/04_julkaisut_ja_asiakirjat/01_julkaisut/02_taloudelliset_katsaukset/20140915Taloud/nam_e.jsp)).

## **Government debt management risks**

Debt management refers to budgetary borrowing, the investment of the government's cash assets, the risks arising from budgetary debt and invested cash assets, and the management of such risks. Cash assets consist of funds in government accounts in financial institutions and in the Bank of Finland.

The objective of the government's budgetary debt management is to meet government budgetary borrowing needs and to minimise debt-related costs at a risk level considered acceptable in the long term.

A policy has been prepared for debt management related risks, specifying the objective of risk management and acceptable risk levels. Government debt and cash assets do not involve any foreign exchange risk. A quantitative model has been drawn up for the interest rate risk associated with debt, and a target has been set. The Ministry of Finance makes decisions concerning the debt management policy and provides guidelines to the State Treasury, which is responsible for the operative side of debt management.

Government debt management risks can be grouped as follows:

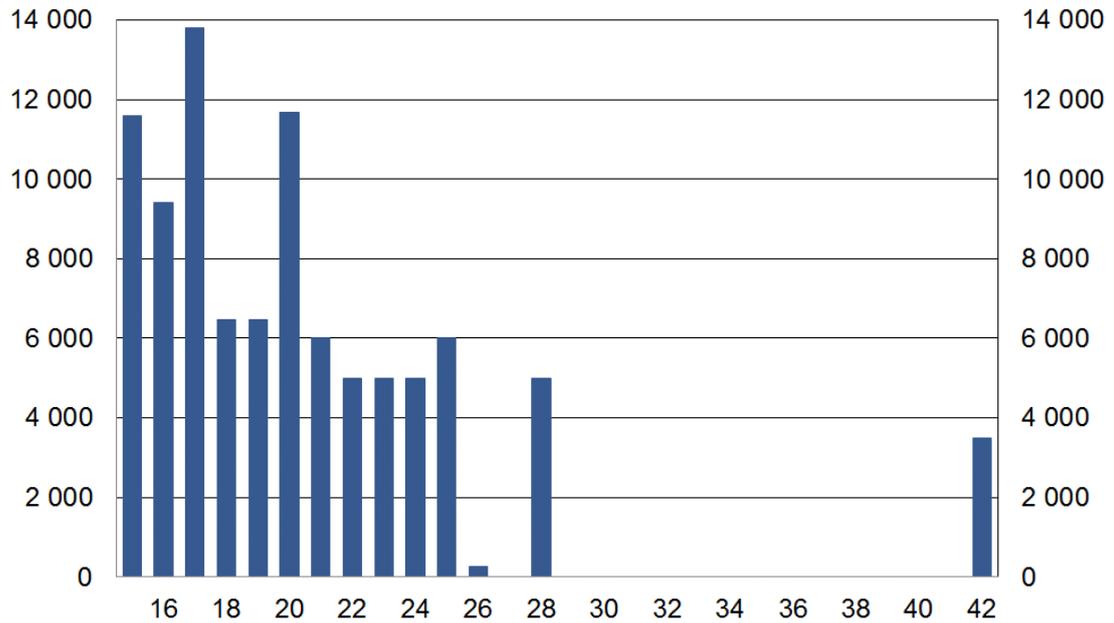
- Financing (liquidity and refinancing risks)
- Market risks (interest and foreign exchange risks)
- Credit risks
- Legal and operational risks, and model risks

Financing risks include risks associated with the availability or terms of financing. This may refer to the risk of insolvency or an increase in the cost of debt caused by exceptional market conditions, government credit rating decline, or other adverse economic conditions. At the moment, borrowing accounts for approximately 10% of government income. Even if the central government finances were balanced, loans maturing annually need to be refinanced with market financing. Gross government borrowing in 2015 is estimated to be more than EUR 18 billion.

Liquidity risk refers to a situation in which the sources of financing available to the government are insufficient to allow the government to cost-efficiently meet its payment obligations in the next 12 months.

The objective of financing risk management is to ensure that the government is able to fulfil its payment obligations in any given situation. This is achieved by maintaining sufficient short-term liquidity with cash assets and invested liquid assets. To ensure long-term liquidity, funding is diversified to avoid excessive reliance on individual sources and the formation of financing risk concentrations. For this purpose, long-term fundraising is arranged in such a way as to permit evenly spread maturities for government loans over future years.

**Figure 7** Government debt amortisation in 2015–2042 (31 Dec. 2014), EUR million

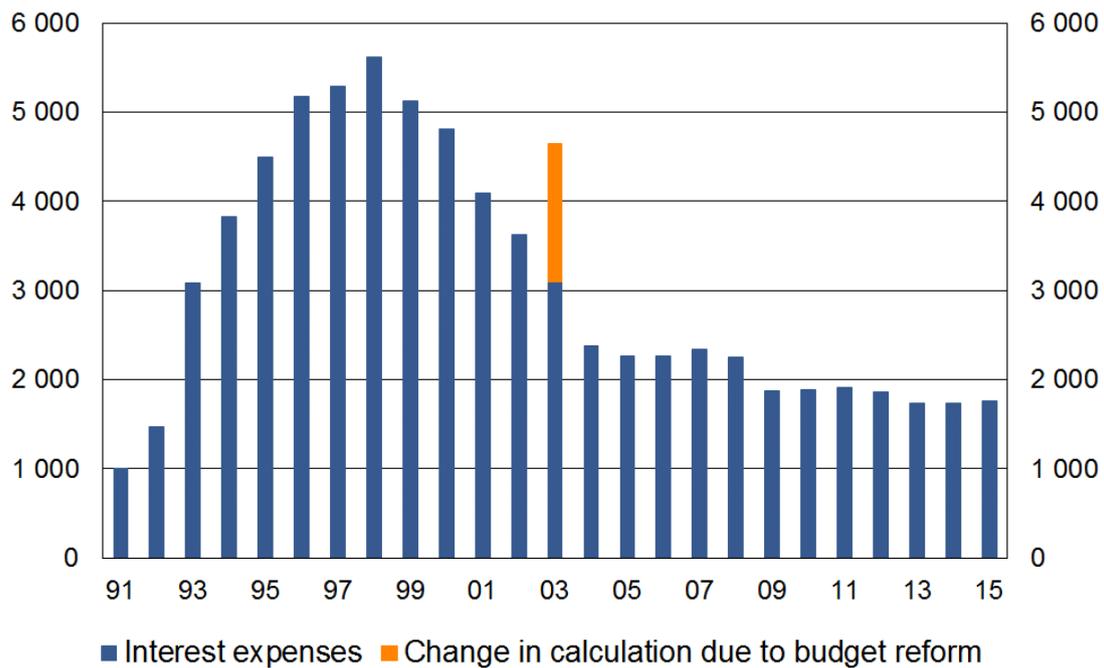


Source: State Treasury

Government debt securities, cash assets and other debt management instruments involve interest rate risk.

In government debt management, interest risk assessment (debt, cash assets, other debt management instruments) is based on Cost at Risk (CaR) analysis, in other words an analysis of the variance of future interest cash flow. This includes systematic modelling of the interest rate sensitivity of the debt, and comparison of the costs of different debt management strategies using model analyses. The purpose of the strategic interest rate risk target selected on the basis of analyses is to minimise expected long-term interest expenses at the selected risk level. Central government debt has almost doubled since 2007, but interest expenses have remained practically the same, or even decreased somewhat (Figure 8).

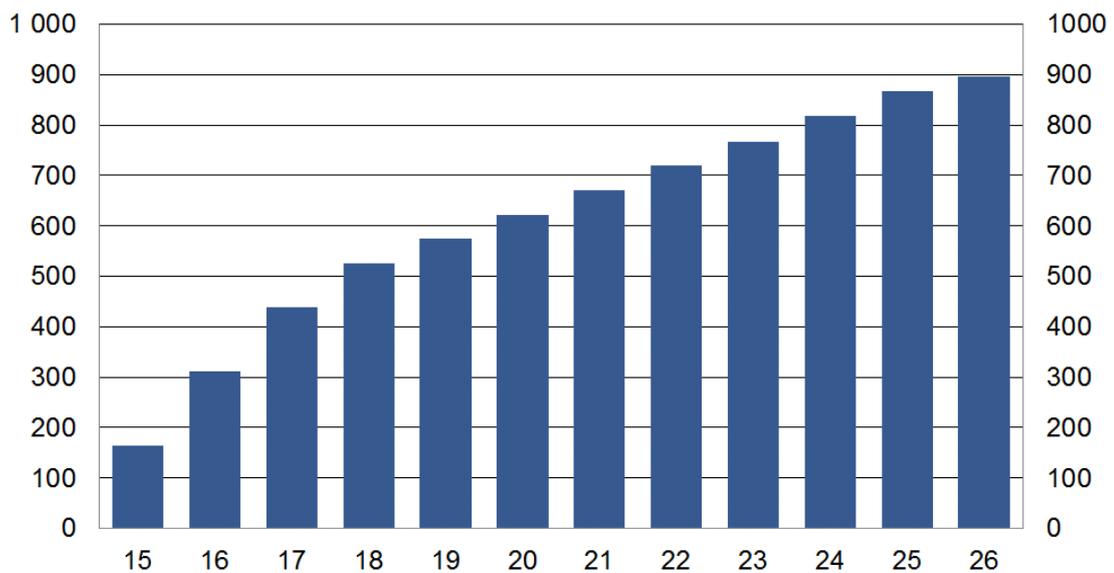
**Figure 8** On-budget interest expenses, EUR million



Source: State Treasury

The interest rate risk associated with debt management can also be analysed using the concept of budgetary risk; this involves examining the change in interest expenses if the general interest rate level were to rise permanently by one percentage point. This would result in an increase in the government's budgeted/forecast interest expenses through repricing of the debt which would, in 2018 for instance, be approximately EUR 500 million higher than projected.

**Figure 9** Budgetary risk, EUR million



\*) Change in net expenditure in the event of a non-recurring, permanent rise in interest rates of one percentage point

Source: State Treasury

Budgetary risk in Figure 9 shows the change in interest expenses when the amount of debt remains unchanged (situation 31.12.2014).

Credit risk refers to the risk of loss in the event of the counterparty's insolvency. Government's credit risks arise from cash assets, invested liquid assets and derivative contracts. Receivables at risk are used to measure credit risk. The objective of credit risk management is to minimise risks.

Foreign exchange risk refers to the risk of financial losses caused by a change in currency exchange rates. In accordance with the current debt management policy, the Finnish Government does not assume any foreign exchange risks in its debt management activities.

Government debt management also entails operational, legal and model risks. The purpose of risk management is to minimise these risks, which in practice means for example adequate competence and resourcing, clearly defined processes and internal control, and, in terms of legal risks, having standard documentation practices in place.

### **Government life cycle projects**

In a life cycle model, or a public-private partnership, PPP, the service provider (road infrastructure company) is responsible for project financing, planning, implementation and maintenance as agreed for a period of approximately 15–25 years. Approximately EUR 500–550 million in funding is allocated every year to transport infrastructure projects under three separate budget items (31.10.77,78 and 79), with the life cycle funding project (31.10.79) being one item. Within the budget, Parliament authorises the Finnish Transport Agency to carry out a life cycle project. Such authorisation includes the costs of actual road construction, and the service fee for road maintenance payable to the road infrastructure company. To this end, Parliament decides annually on the appropriations based on the agreement.

Projects being carried out under a life cycle model for which agreements are currently in effect:

- E18 Muurla–Lohja (EUR 700 million), completed in 2008, agreement in effect until 2029
- E18 Koskenkylä–Kotka (EUR 650 million), completed in 2014, agreement in effect until 2026
- E18 Hamina–Vaalimaa (EUR 660 million), completion in 2018, agreement in effect until 2025

The life cycle model was also used in the construction of the Järvenpää–Lahti motorway but the agreement is no longer in effect and the project has been paid for in full. The life cycle model has been used to carry out major new road construction projects.

The financing solution in a life cycle model is based on risk allocation for the project in question, and the current situation in the financial markets. When submitting a tender for a life cycle project, a road infrastructure company assesses the future

development of interest rates, the uncertainties involved, and the resulting financial risk, which is then factored into the tender.

Experience shows that in large-scale projects, there are few tenderers and tenders are high. Moreover, extensive and complicated agreements also raise the costs of project implementation. The payment mechanism in the projects may be based on traffic volumes or usability. The latter has, however, been perceived as a complicated agreement requiring instructions for its interpretation.

Generally speaking, the risks involved in a life cycle model include an increase in building costs, delays and quality issues in construction work, and maintenance quality and cost risk. There were no delays in the completed projects VT4 Järvenpää–Lahti and E18 Koskenkylä–Kotka, and the construction period was shorter than anticipated. The actual construction works in the E18 Muurla–Lohja motorway project were completed ahead of schedule, but some problems occurred during implementation and efforts to resolve them caused a slight delay in the project's completion. It has been suggested that the model should be improved by focusing more on risk sharing at the tendering stage. It has also been pointed out, however, that it is challenging for the client to identify the correct level of risk allocation, because common European financing terms and conditions do not exist.

As far as the agreements currently in force are concerned, the National Audit Office of Finland (VTV) has assessed (VTV, 2013) the additional expenses arising from index terms in the E18 Muurla–Lohja project. A calculation of the costs over the remaining life cycle has been prepared on the basis of actual index development. According to the calculation, index development would cause the authorisation to be exceeded before the end of the project. The payment mechanism provided in the project service agreement contains at least two different indices and different variations thereof, which complicates cost calculation. In conclusion, it is fair to say that in the case of long and complicated agreements, taking cost level changes into account in total authorised spending and allocating such spending over different budget years is extremely challenging.

From the government perspective, the final calculation of project costs and materialised risks is not feasible until after the termination of agreements, in the life cycle model assessment stage. Factors for which the agreement could not provide, such as new official safety regulations and the resulting costs, and which cause spending to exceed the authorised total, should be introduced to budget discussions as a proposed increase in authorisation. Other items exceeding the authorised total which should have been accurately estimated and included in the authorisation, may have to be introduced to budget discussions during the contract period as a proposed increase in appropriation.

The life cycle model ties up government funds for decades, limiting the opportunities of future governments to start new projects. In the 2016–2019 budget planning period, life cycle projects represent approximately 18–23% annually of the EUR 544 million allocated under key transport network items (31.10.77, 78 and 79). At the current stage, it appears that the authorised total for the E18 Muurla–Lohja project will be exceeded by EUR 35 million due to actual cost development.

It seems that the life cycle model should only be used if the cost of project implementation is lower than with direct budget financing. However, there is no comparison data available to prove this. In the case of the life cycle model, the

agreement includes financing costs, whereas this is not the case with projects funded from the budget. It is fair to assume that the Finnish government could acquire funding at a lower interest rate based on its good credit rating than a private road infrastructure company. The cost-efficiency of project implementation would then rely on the assumption that the project would be carried out more efficiently and with better results than a budget-funded project. However, no such cost-efficiency has, so far, been clearly proven.

**Table 4** Life cycle projects in the government budget, EUR million

	<b>Authorisation</b>	<b>2008-2015</b>	<b>2016-2019</b>	<b>2020-2035</b>	<b>2008-2035</b>
E18 Muurla-Lohja	700	285	158	292	735
E18 Koskenkylä-Kotka	650	94	212	332	638
E18 Hamina-Vaalimaa	660	5	83	572	660
<b>Total</b>	<b>2010</b>	<b>385</b>	<b>453</b>	<b>1196</b>	<b>2033</b>

Source: Ministry of Finance

## 2.2.2 Off-balance-sheet liabilities

This chapter reviews so-called off-balance-sheet liabilities. These include government guarantees, other multiannual liabilities and capital liabilities. Government guarantees have been issued e.g. to Finnvera, students, State enterprises, the European Financial Stabilisation Facility, and the Bank of Finland. In addition, off-balance-sheet funds offer guarantees. Other multiannual government liabilities include government pension liability, need for appropriations linked to authorisations, and contractual liabilities. Capital liabilities refer to government commitments to issue capital to the European Financial Stabilisation Facility or other international financial institutions.

## Guarantees

**Table 5** Government guarantees in 2005-2014, EUR billion

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Finnvera	6.74	7.25	7.20	10.52	13.60	13.15	14.42	15.44	15.67	20.28
Export guarantee and special guarantee operations, total liability	4.54	5.07	4.98	8.29	9.67	8.93	10.37	11.20	11.00	12.60
Domestic portfolio of liabilities*	2.20	2.18	2.22	2.22	2.65	2.79	2.77	2.68	2.53	2.32
Government guarantees on loans and derivative contracts	-	-	-	-	1.29	1.43	1.29	1.55	2.14	5.36
Student loans	1.30	1.31	1.31	1.31	1.33	1.36	1.41	1.49	1.58	1.68
EFSF	0	0	0	0	0	0	2.10	5.13	6.23	6.61
Bank of Finland	4.23	3.99	3.75	3.86	3.8	3.89	3.89	4.07	7.66	7.92
Government funds	-	-	-	-	-	7.91	9.15	10.20	11.17	11.84
National Housing Fund	2.90	5.40	5.60	5.70	6.30	7.85	9.08	10.15	11.12	11.80
Development Fund of Agriculture and Forestry	-	-	-	-	-	0.01	0.02	0.02	0.03	0.03
National Export Guarantee Fund	-	-	-	-	-	0.05	0.04	0.03	0.03	0.00
Other	0.08	0.25	0.23	0.35	1.16	0.28	0.63	0.84	0.45	0.34

\* The government has agreed to compensate for 40–75% of the losses in the domestic liability portfolio – data unavailable  
Source: Ministry of Employment and the Economy, Ministry of Education, State Treasury

### *Finnvera*

Finnvera plc is a specialised financing company owned by the State of Finland. Its purpose is to improve and diversify the financing options available to enterprises by offering loans, guarantees, venture capital investments and export financing services. Finnvera's operations must focus on shortcomings in the supply of financing services. Finnvera is Finland's official Export Credit Agency (ECA). The export financing services offered by Finnish Export Credit Ltd (FEC) are part of Finnvera's operations.

The Act on the State-Owned Specialised Financing Company (443/1998) contains provisions regarding the separateness of domestic operations and the export guarantee and special guarantee operations. In Finnvera's balance sheet, equity and retained earnings are divided into the reserve for domestic operations and the reserve for export credit guarantees.

Finnvera's services involving financial liabilities for the government include loan financing offered to start-ups and for business development. Finnvera may also offer guarantees for different business needs. SMEs can use Finnvera's guarantees as collateral for loans provided by banks and financial and insurance institutions, and for other contingent liabilities.

Finnvera provides export companies with guarantees to help them arrange the necessary financing. The government undertakes to fulfil Finnvera's export guarantee commitments in so far as Finnvera is unable to meet these commitments with funds in its export guarantee and special guarantee reserves on its balance

sheet. In the wake of the financial crisis, Finnvera began to offer direct export credit. The export financing arrangement in the form of a credit was initially based on the government's funding system, in which the government lent Finnvera the funds it needed for its lending activities. Since 2012, Finnvera has been acquiring these funds itself. Fundraising is based on a government guarantee. The guarantee is issued to Finnvera free of charge. Finnvera's export credit financing is not considered a part of central government debt, even though Finnvera acquires its funding under a government guarantee. In national accounting, Finnvera is categorised as a financial sector entity rather than a government administration entity.

The government grants authorisations as a means of regulating the scope of Finnvera's activities. The ceiling for liabilities in domestic financing activities is currently EUR 4.2 billion, while the ceiling for export guarantee liabilities is EUR 17 billion. In the long term, Finnvera's operations must be self-supporting, both in domestic operations and in export financing; in other words, fees from guarantee activities should cover any materialised risks.

The government's financial liabilities from Finnvera's operations have quickly grown from less than EUR 7 billion in 2005 to approximately EUR 20 billion in 2014. This growth can be attributed particularly to export guarantee operations and guarantees on loans and derivative contracts.

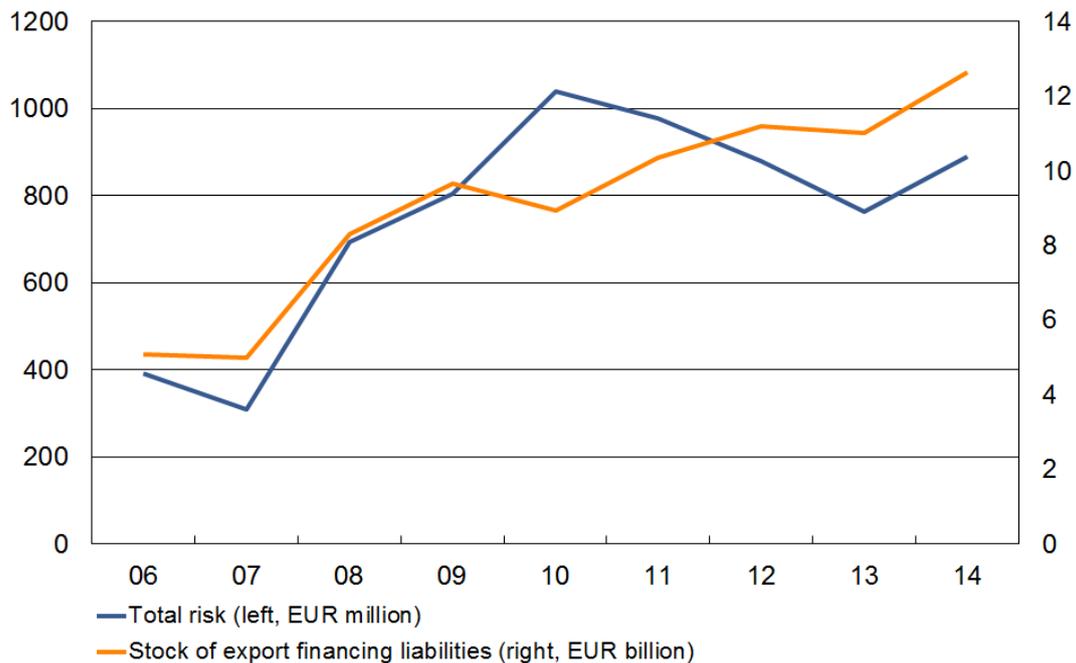
Similarly, provisions have been made for any operational losses. Any losses from Finnvera's export guarantee activities are covered firstly from the export guarantee and special guarantee reserves in its balance sheet, and secondly from the off-budget National Export Guarantee Fund. If the funds in these reserves are insufficient, compensation is ultimately paid from the government budget.

Export guarantee and special guarantee liabilities amounted to EUR 12.6 billion at the end of 2014, and the corresponding reserve to EUR 436 million. If the annual result of export guarantees and special guarantees is negative and the capital held in the reserve is insufficient to cover the loss, funds from the State Guarantee Fund will be used to cover the loss in accordance with Section 4 of the Act on the State Guarantee Fund (444/1998). The State Guarantee Fund's cash assets totalled EUR 656.3 million at the end of 2014. Losses from export credit guarantee and special guarantee activities stood at EUR 11 million in 2013 and at EUR 10 million in 2012.

The government compensates Finnvera for approximately half of its credit losses from its SME financing activities. Any operational losses remaining after this compensation has been paid are covered from the domestic operations reserve in Finnvera's balance sheet. According to a decision made by the Government in 2012, the government will compensate 75% of the credit losses arising from financing granted to start-ups and growth companies.

On 31 September 2014, liabilities from domestic credit and guarantee activities totalled EUR 2.4 billion and the corresponding reserve stood at EUR 135 million. Guarantee and collateral losses in amounted to EUR 101 million, of which the government compensated EUR 48 million. Losses in 2012 stood at EUR 115 million, with government compensation totalling EUR 50 million.

**Figure 10** Stock of export financing liabilities and total risk, EUR billion



Source: Finnvera

The costs incurred by the government from Finnvera's liabilities have been minor in recent years. However, liabilities have grown significantly following the expansion of Finnvera's operations. Defining the risks arising from these liabilities in any simple, clear-cut way is difficult, partly because of the special nature of export guarantee activities; individual projects may entail considerable liabilities and involve a number of risks, such as political risk.

Figure 10 indicates the growth in the export financing liabilities portfolio and the development of the total risk indicator. The total risk indicator, derived from a statistical risk model, describes the maximum losses to be expected from export guarantee activities at a 99 per cent probability during the year in question.<sup>14</sup> The maximum expected losses in 2014 were just under EUR 900 million. This calculation suggests a material increase in total risk following liabilities portfolio growth.

An attempt to define total risk offers a useful way of illustrating the risk to the government caused by Finnvera's liabilities. This calculation model is, however, sensitive to the selected default values. It is difficult to calculate risk owing to the small number of financing targets, which is why the outcomes of the statistical risk model involve uncertainty and the risk magnitude should be considered indicative only.<sup>15</sup> Consequently, it is not advisable to rely on just one indicator for the assessment of total risk. For instance, the National Audit Office of Finland (VTV) has called for risk-related information other than just one seemingly accurate risk indicator.

<sup>14</sup> So-called Value at Risk indicator.

<sup>15</sup> Cf. VTV (2014).

### *Liabilities associated with the euro crisis*

As a member of the European Union (EU) and the euro area, Finland took part in actions to support financial stability in the EU and the euro area through various arrangements in 2008–2014. These arrangements were carried out as part of jointly agreed economic adjustment programmes, which involve various forms of financial assistance.

#### European Financial Stability Facility (EFSF)

The European Financial Stability Facility is a limited liability company founded by the euro area member states in Luxembourg in 2010 to serve as a temporary crisis resolution mechanism by providing financial assistance to euro area member states. Member states guarantee the funding of the EFSF. The maximum amount of the EFSF fundraising programme approved in February 2012 is EUR 241 billion, used to provide financial assistance to Greece, Ireland and Portugal. No new financial assistance can be provided by the EFSF after 30 June 2013. The total amount of funds raised may exceed the specified maximum as the EFSF interest rises, until Greece begins its loan amortisation in 2023.

Finland's share of guarantees in the funds raised by the EFSF, including interest and over-guarantee, totalled EUR 6.61 billion on 31 December 2014.<sup>16</sup>

Based on the guarantees given, Finland may have to make payments to the EFSF if a beneficiary country fails to repay the financial assistance or its interest to the EFSF. In this case, Finland would have to pay the EFSF an amount representing its share of guarantees required by the EFSF in order to make payments to its financiers in keeping with its commitments. Moreover, the EFSF's fundraising strategy involves operational risks and counterparty and market risks which may, to some extent, materialise regardless of the beneficiary's solvency. Finland has received collateral payments<sup>17</sup> to limit the risks associated with financial assistance provided under the second programme for Greece and the programme for Spain. The collateral represents 40% of Finland's calculated share of the loan. The collateral payments associated with the assistance programmes referred to above were paid in full by the end of 2014 as agreed. The market value of collateral accumulated in Spain's programme is approximately EUR 298 million and in Greece's programme approximately 930 million. In total, the market value of collateral received by Finland stood at EUR 1.23 billion on 31 December 2014. 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).

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<sup>16</sup> The so-called over-guarantee on the capital and interest of the funds raised required to secure the credit rating is taken into account when calculating Finland's guarantee liabilities.

<sup>17</sup> The initial amount of the collateral payments is based on loan principal and on Standard & Poor's assumption of losses based on previous experience of losses incurred by bond holders in government debt arrangements. The collateral covers some of the credit risk associated with the beneficiary country.

### **Assessment of risks related to the euro area stability mechanisms**

There are a number of ways to assess the risks for Finland arising from the management of the debt crisis within the euro area. One way is to calculate the total liabilities for Finland of different financial instruments and assess the potential of these to jeopardise the sustainability of Finland's public finances if, in extreme conditions, Finland was required to answer for all of its liabilities.

Another way of assessing the risks related to Finland's liabilities is to make assumptions, based on existing market information, in relation to the liabilities and the probability of default by existing and potential beneficiary countries, and with respect to the expected value of financial losses in the case of receivables being restructured. Simplified assumptions, such as the following, must be made to calculate the expected value of a potential financial loss: 1) the probability of default by existing and potential future crisis states is assumed to be 30 per cent, 2) in the event of insolvency, the write-down on EFSF funding is 40 per cent and for ESM it is 10 per cent. Due to its preferred creditor status, the IMF has not been forced to write down receivables from crisis funding provided to emerging economies. In the case of the ESM, the write-down could be set on a formulaic basis at 10 per cent. Furthermore, 3) in addition to the current EFSF programmes for Ireland, Portugal and Greece total financial assistance is assumed to include the ESM's entire capacity, totalling EUR 700 billion.

Based on these assumptions, the expected value of potential financial losses from Finland's liabilities in the EFSF and ESM crisis funding would come to approximately EUR 700 million. If the probability assumption for insolvency rises to 50 per cent, the expected value of potential financial losses from Finland's liabilities would grow to EUR 1.2 billion. This risk assessment is simplified and indicative only, and involves a great deal of uncertainty. For example, the assumed probabilities of insolvency may underestimate or overestimate the risks. The expected write-down rate also affects the probability calculation. If one changes, it affects the other. Moreover, potential losses do not materialise all at once but over a long period of time.

### International Monetary Fund (IMF)

The Bank of Finland uses its foreign exchange reserve to account for Finland's commitments to the IMF. The Bank of Finland has a government guarantee on all IMF commitments made by the Bank of Finland, as the law requires the bank to have sufficient collateral for lending activities. Government guarantees for the Bank of Finland's IMF commitments totalled EUR 7.9 billion at the end of 2014.

### *Student loans*

The portfolio of government guaranteed student loans shrank from the mid-1990s to 2005, after which it has been gradually growing from approximately EUR 1.3 billion to EUR 1.7 billion in 2014. The government guarantee on the student loan is specified in detail in the Student Financial Aid Act. The amount of government guarantee on the student loan is EUR 260–700 per month.

The amount of guarantee liability receivables being collected through a recovery procedure in 2013 totalled EUR 159.6 million. Loans repayable by the government under its guarantee commitment were on the same level as 10 years ago; just under EUR 20 million. A peak was reached in 2009 at EUR 27.6 million. Guarantee liability payments per person were EUR 4,200–4,400 on average.

Guarantee liability receivables fell in 2007 and have remained lower since. In 2003, receivables accounted for 13.4 per cent of the loan portfolio compared to under 10 per cent in 2013. Meanwhile, general government guarantee receivables represented 1.2–2 per cent of the loan portfolio. The number of people entitled to guarantees has decreased by approximately 13 per cent in the last 10 years. In the last ten years, guarantee liability payments have represented between 10 and 16 per cent of guarantee receivables.

Annual revenue from recovery procedures has been very close to annual guarantee liability expenditure. In 2014, revenue amounted to EUR 22 million against guarantee liability expenses of EUR 20.7 million. Unemployment is likely to decrease revenue and increase guarantee liability expenditure. Net expenses from the loan system to the government have been small in recent years. In some years, revenue has exceeded guarantee liability expenses. Expenses also include statute-barred receivables. An effective recovery procedure for guarantee liability debt may help to prevent an increase in guarantee liability expenses.

#### *Off-budget central government funds*

The central government currently has 11 off-budget funds. According to information held by the State Treasury, the National Housing Fund, the Development Fund of Agriculture and Forestry, the National Emergency Supply Fund and the State Guarantee Fund have government guarantees.

Interest subsidies on loans granted by financial institutions for government-supported housing production and for major renovations, as well as assistance related to subsidised loans are paid from the National Housing Fund. Other Fund expenses include housing production start-up assistance, municipal engineering aid, assistance for housing area development, financing for development projects, and various support measures for rental housing corporations in financial difficulties. Furthermore, the Fund is responsible for providing collateral security for subsidised loans, government guarantees for owner-occupied housing loans, guarantees for preferred loans associated with Arava loans, and expenses arising from guarantee loans and loan receivable recovery in rental housing. The Fund also uses its assets for loan amortisation and interest payment.

The Fund's revenue consists of Arava loan repayments and interest, and various payments associated with government guarantees.

In practice, almost the entire guarantee portfolio of off-budget funds consists of housing loan guarantees for state-subsidised housing production. On 31 December 2013, government guaranteed housing loan portfolio exceeded EUR 11.1 billion. In the past ten years, the housing loan guarantee portfolio has grown by approximately 18 per cent per year, following the 2008 switchover in the housing loan system from direct loans to subsidised loans and the collateral security granted for such loans.

The majority of the guarantees, approximately EUR 9 billion in 2013, are linked to interest-subsidised loans granted by financial institutions for rental and right-of-occupancy housing. Subsidised loans and right-of-occupancy loans and guarantees are available to municipalities, other general government entities or non-profit corporations. The guarantee applies to the entire subsidised loan, which may cover up to 95 per cent of the costs of land and rental housing construction. Guarantees for right-of-occupancy housing cover up to 85 per cent of the costs of land and

construction. These guarantees do not require a separate application; instead, they are granted automatically when an application for a subsidised loan is approved.

Older Arava loans granted directly by the State may be converted into larger loan entities granted by other financial institutions. A government guarantee is granted for the full amount of these converted loans. The guarantee fee is 0.5 per cent of the loan principal.

Government guarantee for rental housing production is also available to entities other than those referred to above. These guarantees are subject to a guarantee fee, which represents 0.5% of the loan principal.

Government guarantees may also be granted to private individuals. This loan portfolio stood at EUR 2 billion in 2013. Anyone who buys or builds a home is eligible for a government guarantee on their home loan. This guarantee is granted in situations where the applicant is unable to provide adequate collateral for the home loan. Banks may grant government guarantees as part of their home loan decisions. Customers are not required to apply for the government guarantee separately, nor are there any limitations regarding income or wealth. Customers who request a government guarantee on their home loan will be granted one. The maximum government guarantee is 20 per cent (25 per cent in ASP loans) or EUR 50,000 per home. The guarantee is subject to a fee representing 2.5 per cent of the guaranteed amount. Guarantee fees will not be collected for interest-subsidised loans (ASP loan).

Since the beginning of 2015, guarantees are also available for housing corporation loans to be used for major improvements. The maximum amount of such a guarantee loan is 70 per cent of the approved costs of improvement. The guarantee fee represents 2 per cent of the loan principal.

Guarantees were previously granted for low-energy home construction or for home purchases to private individuals on the basis of means testing, but since the beginning of 2015 such subsidised loans or guarantees are no longer granted.

All of the guarantees referred to above include terms and conditions, particularly with respect to the amount of the loan and reasonable terms. Furthermore, government guarantee is the secondary collateral in all home loan guarantees. If the income on realisation is not sufficient to cover the bank's loan receivables, the government will pay the bank a guarantee compensation prescribed by law.

The National Housing Fund is exposed to two risks: credit loss risk and interest risk. Until now, guarantee fee income has significantly exceeded the credit losses on loans. However, credit loss risks are expected to grow in regions experiencing a population loss following the decrease in housing needs and the ageing and reduction in the value of the housing stock. Another risk-increasing factor is that home loans repayment schedules tend to leave the biggest instalments for the final years.

Interest rate risks on subsidised loans paid from the National Housing Fund have grown following reductions in the co-payment portion of interest and an annual increase of approximately one billion euro of the subsidised loan portfolio. The co-payment portion of government-issued loans is currently 1 per cent, and the government covers expenses in excess of this rate in accordance with descending

percentage rates. According to the National Housing Fund's estimate, at an interest rate of 5 per cent interest expenditure from the existing subsidised loan portfolio would grow to approximately EUR 1.2 billion during the remaining maturity of the portfolio.

## **Other**

The table below indicates the government's multi-annual liabilities. The largest item in the state budget economy is government pension liabilities.

Pension liability means the amount required, including future investment income, to cover the costs of pension benefits accumulated. Government pension liabilities indicate the total cost of the government's pension commitment to former and present employees.

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 liability changes annually: those employed continue to earn more pension, new people retire, and people entitled to pension die. In 2013, government pension liabilities totalled approximately EUR 94 billion and the funding rate was 17 per cent.

Government pensions amounted to approximately EUR 4.3 billion in 2014. Pensions are paid out of appropriations reserved in each year's budget. Every year, the amount recognised as revenue in the budget by the State Pension Fund (VER) accounts for 40 per cent of the year's pension expenses. Occasional exceptions have been made; for instance in 2015 the amount recognised as revenue was increased by EUR 500 million. Considering that VER's income consists of employer and employee pension contributions on the one hand and of investment income on the other, the funding system for the government pension expenses is exposed to risks arising from unexpected changes in the wage bill, and in investment assets and return on investment. While a decrease in the wage bill would weaken VER's income base, from the government perspective it would decrease direct labour costs and curb the growth of pension liabilities.

Equity investments account for 40 per cent of the State Pension Fund's investments, fixed income investments for 51 per cent and other investments for 9 per cent. An investment plan annually approved by the Board of Directors and investment limits provide the guidelines for risks in investment activities. Management is responsible for investment activities and for the related operational risk management. Portfolio stress testing is reported to the risk management committee and the Board of Directors on a quarterly basis.

Other multi-annual liabilities amounted to approximately 10 billion in 2013. These include rental agreements for government agencies and universities, compensation payable under government non-life and motor vehicle insurances, and agreements and contracts related to basic transport infrastructure management. This information has been included in the government's annual report since 2011.

An authorisation to commit to an investment, an acquisition or a subsidy may be granted in the budget. If such authorisations are exercised, appropriations will be needed, their ceiling being the maximum amount of the authorisation. Based on authorisations granted in 2005 or earlier, future appropriations to the amount of EUR

9 billion were tied up. In 2013, the appropriations required due to authorisations had grown to more than EUR 11 billion.

The multi-annual liabilities of off-budget entities and state enterprises are relatively small. The biggest item is the State Pension Fund's investment commitments (binding commitments which have not been paid out yet but for which there are existing agreements) which amounted to EUR 520 million in 2013.

The Senate Properties finances some of its real estate investments through loans from financial institutions. Net borrowing in 2014 amounted to around EUR 50 million. The Senate Properties is a state enterprise, and the government answers for any loans it takes out from financial institutions.

Government liabilities for the loans of Senate Properties stood at EUR 1.3 billion at the end of 2014. In 2005, liabilities amounted to EUR 0.5 billion. This increase can be attributed to the replacement of loans granted directly by the state to loans from financial institutions.

The Senate Properties has a high equity ratio: 64% in the financial statements for 2014, with strong income financing. The Senate Properties hedges against interest rate risks in accordance with the interest risk policy prepared by the company's Board of Directors.

**Table 6** Government liabilities in 2005-2014, EUR billion

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Liabilities / state budget economy	66.40	88.25	93.57	96.13	99.48	103.34	110.43	116.96	115.38	130.14
Other multi-annual liabilities, appropriations required	-	-	-	-	-	-	6.79	8.69	8.95	7.48
Government pension liability <sup>1</sup>	57.60	79.30	82.70	85.60	88.40	90.60	89.70	92.60	94.00	95.40
Appropriations required following the exercise of authorisations	8.80	8.95	10.87	10.53	11.08	12.74	12.76	14.50	11.28	10.00
Liabilities / Off-budget entities	-	-	-	-	-	0.32	0.39	0.53	0.58	0.74
Other multi-annual liabilities, appropriations required	-	-	-	-	-	-	0.05	0.06	0.06	0.07
Investment commitments	-	-	-	-	-	0.32	0.34	0.47	0.52	0.67
Liabilities / State enterprises	-	-	-	-	-	1.41	1.46	1.51	1.62	1.77
Senate Properties' loans	0.54	0.71	0.84	1.08	1.29	1.00	1.06	1.20	1.22	1.35
Rental liabilities	-	-	-	-	-	0.27	0.25	0.25	0.26	0.26
Leasing liabilities	-	-	-	-	-	0.01	0.01	0.01	0.01	0.01
Investment commitments	-	-	-	-	-	0.13	0.15	0.06	0.13	0.14

Source: State Treasury. <sup>1</sup>The calculation formula for government pension liabilities changed in 2006, therefore any previous figures are not comparable.

### 2.2.3 Capital liabilities

Capital liabilities refer to payment the government is required to make to international financial institutions in the event that capital is required to cover losses or to avoid insolvency. Several international financial institutions have increased their capital in recent years, causing a consistent rise in callable capital. By far the most significant increase in capital liabilities was, however, caused by the establishment of the European Stability Mechanism. Our principal focus here is therefore on capital liabilities arising from the ESM.

**Table 7** Government capital liabilities, EUR billion

	2008	2009	2010	2011	2012	2013	2014
Asian Development Bank (AsDB)*	0.12	0.12	0.40	0.41	0.40	0.38	0.41
African Development Bank (AfDB)*	0.11	0.10	0.11	0.35	0.35	0.33	0.35
Inter-American Development Bank (IDB)**	0.11	0.11	0.12	0.12	0.13	0.14	0.18
European Bank for Reconstruction and Development (EBRD)	0.18	0.18	0.18	0.30	0.30	0.30	0.30
World Bank Group (WBG)**/**	0.70	0.68	0.74	0.76	0.79	0.87	0.97
European Investment Bank (EIB)	2.00	2.82	2.82	2.82	2.82	2.82	2.82
Council of Europe Development Bank (CEB)	0.04	0.04	0.04	0.06	0.06	0.06	0.06
Nordic Investment Bank (NIB)	0.69	0.69	0.69	1.01	1.01	1.01	1.01
European Stability Mechanism (ESM)	0.00	0.00	0.00	0.00	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>

\* 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), Multilateral Investment Guarantee Agency (MIGA).

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

### European Stability Mechanism

The purpose of the European Stability Mechanism (ESM) is to safeguard financial stability within the euro area using funds raised from the markets. The ESM is a permanent stability mechanism acting as an international financial institution, backed up by its own paid-in capital. The maximum lending capacity of the ESM is EUR 500 billion. The EUR 700 billion subscribed capital of the ESM consists of EUR 80 billion in paid-in capital and a maximum of EUR 620 billion in callable capital. The ESM shareholder contribution key is based on the ECB capital subscription. On 31 December 2014, the ESM's lending capacity amounted to EUR 500 billion, with EUR 45.4 billion being used.

Finland's capital subscription to the ESM is EUR 12.58 billion, with paid-in capital accounting for EUR 1.44 billion and callable capital for EUR 11.14 billion. The Finnish government used approximately EUR 1.44 billion worth of budget funds to capitalise the ESM in 2012. Participation in the ESM also involves a commitment by

the government to contribute EUR 11.14 billion in callable capital in the event of the insolvency of the ESM, or if the reserve fund and paid-in capital are insufficient to cover losses. The need to contribute callable capital in the future depends on how many financial assistance programmes will be approved, and to what extent the euro area is able to restore stability in the near future. The commitment to contribute callable capital may account for up to 5 per cent of Finland's GDP. Paid-in capital of EUR 1.44 billion accounts for less than one per cent of GDP. This is not a contingent liability; instead, it is regarded as a government asset. The paid-in capital of the ESM generates a return. Risks to countries participating in the ESM are limited by: 1) unanimous decision-making regarding new financial assistance programmes; 2) the status of the ESM as the preferred creditor (after the IMF) and a reserve fund.

#### 2.2.4 Contractual liabilities<sup>18</sup>

The government is responsible for the achievement of emissions targets in the non-ETS sector, or the so-called burden-sharing sector (transport, agriculture, housing). At the moment, it seems that the current emissions reduction obligation (-16% from the 2005 level by 2020) will be met. If, for any reason, the emissions development would take an unfavourable turn, the government would either be forced 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. Otherwise, the housing and agriculture sectors do not create any pressures on emissions.

Nuclear liability is specified in the Nuclear Liability Act. Nuclear liability refers to liability the nuclear power plant licensee has for damage to third parties. The act on the temporary amendment of the Nuclear Liability Act came into force on 1 January 2012. According to 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 approximately EUR 700 million. The licensee is required to have insurance of 600 million SDR to cover these liabilities. Finland has joined international conventions that obligate the participating countries to compensate for damage in excess of the licensee's liabilities. These conventions provide compensation for damage up to 125 million SDR (approximately EUR 146 million).

#### 2.2.5 Liabilities associated with the banking sector

Financial and banking crises are rare<sup>19</sup>, but the resulting costs are extremely high<sup>20</sup>. In general, these crises have a significant and negative impact on economic development, but the most recent financial crisis has been exceptionally harmful in this respect. It showed that when the banking sector or individual large credit institutions experienced major difficulties, the public sector had to resort to support

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<sup>18</sup> The government's contractual liabilities are not discussed extensively in this review.

<sup>19</sup> According to the IMF's calculations, 147 systemic banking crises occurred globally in the period 1970–2011 (Laeven and Valencia 2012). In a systemic crisis, deposit flight is a common phenomenon. It is also typical that banks sustain major losses, 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.

<sup>20</sup> Cf. Reinhart and Rogoff (2009).

measures to ensure the continuity of financial operations necessary for the economy and society, even though such measures are not required by law.

In some EU member states, such as Ireland and Spain, support provided to credit institutions resulted in a severe deterioration of central government finances, a sharp rise in indebtedness and growing market uncertainty, protracting the general economic crisis and increasing its social costs. Furthermore, problems in the banking sector have destroyed the creditworthiness of some countries, forcing them to seek external support. Even without public support, banks' difficulties have weakened the channelling of funds and economic growth. A steep rise in general government debt naturally imposes a considerable long-term burden on taxpayers.

A government bailout was required in Finland too. When the current financial crisis reached its deepest point in 2009, the government agreed, based on a decision by Parliament, to provide an initial guarantee of EUR 50 billion for credit institutions' funding, and to provide EUR 4 billion in capital support to viable credit institutions within the framework of the Commission's government aid regulations. Ultimately, there was no need for these support measures, and the unused commitments expired. At the height of Finland's banking crisis in the early 1990s, the government had to offer direct support to the banking sector involving significant use of government funds. According to an IMF estimate, direct costs were almost 13% of GDP, in addition to which the crisis caused significant indirect costs as total output plummeted, resulting in loss of tax revenue and an increase in social expenses (such as unemployment benefits).

### **Government responsibility to provide support to banks in a crisis**

The question of whether the government should support the privately-owned banking sector in times of need has been widely debated. The government is deemed to have ultimate responsibility for the overall safety and security of society, and for basic functions, including critical financial services such as deposit accounts and payment systems. Denying any responsibility is not therefore plausible, and in times of crisis it has been very difficult for governments to avoid taking responsibility even if using public funds directly or indirectly for support measures has been considered questionable and the result of a failure in the banks' risk management.

Others have argued that, in normal times, implied government support could deliver financial gain to potential recipients, creating moral hazard based on reckless risk-taking. In their assessments, credit rating agencies factor in any government support and its impact on the bank's total risk exposure estimate, which in turn affects the cost of fundraising.<sup>21</sup> The bigger the bank, the more likely government support is usually considered. In extreme situations, some banks are deemed "too big to fail". European experience has shown that in difficult, rapidly changing conditions, it is extremely difficult to divide banks into those that are to be bailed out and those that are allowed to fall.

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<sup>21</sup> It is difficult to accurately assess the scale of such support, but according to IMF estimates it remained as high as 60–90 basis points in the euro area in 2013. If the amount of Finnish banks' debt-based fundraising, which represents approximately 200 per cent of GDP, is multiplied by the average of the IMF's estimate, the expected value of such support is around 1.5 percent of GDP. Similarly, according to Moody's estimates the assumed "systemic support" for the Finnish banking groups represents 2-3 notches (in the credit rating scale) in the long-term rating. Moody's will, however, consider the probability of support in the new regulatory environment and this may affect banks' credit ratings.

The authorities have lacked the means and regulatory tools to resolve sudden nationwide or crossborder banking crises without, in some cases, significant support measures and use of government funds. Based on an EU Directive, the new crisis resolution legislation for banks and investment firms came into force at the beginning of 2015, materially changing the previous liability configuration. One of the key objectives of the new law was to dramatically decrease the capital subsidy provided by governments in the event of a crisis. To achieve this, the owners of the institutions and holders of credit instruments are assigned principal responsibility for covering the costs of crisis resolution. Secondly, the institutions will build up crisis resolution funds which will provide funding for crisis resolution arrangements as required. The home state of the ailing bank is next in line after these. In addition to the resolution arrangements, the new regulatory framework offers supervising entities better opportunities for early intervention if there are signs of trouble.

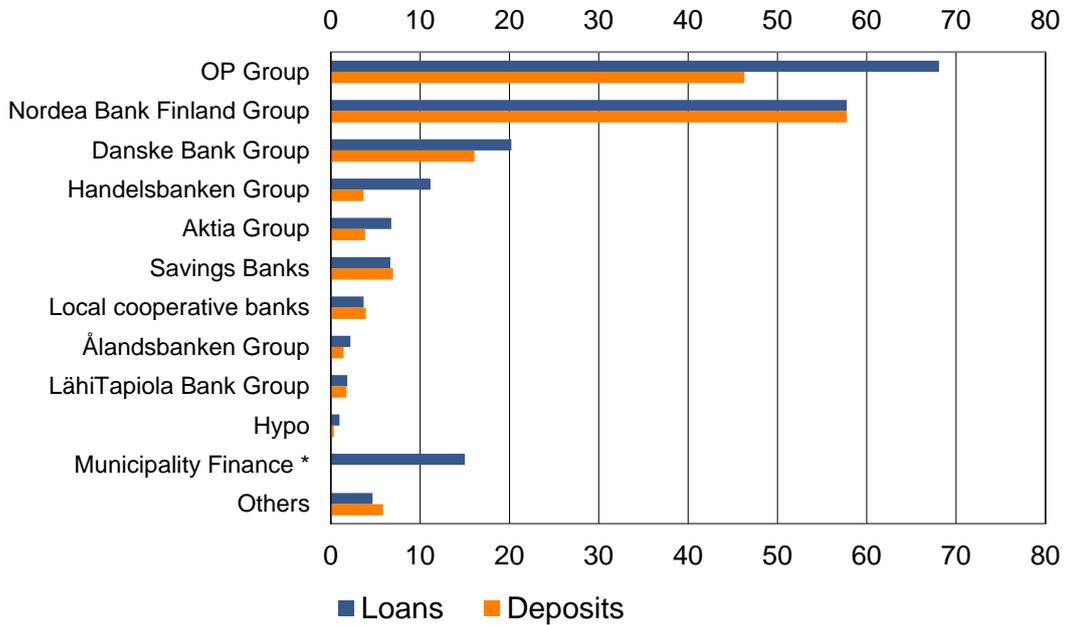
The introduction of the new regulatory system will materially decrease implicit liabilities in the form of capital subsidy but not eliminate them altogether; this is because, in the worst crisis scenarios, the costs of upholding the activities of a major bank playing a key role in the financial system are very high, and investor liabilities and crisis resolution funds may not always be sufficient to cover them. But at least a clearly defined procedure is now in place on how to proceed in the event of a banking crisis. It is also fair to assume that the new regulatory environment will clearly reduce the need for government funds – in other words, government liabilities – although there may be some uncertainties as to how to enforce investor liability in a situation of severe market stress. Macroprudential tools (capital buffers, risk weight definitions, maximum loan-to-value ratio etc.) can also bolster the banks' capital adequacy and help to prepare for any problems in advance.

Crisis resolution regulations do not apply to banks' liquidity risks. EU regulations designed to prevent a liquidity crisis are in the pipeline, but regulation similar to that now in place for crisis resolution is unavailable (nor is such regulation being planned, as far as we are aware). In an acute crisis, a bank can turn to a central bank and apply for emergency funding subject to the ECB's approval. In such a case, the government may have to provide a guarantee to the central bank if the applicant bank's collateral for emergency funding is insufficient.

### **Structure and situation of the Finnish banking sector**

Considering the size of the Finnish economy, the banking sector is fairly large (the combined banking balance sheet is approximately 270–280 per cent of GDP) but the dominant features include a concentrated structure and strong links to other Nordic countries. Three credit institution groups control the banking market, two of them under foreign/Nordic ownership. The combined balance of the largest three players accounts for about 80 per cent of the total, while the combined share of the two large foreign entities and the subsidiaries/branch offices of foreign/Nordic banks operating in Finland totals approximately 70 per cent. The high degree of concentration within Finland and, through ownership arrangements, with Sweden and Denmark increase the banking sector's sensitivity to disruptions. It is fair to say that the Finnish banking sector is subject to a systemic risk arising from its structure. Systemic risk usually enhances cyclical risk and vice versa.

**Figure 11** Bank loans and deposits at the end of 2013, EUR billion

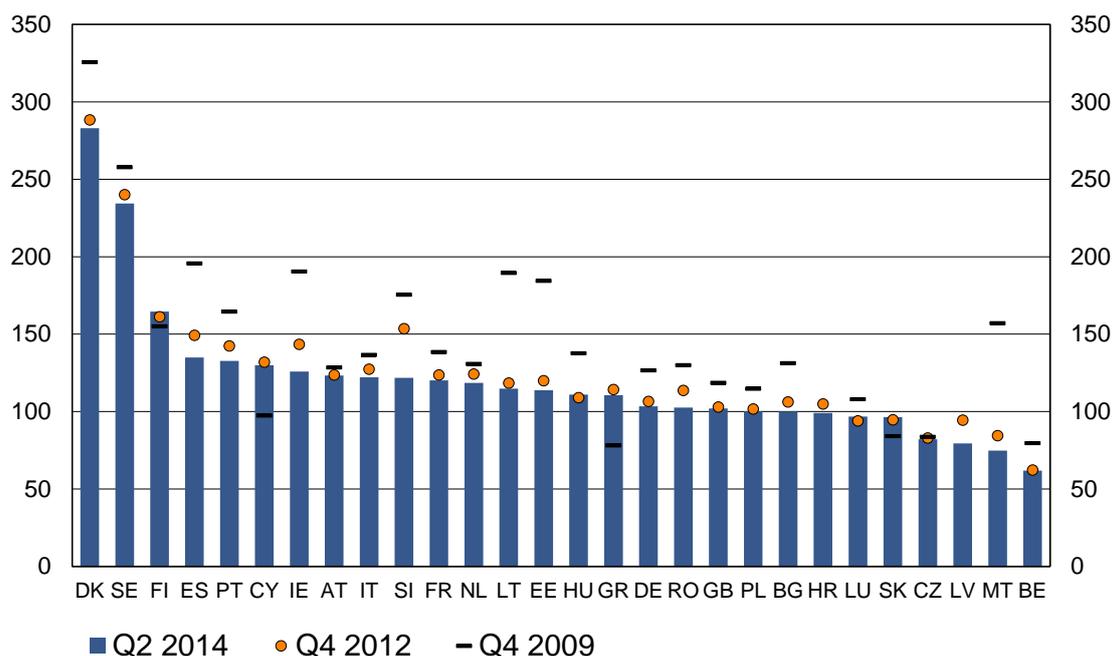


\*) Based on an estimate

Source: FFI, Bank of Finland, Municipality Finance

In recent years, the focus of Finnish banks' funding has shifted towards market financing. The difference between loans to and from the public (financing gap) is approximately EUR 60 billion compared with EUR 30 billion in 2006. On the other hand, Finnish banking groups have successfully used facilities such as mortgage-backed bonds to reduce their dependence on short-term market financing, which may cause a significant liquidity risk in the event of a market disruption (Lehman Brothers bankruptcy). Finnish banks have been able to maintain the confidence of foreign investors throughout the financial crisis. This can be partly attributed to the strong creditworthiness of the Finnish government. Banks can, if necessary, borrow from the central bank against collateral or, in an emergency where collateral is unavailable, against a government guarantee.

**Figure 12** Bank dependence on market financing, loans/deposits, %



Source: ECB

In addition, Finland-based banks that are part of Nordic financing groups raise some of their funds internally. Due to intra-group financing arrangements, a pan-Nordic banking crisis and market reactions during such a crisis, which are very hard to predict (incl. changes in the values of receivables) would significantly complicate the assessment of Finnish banks' liquidity risks and potential government guarantee risks.

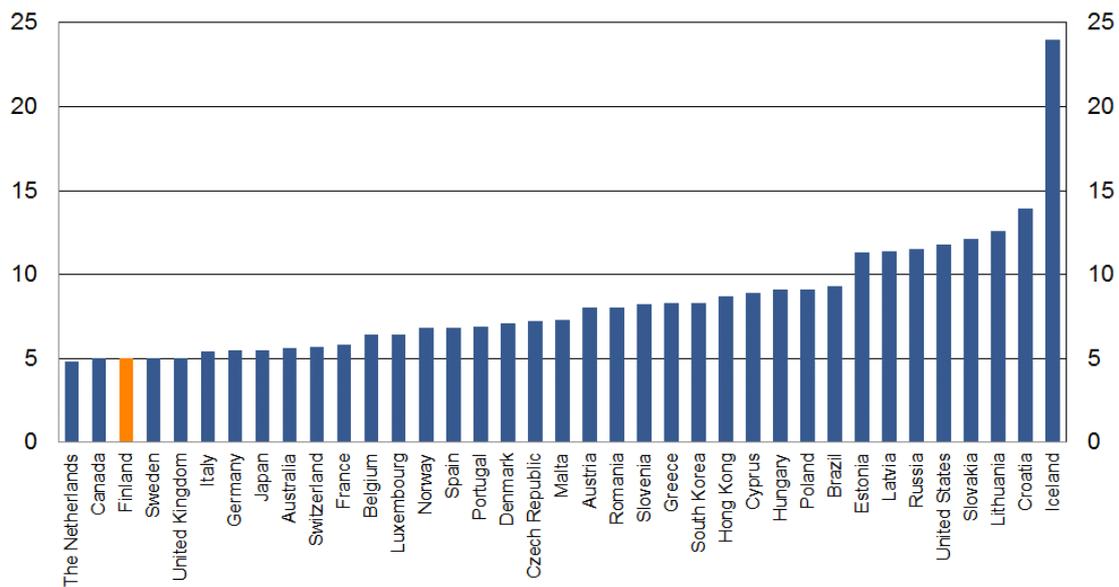
The banks have been able to maintain a healthy capital adequacy throughout the crisis. Common equity Tier I capital as a percentage of risk-weighted assets remained at 13 per cent at a minimum in 2009 – 2013. The proportion of non-performing loans has remained very small, and banks have been able to maintain a satisfactory profitability level despite the deteriorating macroeconomic climate. The banks' combined buffer against losses (own funds exceeding the risk-weighted asset requirement of 8 per cent) has remained rather steadily at around EUR 10 billion. The fact that Finnish banks were given a clean bill of health in the ECB balance sheet analysis, and three banks (Nordea, OP and Danske) were successfully placed under direct ECB supervision in November 2014, speaks for their healthy capital adequacy. Meanwhile the non-risk-weighted equity ratio of Finnish banks is, on average, relatively low: about 4 per cent of the banks' combined assets. This figure evens out the notable differences between different banking groups.<sup>22</sup>

<sup>22</sup> The Bank of Finland and the Financial Supervisory Authority regularly monitor and analyse the stability of the Finnish banking system and the condition of individual entities. For more information, please refer to the Bank of Finland's publications:

[http://www.suomenpankki.fi/fi/julkaisut/euro\\_ja\\_talous/rahoitusjarjestelman\\_vakaus/Pages/default.aspx](http://www.suomenpankki.fi/fi/julkaisut/euro_ja_talous/rahoitusjarjestelman_vakaus/Pages/default.aspx) and the analyses published by the Financial Supervisory Authority on the financial status of the entities being supervised:

[http://www.finanssivalvonta.fi/fi/Tiedotteet/Analysit\\_tutkimukset/Pages/Default.aspx](http://www.finanssivalvonta.fi/fi/Tiedotteet/Analysit_tutkimukset/Pages/Default.aspx).

**Figure 13** Capital to non-risk-weighted bank receivables, %



Please note that the IMF definition is slightly different from the definition used by the Financial Supervisory Authority, but permits an international comparison. Data refers to 2013, except for Hungary and the United Kingdom 2012, Norway 2011, Slovenia 2010 and Sweden 2009.

Source: Macrobond, IMF Financial Soundness Indicators

## Deposit Guarantee Fund

The Deposit Guarantee Fund was established in 1998 to protect customers making deposits, as required by an EU Directive. The Deposit Guarantee Fund protects the deposits of customers in the event of an individual deposit-taking bank's insolvency. A single depositor's deposits and accrued interest are compensated to a maximum of EUR100,000. The Financial Supervisory Authority handles complaints made by a bank's depositor customer and decides on the Fund's liability to compensate. Following the introduction of the new crisis resolution law, the responsibilities of the Deposit Guarantee Fund will gradually be assumed by the Financial Stability Authority. However, the old Deposit Guarantee Fund will be available for individual compensation cases if the Financial Stability Authority's funds are insufficient.

The banking sector is responsible for ensuring the Deposit Guarantee Fund's compensation capability. The fund collects annual contributions from members and invests them. The market value of the investments is nearly EUR 1 billion while the fund's liabilities, or deposits the law requires the fund to compensate, amount to approximately EUR 76–79 billion. According to law, banks are required to lend to the fund if it is unable to fulfil its compensation obligation. The law imposes no obligations on the State to lend to the Deposit Guarantee Fund if it has insufficient funds, and at the same time banks are unable to fulfil their lending obligation to the Fund.

However, it is obvious that the State has an implicit liability related to deposit guarantee. This liability could be removed by the establishment of a sufficiently large (joint European) fund, but creating such a fund would involve problems associated with joint liability. In practice, a situation where a large or medium-sized bank considered crucial to the financing system is required to pay compensation, crisis resolution would also be required for the entire bank or banking group. A resolution

may be sought by selling the affected bank's balance sheet items to other organisations, or by merging an affected bank with a healthy entity, thereby reducing the financing need of the Deposit Guarantee Fund. It is impossible to know in advance how successful these measures would be in a situation of severe market stress.

#### 2.2.6 Local government:

As part of general government finances, local government finances are used to organise and provide services to municipal residents. Municipalities organise basic services for their residents, including social services, health care, education and culture, and technical services.

Municipalities are responsible for performing two types of tasks: statutory and those assigned by the municipalities themselves. Statutory tasks refer to tasks the municipality is required to perform under legislation. The majority of municipal duties are based on law, most of them on special legislation. 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. This is to ensure local self-government laid down in Section 121 of the Constitution of Finland.

As a rule, municipalities can use their discretion to determine how these services are provided in practice. Local councils have responsibility to decide on how to organise the service-providing units and to set them up. If the municipality's own service provision system is unable to meet the needs or the operations are ineffective, the council will consider other service provision alternatives. According to Section 2 of the Local Government Act, municipalities may perform the functions prescribed by law alone or in cooperation with other municipalities, acquire services from another municipality or joint municipal authority, establish a limited liability company to provide services or be a shareholder in such a company, or acquire services from a private service provider.

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 several other 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. Municipalities may also enter into a contractual arrangement whereby a municipality with primary responsibility provides the services required by the other contracting municipalities, as specified in the contract. A joint municipal authority, whose establishment requires local councils to sign an agreement, is the most important form of intermunicipal cooperation. Membership of a joint municipal authority may be voluntary or mandatory.

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 have a large number of voluntarily arranged joint municipal authorities. In 2014, the total number of joint municipal authorities was 142. Joint municipal authorities represented approximately 25 per cent of total local government spending. The highest decision-making body in a joint municipal board is a council, whose membership primarily consists of local councillors appointed by member municipalities.

Municipal service and investment financing requires stable economic growth. Unexpected changes in local government finances affect the ability of municipalities to manage their finances and provide basic services. This can affect Finland's credit rating and thereby the general government's ability to manage fiscal policy. Furthermore, an increase in the municipal tax ratio could have a negative impact on economic growth. Municipal investment and consumer behaviour also affect the 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 loans.

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 in Finland has risen from 18.13 (in 2004) to 19.85 per cent in 2015.

### **Municipal loan portfolio**

Municipal loans have been growing annually, and according to the final accounts estimate for 2014, municipal loans currently amount to around EUR 14.88 billion. Municipal loan growth remained slow and steady for a long time, but took a sharp upward turn in 2003 with loans growing from approximately EUR 5.1 billion to the present-day EUR 14.9 billion. The total loan portfolio of municipalities and joint municipal authorities stood at EUR 16.6 billion at the end of 2014. Total loans of the local authority corporation<sup>23</sup> amounted to EUR 30.6 billion at the end of 2013. Municipalities with more than 100,000 inhabitants (9 towns and cities) accounted for approximately 48 per cent of the local authority corporation's loan portfolio and for 40 per cent of municipal loans.

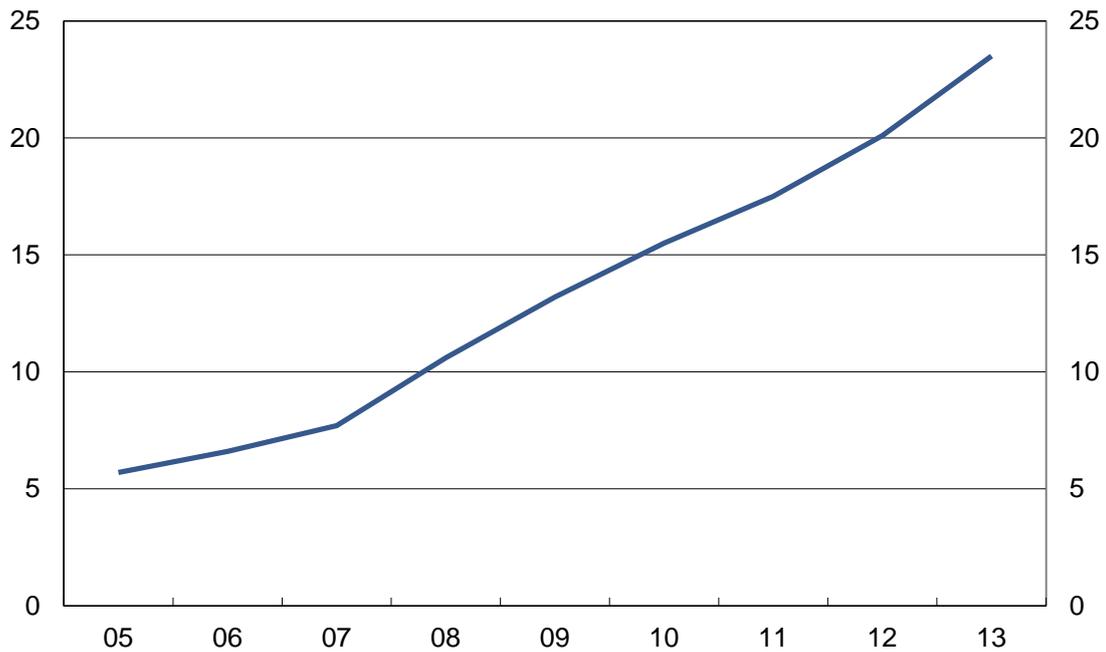
Municipality Finance provides approximately 50–60 per cent of municipal loans. Currently, some 75–80 per cent of new loans and almost 100 per cent of the financing for government-subsidised social housing production is provided by Municipality Finance. Municipality Finance is a credit institution owned directly by municipalities, or indirectly through municipal companies, with the State holding a 16 per cent stake. The Municipal Guarantee Board is an institution under public law. Its purpose is to safeguard and develop the joint funding of municipalities. According to the Guarantee Board Act, members of the Municipal Guarantee Board are jointly, relative to their population, responsible for commitments and expenditure of the Guarantee Board that it cannot cover otherwise. Municipalities also raise funds through the banking sector and other private investors.

The Municipal Guarantee Board has seen its operations expand significantly, with its guarantee portfolio multiplying in less than ten years from EUR 5 billion in 2005 to EUR 23.5 in 2013.

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<sup>23</sup> According to Chapter 1, section 5.1 of the Accounting Act and section 6 of the same, a 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.

**Figure 14** The guarantee portfolio of the Municipal Guarantee Board, EUR billion



Source: Municipality Finance

The mission of Municipality Finance and the Municipal Guarantee Board is to raise funding from Finland and abroad at a reasonable cost, relying on the good credit rating of municipalities. Thanks to the clean credit history of Finnish municipalities and legislation that addresses the financial problems of individual municipalities, there are no major differences in the prices of financing for municipalities unlike in the prices of financing from the banking sector. This may involve some degree of risk as financially weaker municipalities are granted loans at reasonable terms, which may then be used to maintain liquidity instead of making financially sound investments aimed at ensuring basic services.

However, it is unlikely that individual municipalities would be unable to repay their loans and this would occur only in highly exceptional circumstances. If a municipality would be in such a financial hardship that repaying its loans would be impossible, creditors' interests would be protected by the Guarantee Board's fund and, if needed, additionally by municipalities. Loan directly from the private sector would in that case mean usually credit loss. Furthermore, the government is permitted by the existing legislation to address the financial problems of municipalities and to introduce previous legal provisions, as was the case with the town of Karkkila and its inability to repay its loans during the recession of the 1990s.

## **Government alternatives for preventing financial problems in municipalities.**

### **The new Local Government Act**

The new Local Government Act (to take effect in 2015) will introduce stricter provisions regarding local government finances. The objective is to enforce stricter controls and to raise awareness of the potential financial risks posed to municipalities and the government in a timely manner.

Financial statements (Section 113): ... Financial statements must provide accurate and adequate information on the financial performance, financial position, financing and operations of the municipality.

Report on operations (Section 115): ... The report on operations must offer material information regarding the finances of the municipality and local authority corporation which is not indicated in the balance sheet, income statement or cash flow statement of the municipality or local authority corporation. Such information includes at least... on the organisation of internal control and risk management, and key conclusions.

An auditor's duties (Section 123): 4) Has internal control and risk management and Group supervision been properly arranged?

The new Local Government Act (Section 129) permits the provision of guarantees or other collateral for the liabilities or other commitments of entities acting in a competitive market environment only in situations where the entity is part of a local authority corporation or under the joint control of municipalities, or municipalities and the government. Furthermore, a loan, guarantee or other collateral granted by the municipality may not pose a risk to the municipality's ability to perform its prescribed duties.

The Local Government Act will include a new provision requiring joint municipal authorities to cover their deficit during a four-year period, while the provision requiring a basic municipality to cover its deficit in four or six years will remain in effect.

### **Assessment procedure**

Following the introduction of the new Local Government Act, the assessment procedure applied to municipalities in a particularly difficult financial situation will be based on Group data as of 2017, allowing better overall control of the situation. Until then, the current provisions shall apply.

Until 2014, the State budget has included an appropriation for a discretionary increase in central government transfers. This mechanism has permitted a quick response in local government finances to sudden, temporary financial problems in individual municipalities. In recent years, the annual appropriation has been in the region of EUR 20 million.

The Municipal Guarantee Board guarantees the fund-raising of Municipality Finance in financial markets but does not guarantee its borrowing operations nor the credit risks involved. Responsibility for these lies ultimately with municipalities, joint municipal authorities or the central government either as direct debtors or as guarantors providing collateral security or surety.

The Municipal Guarantee Board requires a sufficient collateral on its guarantees, which is why the lending portfolio of Municipality Finance and investments made for

liquidity purposes have been pledged as a counter-guarantee to the Guarantee Board for fundraising. The Municipal Guarantee Board's fund and standby credit facilities may be used to cover the payment obligation arising from a guarantee and to provide temporary financing to Municipality Finance to prevent an immediate payment obligation. The fund and the standby credit facilities will only be used as a last resort if Municipality Finance faces difficulties. The Municipal Guarantee Board's fund amounts to approximately EUR 17 million and standby credit to EUR 150 million.

The significant annual increase in total municipal loans, coupled with growing loans in the public sector, could pose a problem when the markets assess Finland's ability to manage its finances and to repay its loans in accordance with its agreements.<sup>24</sup>

On the whole, the municipal loan portfolio does not represent a material risk factor for the government or the local government finances. However, the growth trend and rate are a cause for concern. Financial statements for the last three 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. Municipalities obtain loans easily and at low cost, regardless of their ability to manage their finances. This 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 wealthy 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.

### *Municipal guarantees*

Guarantees granted to municipalities have also been growing: financial statements for 2013 show that total municipal guarantees amounted to EUR 8.2 billion, EUR 0.95 billion of which were paid to extra-Group entities. The biggest growth is seen in guarantees to intra-Group entities. In 2008, municipal guarantees totalled EUR 4.6 billion, EUR 0.91 billion of which was to extra-Group entities. Joint municipal authorities had considerably smaller guarantees: in 2013, their guarantees for intra-Group entities amounted to EUR 187 million and for others EUR 36 million.

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

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<sup>24</sup> The unexpected and significant change in the loan portfolio of the municipality of Jalasjärvi provides an example of the economic activity risk caused by unexpected changes in the municipality's loan portfolio. The change was caused by the recovery of central government transfers awarded to the adult education centre of Jalasjärvi (JAKK), maintained by the Municipality of Jalasjärvi, for apprenticeship training. The Ministry of Education is entitled under a Supreme Administrative Court's decision to recover central government transfers paid on false grounds. The Ministry of Education decided to recover EUR 35 million in four equal instalments by the end of July 2014, the first instalment falling due at the beginning of November 2013. Following this recovery process, the Municipality of Jalasjärvi was required to undergo the assessment procedure for municipalities in severe financial distress on the basis of the key indicators in its financial statements for 2011 and 2012. The assessment procedure resulted in a decision made by the Government in June 2014 to merge the municipalities of Kurikka and Jalasjärvi at the beginning of 2016.

If an individual guarantee obligation realises, municipalities typically cover the losses by taking out a loan. In a survey (88 respondents from different sized municipalities) conducted in connection with the Local Government Act Reform in 2013, approximately 9 per cent reported a realised guarantee liability in the last five years. According to the respondents, realisation in all cases could be attributed to a non-Group entity. The amount of realised guarantee liabilities was EUR 1 – 500,000. <sup>25</sup>

The analysis above does not include municipal liabilities for guarantees issued by the Municipal Guarantee Board. Municipalities' share of these liabilities (EUR 23.5 billion at the end of 2013) is calculated on a euro-per-capita principle, which means liabilities amounted to approximately EUR 4,300 per capita in each municipality. This sum includes EUR 14 billion in guarantees issued by the Municipal Guarantee Board to Municipality Finance, in other words, it does not include the portion recorded as local government debt in statistics. Taking into account the municipalities' own guarantees and the Municipal Guarantee Board's portion, total municipal guarantee liabilities stood at approximately EUR 22 billion at the end of 2013. Each municipality is severally responsible for its own guarantees, while all municipalities are jointly responsible for the Guarantee Board's guarantees.

### **Municipal life cycle projects**

In recent years, municipalities have opted for a life cycle model, or the so-called public-private partnership (PPP) for investments instead of borrowing. When a project is carried out through a PPP, a private company assumes overall responsibility for a public project, typically for a much longer period than in conventional agreements. In most PPPs, the private service provider is responsible for project planning, financing, implementation and maintenance, with the service period running from several years to decades.

All costs arising from a PPP are typically charged in the form of service fees, distributed over the entire contract period, which means no major initial investment is required from the client, as is the case with conventional publicly funded projects.

The estimated value of PPP projects carried out by municipalities and joint municipal authorities in 1997 – 2014 is EUR 0.5 billion. This consists of 10 different projects, primarily involving the construction of schools and day care centres. Data on PPPs is scattered, and no extensive data is available on the number of projects or their costs to municipalities.

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

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<sup>25</sup> If municipal finances are weak to begin with, realisation of the guarantee obligation could lead to a situation where the provision of services to the municipality's residents is at risk. A case in point is the town of Juankoski, which had to undergo the assessment procedure for municipalities in severe financial distress in 2012. At this time, the assessment group proposed that merger negotiations be initiated with the town of Kuopio. The financial situation worsened in 2013 when a guarantee offered by Juankoski to an enterprise was realised, resulting in a decision to merge the two towns at the beginning of 2017. Without this agreement, Juankoski would have had to undergo another assessment procedure, followed by a potential forced merger. The financial problems were not directly caused by the realisation of the guarantee obligation; the main contributing factor was the discontinuation of business activities that were of major significance to the town's economy.

## 2.2.7 State-owned enterprises

There are two kinds of state-owned enterprises: State-owned companies in which the State holds the majority of voting rights, and associated companies in which the State holds less than 50.1 per cent of the shares and voting rights.<sup>26</sup>

Ownership steering is carried out by the Prime Minister's Office and different ministries. Companies are categorised on the basis of their role from the government perspective: whether they involve an investor interest, a strategic interest, or whether they are so-called special assignment companies with a special interest related to regulation or official duties. Responsibility for ownership steering of companies operating on a business basis lies with the Ownership Steering Department of the Prime Minister's Office, while ministries responsible for regulatory issues in the sector in question are in charge of special assignment companies. In December 2014, the Ownership Steering Department was responsible for 27 companies, 23 of which operated on a business basis and four of which were special assignment companies. Different ministries were responsible for 21 special assignment companies, and the Ministry of Finance had additional responsibility for four companies involving a strategic special interest related to regulations or official obligations.

Information regarding the risks involved in the operations of these companies and risk management is provided to external stakeholders in the companies' annual reports. According to Chapter 8:5 of the Limited Liability Companies Act (624/2006), companies must prepare a report on their operations. Chapter 3:1 of the Accounting Act (1336/1997) contains more specific provisions regarding the obligation of companies to prepare a report on operations, and regarding its content. If a company is required to prepare a report, the report must offer a fair and extensive assessment, in view of the scope and structure of the operations in question, of the major risks and uncertainties involved, as well as other factors affecting the company's business development, and its financial position and performance. Such an assessment must include key financial indicators used to illustrate the company's business and its financial position and performance. The report should also include an estimate of probable future development.

Chapter 8:2 of the Accounting Act provides for an Accounting Board operating under the auspices of the Ministry of Employment and the Economy, which offers instructions and statements regarding the application of the Act. The Board issued general instructions (12 September 2006) on the preparation of reports, with section 2.7 explaining what information is to be included in the estimate of major risks and uncertainty factors, and other issues affecting business development. This section lists strategic risks, operational risks, financial risks and damage risks as the key risks affecting a company's operations, and discusses such risks in more detail. The Accounting Board also recommends referring to other established classifications used in the business sector in question. The description should include the means and methods used to manage risks and uncertainty factors. A fair view of future risks and opportunities should be provided to allow stakeholders to compare the

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<sup>26</sup> State ownership in companies is regulated by the State Shareholdings and Ownership Steering Act (1368/2007), which specifies the authorities of Parliament, the Government, and the ministry responsible for ownership steering. The Act does not provide for any derogations from the Limited Liability Companies Act. In addition, a government resolution on the government ownership policy has been issued (3 November 2011), explaining the starting points for ownership steering, ownership policy objectives, and corporate responsibility.

appropriateness of the management's business plans against risks and opportunities.

Companies applying the IFRS standards in the preparation of their financial statement are also required to comply with these standards, for instance concerning the management of risks involved in financial instruments and the related reporting (IFRS 7).

According to 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.

#### 2.2.8 Liabilities associated with environmental and chemical safety

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 include compulsory insurance and the oil pollution compensation fund prescribed by the Environmental Damage Insurance Act (81/1998). The government budget represents last-resort financing.

In the last five years, four incidents have occurred in which the government was 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. To date, the total sum of government liabilities is little over EUR 150 million. This goes to show that the existing secondary environmental liability systems and securities do not cover all situations and are not optimal. A working group (Ministry of the Environment, 2014) 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.

### 2.3 Government assets

More than half of the government's financial assets are in shares and holdings, and less than a third in loans. In 2008, the government's financial assets to GDP decreased by more than EUR 13 billion, or more than 8 percentage points, primarily due to falling share prices. Similarly, financial assets fell significantly in 2011. Since 2011, financial assets have grown thanks to rising share prices. In recent years, the government has received approximately EUR 1.2 billion in dividends on its holdings, representing approximately 2.5 per cent of all income included in government accounts. In 2007, dividend income peaked at almost 4 per cent. Naturally, selling the government holdings will permanently reduce the dividend income flow.

Financial accounts offers information on the financial balance sheet and financial transactions in all sectors of the national economy. Financial accounts is part of the national economic accounting system. Financial accounts contain information on some, but not all real assets. Real assets include manufactured assets such as buildings and stocks, and non-manufactured assets such as land. Total assets is the sum of financial and real assets.

**Table 8** Government financial and real assets, EUR billion, % of GDP

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Financial assets, EUR billion	56.31	62.19	64.89	51.69	58.56	58.56	56.86	59.68	61.36
% GDP	34.26	36.03	34.78	26.68	32.35	31.30	28.88	29.87	30.37
Real assets, EUR billion						47.70	49.50	51.10	51.90
% GDP						25.49	25.14	25.58	25.56
Total, EUR billion						106.26	106.36	110.78	113.26
% GDP						56.79	54.02	55.45	56.07

Source: Statistics Finland

## 2.4 Summary of government liabilities and risks

As described above, fiscal responsibilities, and thereby risks, may emanate from decentralised sources within the government (e.g. state budget economy), other public finance (e.g. government funds, state enterprises, municipalities), private sector (e.g. government-controlled enterprises), or the financial markets (e.g. the banking sector). However, it is not possible to identify all financial risks.

Table 9 shows a summary of government assets and the nominal values of specific, definable liabilities. Information regarding government real and financial assets is based on financial accounting. Financial assets include some key shareholdings in public, listed companies. In addition to these, the state is either the sole owner or a shareholder in several other companies. The value of these holdings is based on the carrying amount. The state has major holdings in VR Group, Finnish Industry Investment Ltd, and Patria Oyj.

Besides debt and pension liabilities, government liabilities include guarantees. The nominal value of these has been rising considerably in recent years, with the guarantees of Finnvera and government funds – mainly housing loan guarantees – showing a particularly sharp increase. By 2014, the nominal value of the guarantees included here had doubled over the previous few years and was nearly 24 per cent of GDP. In addition, the callable capital contributions payable to international financial institutions have grown multifold, mainly as a result of managing the EU financial crisis. Their nominal amount, as a share of GDP, was 8.5 per cent in 2014.

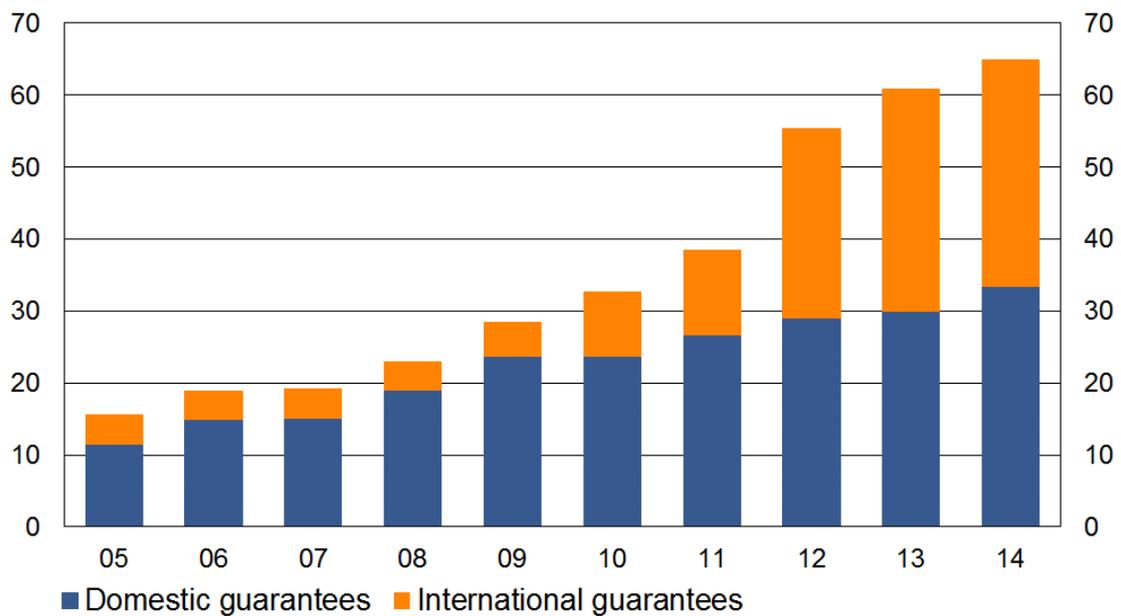
**Table 9**

	2009	2010	2011	2012	2013	2014
<b>Assets</b>						
Government real assets	-	47.7	49.5	51.1	51.9	-
% GDP	-	25.5	25.2	25.6	25.7	-
Government financial assets	58.5	64.4	56.8	59.6	61.2	-
% GDP	32.3	34.4	28.8	29.9	30.3	-
of which						
State Treasury	9.6	11.2	10.3	7.4	4.6	3.1
Solidium	7.6	9.3	6.9	7.2	8.2	7.6
Other quoted shareholdings	10.4	12.1	8.6	7.8	9.5	10.9
Loan receivables from the National Housing Fund	8.6	8.2	7.7	7.2	6.5	6.0
<b>Liabilities</b>						
General government debt	64.3	75.2	79.7	83.9	89.7	95.1
% GDP	35.5	40.2	40.5	42.0	44.4	46.6
Local government debt	10.0	10.6	11.4	12.9	14.9	16.8
% GDP	5.5	5.7	5.8	6.4	7.4	8.2
<b>Government guarantees</b>	26.2	26.6	31.6	37.2	42.8	48.7
% GDP	14.5	14.2	16.1	18.6	21.2	23.9
Finnvera	13.6	13.2	14.4	15.4	15.7	20.3
Student loans	1.3	1.4	1.4	1.5	1.6	1.7
EFSF	0	0	2.1	5.1	6.2	6.6
Bank of Finland	3.8	3.9	3.9	4.1	7.7	7.9
Government funds	6.3	7.9	9.1	10.2	11.2	11.8
Other	1.2	0.3	0.6	0.8	0.5	0.3
<b>Capital liabilities</b>	4.7	5.1	5.8	17.0	17.1	17.2
% GDP	2.6	2.7	3.0	8.5	8.4	8.5
<b>Other liabilities</b>	99.5	105.1	112.3	119.0	117.6	132.6
% GDP	55.0	56.2	57.0	59.6	58.2	65.0
State budget economy	99.5	103.3	110.4	117.0	115.4	130.1
Off-budget entities	-	0.3	0.4	0.5	0.6	0.7
State enterprises	-	1.4	1.5	1.5	1.6	1.8

Liabilities from both domestic (Finnvera, government funds, student loans, Senate Properties etc.) and foreign (crisis management etc.) guarantees have been growing dramatically in the last ten years (Figure 15). At the moment, the nominal values of guarantees and liabilities from domestic and foreign activities are almost equal. When making such comparisons, it should be borne in mind that the risks associated with different types of liabilities may differ. Greater liability does not automatically mean greater risk. Since it is difficult to assess the risks arising from these liabilities in any simple, clear-cut way, for the sake of clarity nominal values for the liabilities have been used here.

By international comparison, Finland's guarantees are at a high level. Comparisons between the nominal values of the guarantees of different countries are difficult due to dissimilar reporting practices. According to the statistics compiled by Eurostat, Finland's guarantee-to-GDP ratio is the third highest of all EU countries (Figure 16).<sup>27</sup>

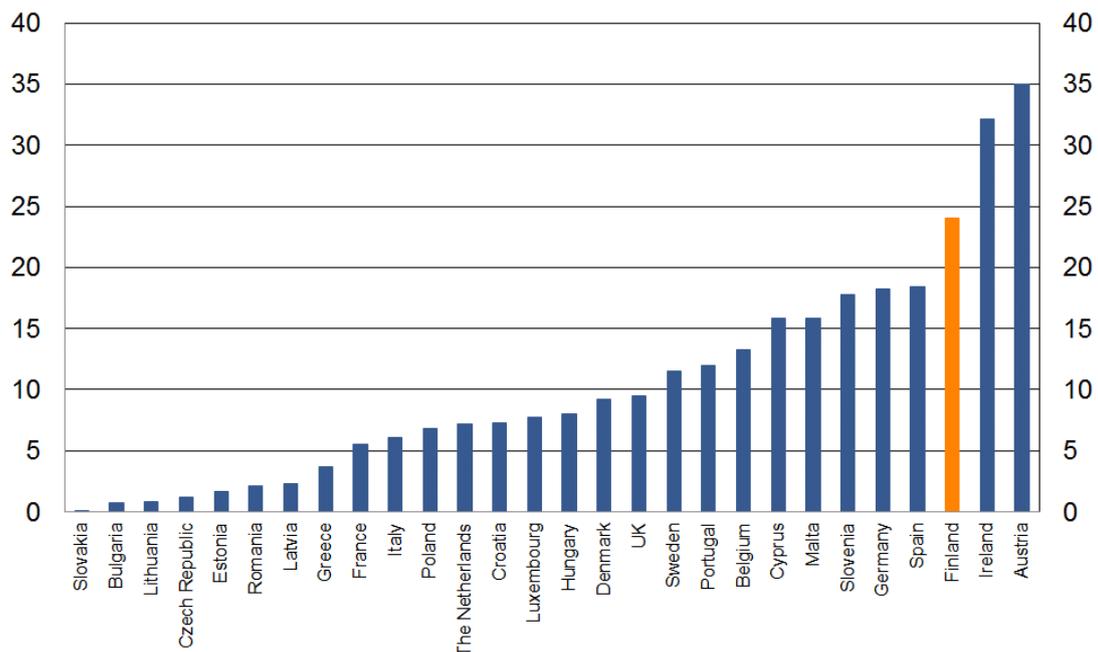
**Figure 15** Guarantees and liabilities from domestic and foreign activities, EUR billion



Domestic incl. Finnvera, student loans, government funds, other guarantees.  
 International incl. EFSF, BF, capital liabilities. For capital liabilities, figures for 2008 have been used for 2005–2007.  
 Source: Ministry of Finance, Ministry of Employment and the Economy, Ministry of Education, State Treasury

<sup>27</sup> Eurostat's data includes local government guarantees.

**Figure 16** General government guarantees in EU countries in 2013, % of GDP



Does not include liabilities associated with the management of the EU financial crisis

Source: Eurostat

Risks associated with general government finances are usually linked to general economic development in one way or another. Weaker-than-predicted economic development tends to result in a higher-than-expected increase in government borrowing. Public debt has clearly outgrown projections, particularly in times of deep recession and depression.

The Finnish government finances' sensitivity to economic cycles has been assessed by organisations such as the OECD. Due to the size of its government finances and the structure of its national economy, Finland is more sensitive to macroeconomic developments than many other EU countries. In Finland's case, total output remaining at one percentage point lower than anticipated would translate into an almost 0.6% decline in general government finances in relation to total output. The impact on government finances is strongest in the case of tax revenues sensitive to economic cycles, such as corporation taxes, and unemployment-related expenditure.

However, using average elasticity as a sensitivity indicator may provide an unrealistic picture of the risks associated with macroeconomic development. In exceptionally difficult economic conditions, general government finances may deteriorate following the simultaneous impact of several different factors. Any decrease in total output would result in a decrease in tax revenue and an increase in unemployment-linked expenditure. At the same time, investors may demand a significantly higher interest rate on loans, which would affect their availability. For instance, escalating geopolitical conflicts could have an impact on the central government fiscal position through a number of channels.

The risks associated with macroeconomic development, general government debt, public sector holdings, export guarantees, and other liabilities assumed by the government are intercorrelated. In conditions of normal cyclical fluctuation, only some of the risks materialise, which is why analysing risks as separate phenomena

may produce an overly optimistic view of the stability and risk tolerance of the fiscal position. In a crisis, several risks can materialise at the same time.

To provide decision-makers with an extensive overview of financial risks, supplementary analyses are needed in addition to financial forecasts. In the banking sector, for example, stress tests may be used to assess the banks' vulnerability. Stress tests typically assess the ability of individual banks to cope financially if macroeconomic development was weaker than anticipated. To avoid the disruption of society, it is essential to safeguard the continuity of the banking system in all circumstances. In crises, governments have been forced to use public funds to support banks in order to safeguard the continuity of the system.

The estimated costs of the banking crisis Finland experienced during the recession of the early 1990s totalled 11 per cent of GDP. However, the Finnish banking sector emerged largely unscathed from the significant output decline that followed the financial crisis of 2009. Meanwhile, in Ireland, public debt climbed within a few years to more than 100 per cent of GDP compared to 44 per cent in 2008, fuelled by the banking crisis caused by the real estate crash. This demonstrates that the costs associated with a banking crisis can lead to much higher public debt than could be anticipated on the basis of macroeconomic trends only.

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