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Abstract

Fiscal risks refer to a range of factors that have an unanticipated effect on government finances. 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). The nominal value of all government guarantees has doubled over the previous few years, totalling slightly over EUR 49 billion at present, which is nearly 24 per cent of GDP. In addition, the amount of capital liabilities payable upon request to international financial institutions has multiplied mainly following the measures for managing the financial crisis in the EU. Their nominal amount, as a share of GDP, is approximately 9 per cent (nearly EUR 18 billion). As a result of the financial crisis, Finland's fiscal position has worsened dramatically. The country therefore faces much poorer prospects of facing new economic disturbances than before. The costs arising from even a partial realisation of the government's constantly increasing guarantee obligations may result in a significant burden on the national economy. This places a special emphasis on the careful monitoring and management of the fiscal responsibilities.

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1 Abstract:

- *Fiscal risks refer to a range of factors that have an unanticipated effect on government finances. Fiscal obligations, and thereby risks, may emanate from various 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.*
- *Besides debt and pension liabilities, government liabilities include guarantees. The nominal value of these has been rising considerably in recent years. Final accounts and other data for 2015 indicate a sharp rise in the guarantees of Finnvera and government funds – mainly housing loan guarantees. The domestic guarantee portfolio (mainly Finnvera, government funds, student loans) grew by EUR 8.2 billion in 2015. Since 2009, these guarantees have grown by about EUR 20 billion.*
- *The nominal value of all government guarantees has doubled in a few years to just over EUR 49 billion, or 24 per cent of GDP. In addition, the callable capital contributions payable to international financial institutions have grown multifold, mainly as a result of EU financial crisis management. Their nominal amount, as a share of GDP, is approximately 9 per cent (nearly EUR 18 billion).*
- *On a global scale, Finland's guarantees are at a high level. Different reporting practices, among other reasons, make it difficult to compare the nominal values of guarantees between countries. However, according to the statistics compiled by Eurostat, Finland's general government guarantee-to-GDP ratio is the third highest of all EU countries.*
- *Risks related to general government finances are usually linked to general economic trends. Under exceptionally difficult economic circumstances, general government finances may be eroded for several reasons. Risks related to macroeconomic development, general government debt, government holdings, the export guarantees issued, and other risks related to other government liabilities correlate with each other.*
- *Typically, under the conditions of normal cyclical fluctuations, only some of these risks will be realised. According to a study by the International Monetary Fund on contingent liabilities*
 - *Different liability realisations show a high correlation (i.e. simultaneous realisation of several liabilities).*
 - *The realisation of risks is often associated with a weak financial situation, further aggravated by the risk realisation (in an average case, the budgetary position ratio weakens by about 2% and the public debt-to-GDP ratio grows by 15%)*
 - *If/When a liability is realised, the average fiscal cost has been as much as 6.1 per cent of GDP (median 2% of GDP).*
 - *In an average country, a) two realisations with a fiscal cost of 6.1% of GDP occur in 25 years, b) the probability of the realisation of a "significant" liability occurring once in 12 years and in any year is 8.7 per cent*

- *As a result of the financial crisis, Finland's fiscal position has worsened dramatically, which means our ability to withstand new economic disturbances is now materially lower than before. The costs arising from even a partial realisation of the government's constantly increasing liabilities may result in a significant burden on the national economy. The instability of the external environment places a special emphasis on the careful monitoring and management of economic liabilities.*
- *2015 marked the first time that overall calculations were prepared (revenue and expense statements and balance sheet) for the state budget economy, state enterprises and off-budget funds. These new calculations are similar to consolidated financial statements in that intragovernmental items have been eliminated to achieve a better overall picture. Previously, the revenue and expense statements and balance sheets for the state budget economy, state enterprises and off-budget funds were prepared and presented separately in the Government's annual report. The key differences between overall and separate statements include an increase in the deficit and changes in the balance sheet structure. Separate revenue and expense statements showed an aggregate deficit of EUR 2.9 billion for the fiscal year 2015. After the elimination of internal transactions – most importantly transfers from funds into the state budget economy and the recognition of revenue from state enterprises – the overall revenue and expenditure statement showed a deficit of EUR 6.2 billion for the fiscal year 2015; an increase of EUR 3.4 billion compared to separate statements. Equity in the overall balance sheet for 2015 was EUR 27.7 billion negative, and EUR 5.8 billion lower compared to the result shown in separate balance sheets.*

2 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. 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 financial activity. Contingent liabilities include government guarantees and collateral involving the guarantor's obligation to pay that depends on factors beyond the government's control.¹

Similarly, fiscal obligations, 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.

Risks related to macroeconomic development, general government debt, government holdings, the export guarantees issued, and other risks related to other government liabilities correlate with each other. Typically, under the conditions of normal cyclical fluctuations, only some of these risks will be realised. The International Monetary Fund studied the fiscal costs of contingent liability realisations in 1990–2014.² The dataset created for the study covered 80 countries, including Finland.

The dataset shows (see Figure 1):

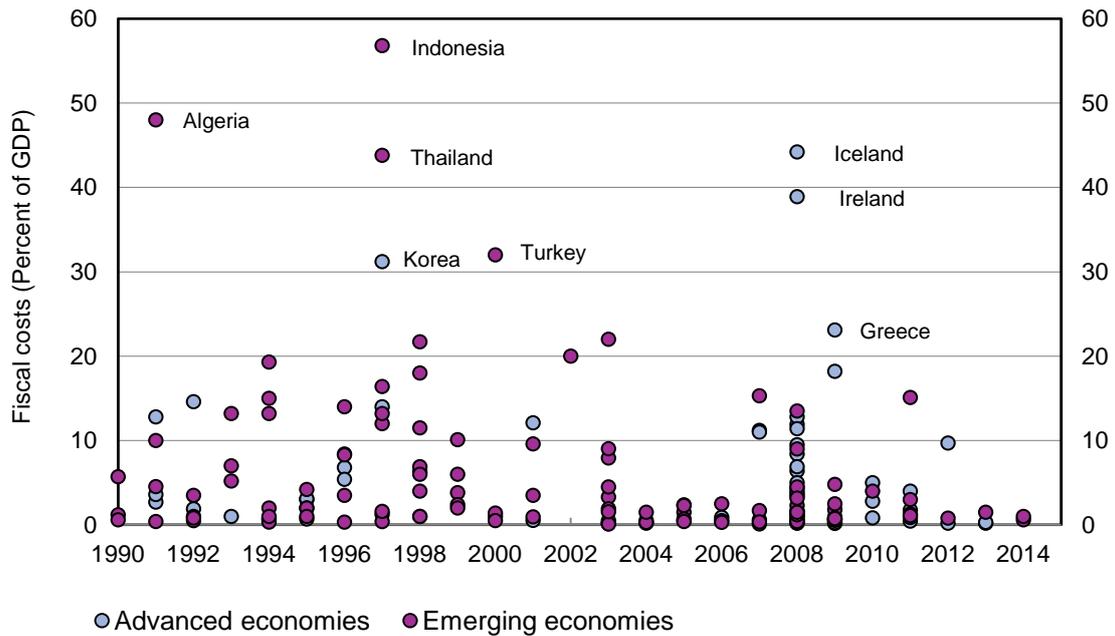
- *"When it rains it pours"*: The realisation of various liabilities is highly intercorrelated (i.e. simultaneous realisation of several liabilities).
- Contingent liabilities tend to coincide with already weak public finances, which they amplify (in an average case, the budgetary position ratio weakens by about 2% and public debt-to-GDP ratio grows by 15%).
- If/When a liability realises, the average fiscal cost has been as much as 6.1 per cent of GDP (median 2% of GDP).
- An average country experiences a) two realisations with a fiscal cost of 6.1% of GDP in 25 years, and, b) the probability of the realisation of a "material" liability occurring once in 12 years, and in any year, is 8.7 per cent

¹ 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.

² Bova et al. (2016)

Therefore, when liabilities realise, the fiscal costs involved may put a considerable strain on government finances, and in the light of average figures, the probability of a major liability materialising is not particularly small. The instability of the external environment places a special emphasis on the careful monitoring and management of economic liabilities.

Figure 1. Fiscal costs of contingent liabilities as % of GDP



Source: Bova et al. (216)

At the end of 2014, the Ministry of Finance appointed a working group to discuss ways of developing the government's fiscal risk reporting and management. In its report,³ the working group concluded the following:

- As a result of the financial crisis, Finland's fiscal position has worsened dramatically, which means our ability to withstand new economic disturbances is now materially lower than before.
- Finland has seen a particularly strong increase in contingent liabilities (such as government guarantees). What makes contingent liabilities special is that they involve no budgetary expenditure – unless the associated risks materialise – nor any increase in government debt. This can easily lead to the amount of such liabilities growing beyond a level deemed reasonable from the perspective of the overall economy.

³ Ministry of Finance (2015)

- Government liability reporting has been inconsistent, making it difficult to see the bigger picture. A large amount of information is available on government risks and liabilities, but the information is fragmented and must be obtained from a number of different sources. Furthermore, there are no appropriate instructions for the recording of liabilities. Consequently, government liabilities are not recorded systematically and the data available in the system therefore offers insufficient coverage.
- Guidelines on liability recording practices should be consistent and reporting should be regular and systematic. In addition, the Government should be committed to limiting its guarantee liabilities, and the actual effect of its guarantees in relation to the risks involved should be regularly assessed.

The extent of implementation of these recommendations is explained in text box 1 below.

Box 1. Implementation of the recommendations given by the Ministry of Finance working group on risk management.

In its report (vm 11/2015), the working group tasked with the development of the government's fiscal risk reporting and management identified several areas in need of development, which had to do with risk and liability identification, reporting and management.

Identifying liabilities: The State Treasury has, on the basis of the development proposals, launched a project to place all government guarantees and collaterals in the State Treasury's interest subsidy and State guarantee management system (KoTa). Following the implementation of the proposed development measures, the KoTa system now includes all government guarantees and collaterals provided by various Ministries and government funds in effect on 31 December 2015.

Steps will be taken in 2016 to fully establish the system and to further develop the practices and procedures involved. The objective is to make extensive, up-to-date quarterly reports on all government guarantees and collaterals available from the KoTa system.

Reporting liabilities: To improve government risk and liability reporting, an annual risk report will be prepared. In addition, the General Government Fiscal Plan will include a concise summary of government liabilities.

Managing liabilities: No changes were made to limit guarantee liabilities or to modify the decision-making process. According to Prime Minister Sipilä's Government Programme, the elements of export financing and the level of financing should be at least equal to those in key competing countries.

This report provides an overview of the government's risks and liabilities, and seeks to provide a detailed explanation of the risks involved in macroeconomic development, and fiscal liabilities emanating from various sources, including a risk assessment as applicable. For the first time, this report also includes a government overall balance. The publication will be updated annually, and a summary will be included in the General Government Fiscal Plan.

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 ⁴of 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. 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.

⁴ E.g. New Zealand, Australia and the Netherlands.

3 An overview of government risks and liabilities

3.1 Risks associated with macroeconomic development

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

The objective of macroeconomic forecasts is to provide the most likely future scenario. However, forecasts always involve risks which, if they materialise, may lead to a more negative or more positive development than anticipated. Weaker-than-predicted development tends to result in a higher than expected increase in government borrowing. Public debt has clearly outgrown projections, particularly in times of deep recession and depression. For example, the change in Finland's national economy following the financial crisis, measured by the change in total output, was almost as dramatic as during the recession of the early 1990s.

Finland's total output shrank by more than 8 per cent, which no economic development forecast was able to predict. Similarly, recovery from the financial crisis has been weaker than anticipated; in fact, Finland's national economy still has not reached the pre-crisis total output level. External macroeconomic shocks such as Nokia's collapse in the mobile phone markets, the impact of digitisation on the demand for forestry products, and the economic decline in Russia combined with increased geopolitical tensions have been a greater hindrance to economic recovery than expected.

Macroeconomic development a major element in budget planning

Macroeconomic development 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.⁵ 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.

⁵ The procedures followed in the preparation of revenue forecasts are described in detail in this publication: <http://vm.fi/documents/10623/456829/Budjettitalouden+tuloarvioiden+laadintamenettelyt+valtiovarainministeriosta/f289b9db-cf59-4499-95cf-60331e886074>

Besides providing a basis 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. Finland is, due to the size of the government finances and the structure of national economy, more sensitive to macro-economic 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 capital 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 1 illustrates the sensitivity of different tax types to changes in the tax base.

Table 1. Budget sensitivity and economic development

Tax type	Tax base	Change	Change in tax revenue, EUR million	Taxes collected in 2014, EUR million
Income tax	Earned income	1%	127	4,318
	Pension income	1%	29	700
Capital income tax	Capital income	1%	29	2,474
Corporate income tax	Operating surplus	1%	25	2,433
VAT	Value of private consumption	1 %	121	16,553
Vehicle tax	No. of new passenger cars sold	in 1,000	7	918
Energy tax	Electricity consumption (tax class I)	1%	10	720
	Petrol consumption	1%	13	1,298
	Diesel consumption	1%	14	1,246
Tax on alcoholic beverages	Alcohol consumption	1%	14	1,394
Tobacco tax	Cigarette consumption	1%	7	785
Expense type	Basis of payment	Change	Change in expenses (government), EUR million	Expenditure in 2014, EUR million
Unemployment-related expenditure	Unemployment rate	1 p.p.	310	2,700
Compensation of employees	Salary level	1%	69	6,935
Interest expenditure	Interest level	1 p.p.	200	1,713

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.

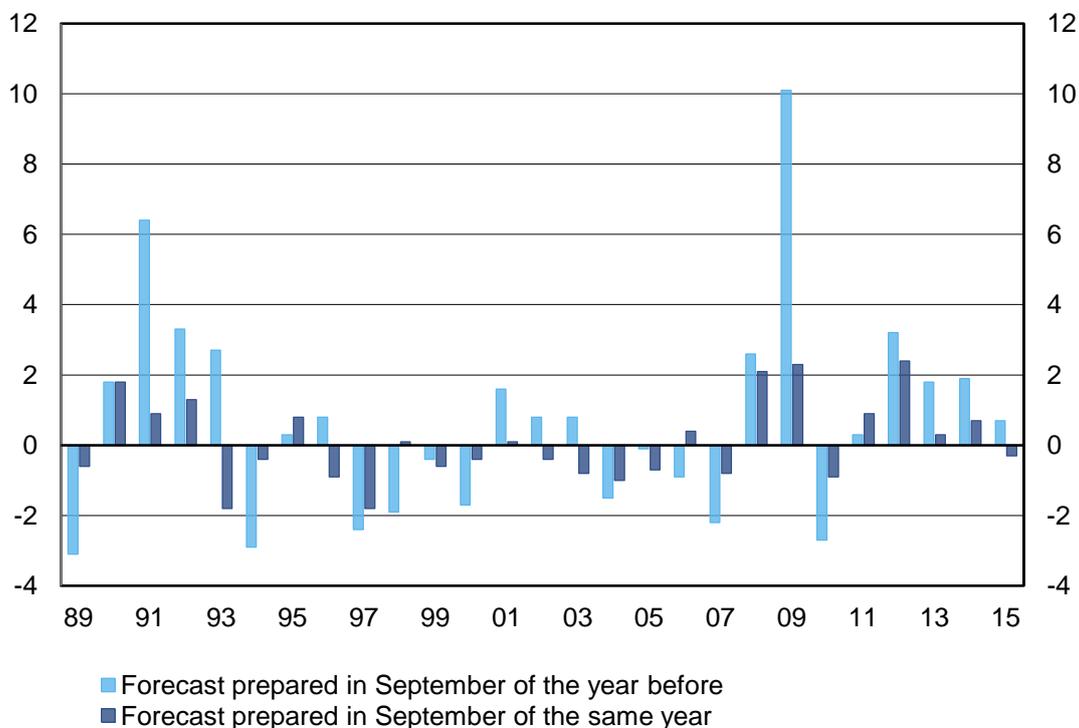
However, using average elasticity – calculated from time series using statistical methods – as a sensitivity indicator may provide an unrealistic picture of the risks associated with macroeconomic development. In a situation where total output is shrinking, as was the case during the early 1990s recession 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 2 below illustrates the accuracy of the cycle forecasts published by the Ministry of Finance in September 1989-2015 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 overestimate of the economic development, while below-zero values show underestimates. In terms of GDP growth, the average forecast error in year $t + 1$ in the period 1988–2015 was -0.7 percentage points, which means economic growth was forecast to be stronger than it actually was. 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 error.

Figure 2. GDP % growth forecast errors (forecast published in 1988-2015 September), %



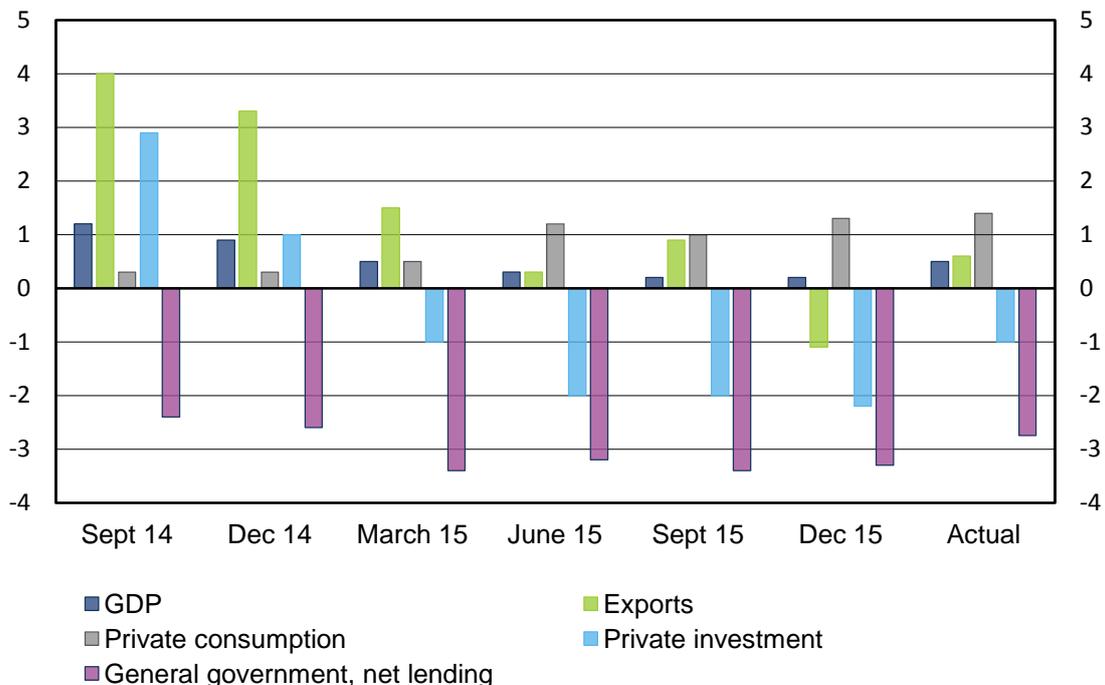
Forecast error = Forecast - Actual
 Source: Ministry of Finance

About last year's development and the materialisation of macroeconomic risk

According to preliminary data published by Statistics Finland in March 2016, total output took an upward turn but at a very subdued growth rate of 0.5%. The Budget for 2015 was based on the forecast published in September 2014, which predicted GDP growth of 1.2%. In subsequent forecast updates, the views taken of development in economic activity were more cautious. In terms of exports and investments, development in 2015 proved to be weaker than forecast in autumn 2014. Global economic and trade growth was weaker than expected, which reflected on the export forecast. Meanwhile, private consumption showed stronger than expected growth, partly due to inflation being more moderate than anticipated. Weaker than predicted macroeconomic development impacted on the general government balance and indebtedness. (See Figure 3)

Last year, the refugee crisis in Europe also eroded the general government balance, with the number of refugees seeking asylum in Finland being nearly ten times higher than predicted. The growing number of asylum-seekers has resulted in an increase of EUR 600 million in the appropriations for annual expenditures in 2016, and EUR 0.6–0.7 billion in 2017–2019. In 2015, the number of asylum-seekers arriving in Finland was 32,500, and forecasts are based on the assumption that as of 2016, the annual number will be 10,000. In previous years, the number of asylum-seekers has been approximately 3,000–4,000. However, it is very difficult to estimate the number of asylum-seekers and the related expenditure, and this poses a risk for general government expenditure.

Figure 3. More detailed macro forecasts for development in 2015, %



Sources: Statistics Finland. Ministry of Finance

Risks associated with macroeconomic development

Many of the risks associated with macroeconomic development involve the global economy. Stronger than expected deceleration of developing economies such as China would inevitably affect Finland's exports. Disruption and uncertainty in the financial markets would very quickly spread to the Finnish economy. It is unlikely that the current geopolitical disputes will be resolved in the near future. If escalated, the situation could affect Finland's economic growth potential in many ways.

The exceptionally low interest rates in the financial markets have fuelled the growth of debt, both in private households and in the public sector. Although interest rates are expected to remain relatively low in the near future, a sharper than expected rise in interest levels would represent a major risk for households and for the central government budgetary position.

3.2 Government liabilities

The financial liabilities of a government are often described using the fiscal risk matrix shown here (Table 2).⁶ In the matrix, liabilities are divided as follows:

- Liabilities involve a contractual, lawful or other legal obligation, or social/political obligation, in which case the government considers it necessary to take action to avoid any disruption to the national economy or society.
- Liabilities represent an obligation in all circumstances, or the government is only required to fulfil its obligation if a particular event occurs.

Table 2. Government liabilities

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

Source: Ministry of Finance

⁶ Cf. Polackova (1989) and Polacova Brix 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 activities in the municipal sector).⁷ The analysis presented here mainly follows this division.

3.2.1 Debt and life cycle projects

The concept of debt

On-budget nominal debt at the end of 2015 stood at EUR 100 billion, showing an increase of EUR 46 billion from the end of 2008. During this period, municipalities and joint municipal authorities have more than doubled their debt to EUR 18.5 billion. General government debt mainly consists of central and local government debt. The Unemployment Insurance Fund, one of the social security funds, has been forced to borrow approximately EUR 1 billion in the past few years, as the contributions and government transfers have not been sufficient to cover increased unemployment expenditure. There is a risk of both state and municipal debt continuing to grow, and not just nominally but relative to GDP.

The term 'government debt' usually means the debt recorded by the State Treasury, which indicates the on-budget nominal debt. As of last year, this concept of debt also includes the new borrowing of the Senate Properties. Another commonly used concept is general government debt, or public debt. This term is used for international comparison, and is generally expressed as a percentage of GDP. Last year, Finland's general government debt-to-GDP ratio exceeded the 60 per cent reference value set out in the Treaty on European Union.⁸

Coverage of the debt recorded by the State Treasury is less extensive than debt as understood in national accounting terms. The debt recorded by State Treasury includes on-budget nominal debt and, as of last year, the new borrowing of Senate Properties, but excludes the debt of other units included in general government finances in the national accounts. Other off-budget entities include the universities, Solidium Oy, Yle Oy, VTT, 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. The debt of Finnvera, a state-owned company, is not included in public debt because the company is classified as a financial institution.⁹

⁷ Implicit direct liabilities are excluded from this analysis.

⁸ Incorporating items included in EDP debt (excessive deficit procedure) in the State Treasury's definition of debt produces what is known as the general government debt, or EDP debt. The most significant items include Finland's guarantees to the European Financial Stability Facility (EFSF) and security deposits associated with derivative contracts. Other items included in EDP debt include capital in the National Nuclear Waste Management Fund, debt arising from the government's PPP projects, and coins in circulation.

⁹ In accordance with the Eurostat guidelines, Statistics Finland will carry out an assessment this year to determine whether Finnvera will be classified as a financial institution or a public sector entity. In the latter case, Finnvera's debt would, in the future, be included in public debt.

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 approximately EUR 1 billion granted to Greece had a direct impact on government debt. In addition, borrowing by the European Financial Stability Facility 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.

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 instructions to the State Treasury, which is responsible for the operative side of debt management.

Government debt management risks can be grouped as follows:

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

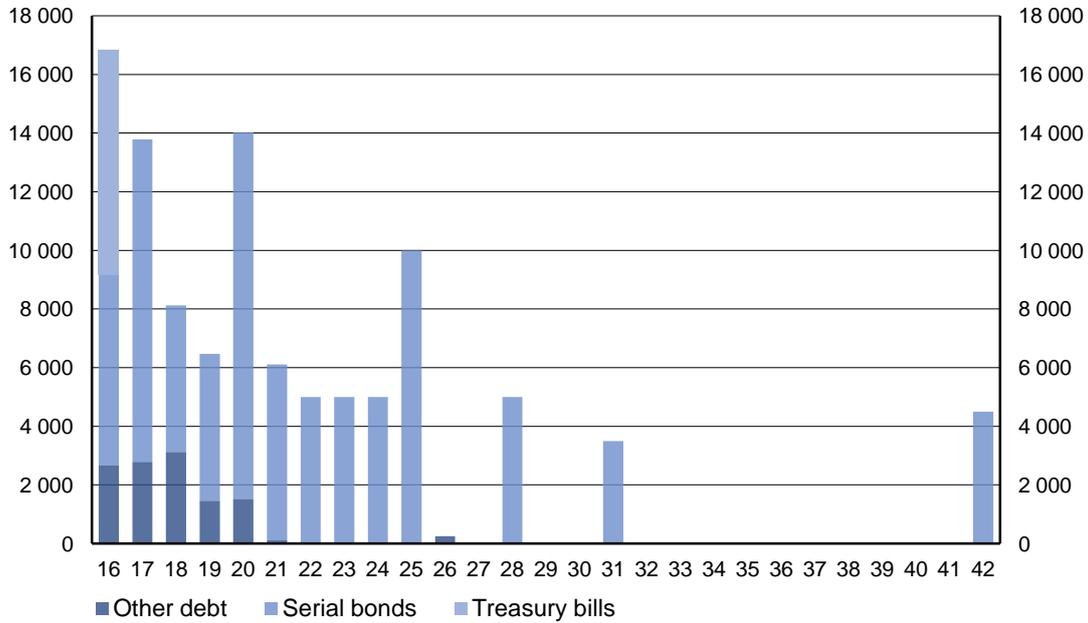
Financial risks include risks associated with the availability or terms of financing. This may refer to the risk of insolvency or an increase in the cost of debt caused by exceptional market conditions, government credit rating decline, or other adverse economic conditions. At the moment, borrowing accounts 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 2016 is estimated to be approximately EUR 20 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 financial 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, fundraising is diversified to avoid excessive reliance on individual

sources and the formation of temporal financial risk clusters. 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 4. Government debt amortisation in 2016–2042 (31 Dec. 2014), EUR million

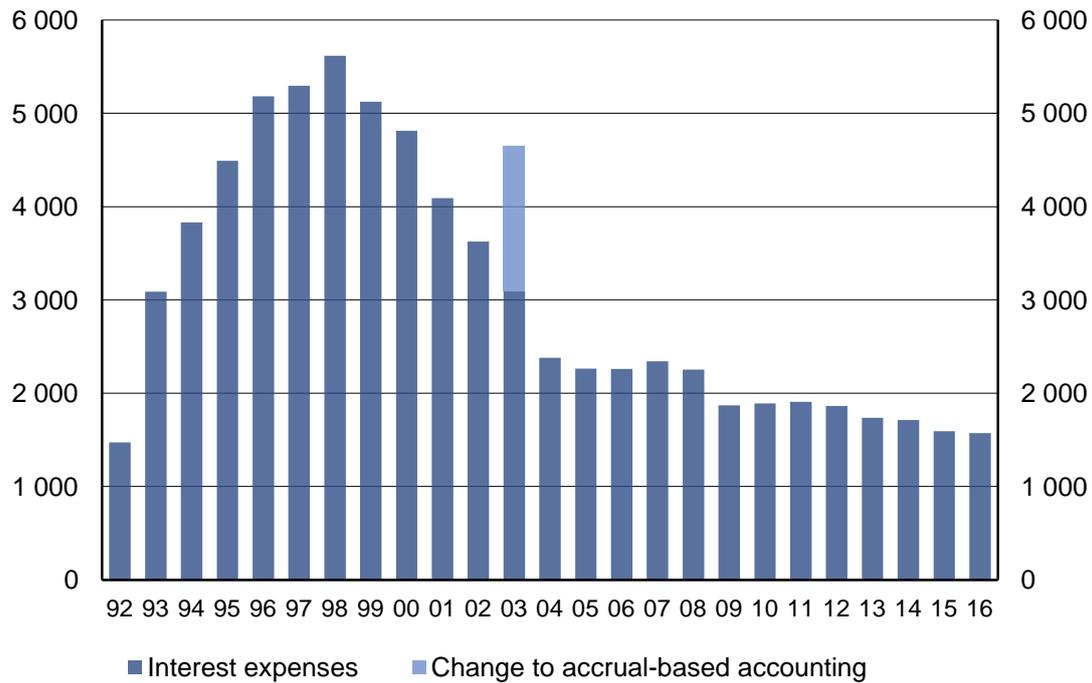


Source: State Treasury

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 interest cash flow. This includes systematic modelling of the interest 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 5).

Figure 5. On-budget interest expenses, EUR million



Source: State Treasury

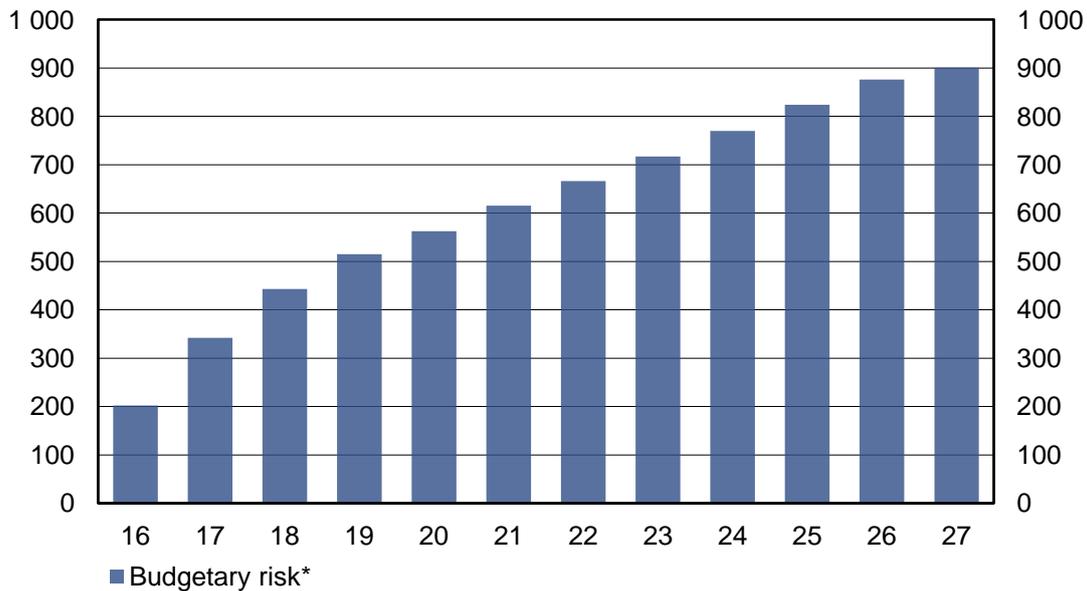
The interest rate risk associated with debt management can also be analysed using the concept of budgetary risk; this involves examining the change in interest expenses when the general interest rate level rises permanently by one percentage point. This type of rate increase would lead through current debt repricing to an increase in the government's budgeted/forecast interest expenses which would, in 2019 for instance, be approximately EUR 500 million higher than projected.

Budgetary risk in Figure 6 shows the change in interest expenses when the amount of debt remains unchanged.

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 debt-management related 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.

Figure 6. Budgetary risk 2016–2027, 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

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

Life cycle model (public-private partnership, PPP)

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 agreed allocations. 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.

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 2035

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.

It has been suggested that the 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 it would be easier for the Finnish government to acquire funding based on its good credit rating than for 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.

Generally speaking, the risks involved in a life cycle model include, in addition to financing risk, 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.

The life cycle model ties up government funds for decades, limiting the opportunities of future governments to start new projects. In the 2017–2020 budget planning period, life cycle projects represent approximately 25–39% of appropriations allocated under key transport network items (31.10.77, 31.10.78 and 31.10.79). 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.

Table 3. Life cycle projects in the government budget, EUR million

Life cycle projects: 31.10.79	Authorisation	2008-2020	2021-2026	2027-2036	2008-2036
E18 Muurla-Lohja	700	471.4	172.6	91.0	735.0
E18 Koskenkylä-Kotka	650	354.5	283.4	0.0	637.9
E18 Hamina-Vaalimaa	660	123.8	218.3	317.9	660.0
Total	2010	949.7	674.3	408.9	2032.9

Source: Ministry of Finance

3.2.2 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 pay in callable capital to the European Stability Mechanism or other international financial institutions.

Government guarantees¹⁰

The government guarantee and collateral portfolio has increased significantly in recent years. The biggest guarantees emanate from Finnvera's export guarantee activities and international financial crisis management. In 2015, the liabilities associated with the debt crisis of the eurozone no longer grew. Instead, the government guarantee given to the Bank of Finland for financing provided by the Central Bank to the International Monetary Fund was renewed in 2016. In spring 2015, the Government issued, for the first time, a government guarantee on the loans taken out by the Unemployment Insurance Fund. (Table 4)

Table 4. Government guarantees in 2005-2015, EUR billion

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Finnvera	6.74	7.25	7.20	10.52	13.60	13.15	14.42	15.44	15.67	20.28	27.67
Export guarantee and special guarantee activities, total liabilities	4.54	5.07	4.98	8.29	9.67	8.93	10.37	11.20	11.00	12.60	17.44
Domestic liability portfolio*	2.20	2.18	2.22	2.22	2.65	2.79	2.77	2.68	2.53	2.32	2.25
Government guarantees on loans	-	-	-	-	1.09	1.03	0.89	0.92	1.06	2.55	3.94
Government guarantees on derivative contracts	-	-	-	-	0.20	0.40	0.40	0.63	1.09	2.82	4.06
Student loans	1.30	1.31	1.31	1.31	1.33	1.36	1.41	1.49	1.58	1.68	2.01
EFSF	0	0	0	0	0	0	2.10	5.13	6.23	6.61	6.23
Bank of Finland										0.46	0.59
Government funds	-	-	-	-	-	7.91	9.15	10.20	11.17	11.84	12.31
Housing Fund of Finland	2.90	5.40	5.60	5.70	6.30	7.85	9.08	10.15	11.12	11.80	12.26
Development Fund of Agriculture and Forestry	-	-	-	-	-	0.01	0.02	0.02	0.03	0.03	0.04
National Export Guarantee Fund	-	-	-	-	-	0.05	0.04	0.03	0.03	0.00	0.00
Other	0.08	0.25	0.23	0.35	1.16	0.28	0.63	0.84	0.45	0.34	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

¹⁰ Government guarantee refers either to a legal commitment by the state to assume liability for the debt of another party or a legal commitment by the state to compensate for the losses arising from certain activities.

Finnvera

There are three types of public export financing instruments in Finland: government export guarantees, interest equalisation and export and ship credits. Export financing is provided through Finnvera, a specialised financing company owned by the State of Finland, and its fully owned subsidiary Finnish Export Credit. Finnvera also provides financing to SMEs in Finland. During 2015, all liabilities associated with Finnvera grew by approximately EUR 7.4 billion.

The government grants authorisations as a means of regulating the scope of public export financing activities. These authorisations have been dramatically raised in the past few years. In 2014, the maximum authorisation of Finnish Export Credit to grant export and ship credits was raised by EUR 4 billion to EUR 7 billion. At the same time, the maximum authorisation for export guarantees granted by Finnvera was raised from EUR 12.5 billion to EUR 17 billion, and the maximum government guarantees to Finnvera were raised from EUR 5 billion to EUR 9 billion. Similarly, the authorisation for interest equalisation was raised from EUR 2 billion to EUR 7 billion. The ceiling for Finnvera's liabilities in domestic financing activities has not been raised correspondingly, and amounts to EUR 4.2 billion at the moment.

Total government liabilities associated with export financing have grown quickly. The estimated total liabilities in 2005 were less than EUR 5 billion, while at the end of 2015, liabilities associated with export guarantees and the related hedging arrangements amounted to EUR 17.4 billion¹¹. In addition, guarantees for Finnvera's fundraising in effect at the end of the year totalled EUR 3.9 billion¹². The liabilities portfolio for domestic financing amounted to EUR 2.2 billion and for derivative contracts EUR 4.1 billion at the end of the year.

The growth of export financing liabilities is showing no signs of slowing down. According to the Government Programme, the elements of export financing and the level of financing should be at least equal to those in key competing countries. In fact, at the end of last year the Ministry of Employment and the Economy proposed further increases in export financing authorisations. According to the government proposal, the maximum authorisation for export and ship credits should be raised to EUR 13 billion, the authorisation for interest equalisation to EUR 13 billion, the authorisation for interest guarantee to EUR 13 billion, and the authorisation for Finnvera's fund guarantee to EUR 15 billion. Similarly, it is proposed that the maximum authorisation for the export guarantees granted by Finnvera and the related hedging arrangements be raised to EUR 19 billion. According to the proposal, the reason for such raises is increased demand for export credits, particularly ship credits.

Finnvera's activities involve risks, such as credit and guarantee risks, financing, interest and currency risks, and operational risks. Finnvera's Board of Directors confirms the principles of the risk management, the policies to be observed, and the guidelines for risk-taking. Finnvera's risk appetite depends on its ability to maintain sufficient equity and other risk buffers relative to the level of risk taken.

¹¹ This includes liabilities in effect and liabilities for tenders. Any overlapping liabilities have been eliminated.

¹² The government guarantee also covers the interest rate and currency swaps associated with loans. As at 31 December 2015, the nominal value of these swaps was roughly EUR 4 billion.

To assess the overall risks associated with its operations, Finnvera uses a statistical risk model. The credit risk model is based on an assessment of the probability of default, the loss given default, and the exposure at default. In the SME financing model, the share of losses is liabilities less the value of collateral, while in the model used in export guarantee activities the share of losses is based on an empirical estimate. In the SME financing model, the probability of default is based on historical data compiled by Finnvera in different risk categories. In credit guarantee activities, it is derived from the ratings of credit institutions. In SME financing, maximum exposure are set for the individual counterparties, and any deviation requires the approval of the Board of Directors or the owner, i.e. the State. In export financing, risks associated with individual counterparties and clusters are hedged, to some extent, with reinsurance. Finnvera's reinsurance policies taken out to hedge against credit risks amount to EUR 945 million (EUR 550 of which was derived from individual reinsurers).

As the export financing provider, Finnish Export Credit commits to pre-agreed terms of credit (incl. Commercial Interest Reference Rates, CIRR¹³) over a long delivery time. Meanwhile, it may, in exceptional cases, be necessary to offer the customer some optionality with respect to loan withdrawal, terms of interest and currency, due to the competitive situation. As a result of such options offered to the customer, the financial risks associated with Finnvera's fundraising and the government interest rate risks may be significantly higher than normal. It is Finnvera's policy to primarily cover the liquidity risk with a prefunded liquidity buffer. Financial risk is also covered with an EUR 500 million credit line provided in the State Budget. The interest risk associated with fixed-rate export credits is transferred to the State with interest equalisation agreements. If, for competitive reasons, the interest rate is, in accordance with the OECD export credit agreement, set at a very low level (CIRR excluding margin), the State may be exposed to a significant interest rate risk as a result of the terms and conditions of the transaction, and the market conditions.

The State of Finland incurs significant financial risks from Finnvera's activities (Figure 7 below). Any losses from Finnvera's export financing activities may be covered from two funds. Losses from export guarantee activities are primarily covered from the reserve for export credit guarantee and special guarantee operations in Finnvera's balance sheet, which at the end of 2015 amounted to EUR 536 million. Secondly, losses are covered from an off-budget fund, National Export Guarantee Fund, which had equity of EUR 661 million at the end of 2015.

Provisions are also made for losses from domestic financing activities. According to its credit and guarantee loss commitment, the State undertakes to cover 40–75% of the losses from SME financing.¹⁴ After this State credit loss compensation, the remaining losses are covered from Finnvera's reserve for domestic operations, which at the end of 2015 totalled EUR 136 million, and other equity items (EUR 397 million). If the reserves are insufficient to cover Finnvera's export financing and domestic financing losses, they will ultimately be covered from the State Budget.

¹³ The CIRR interest is based on the return on long-term government bonds, plus a fixed margin.

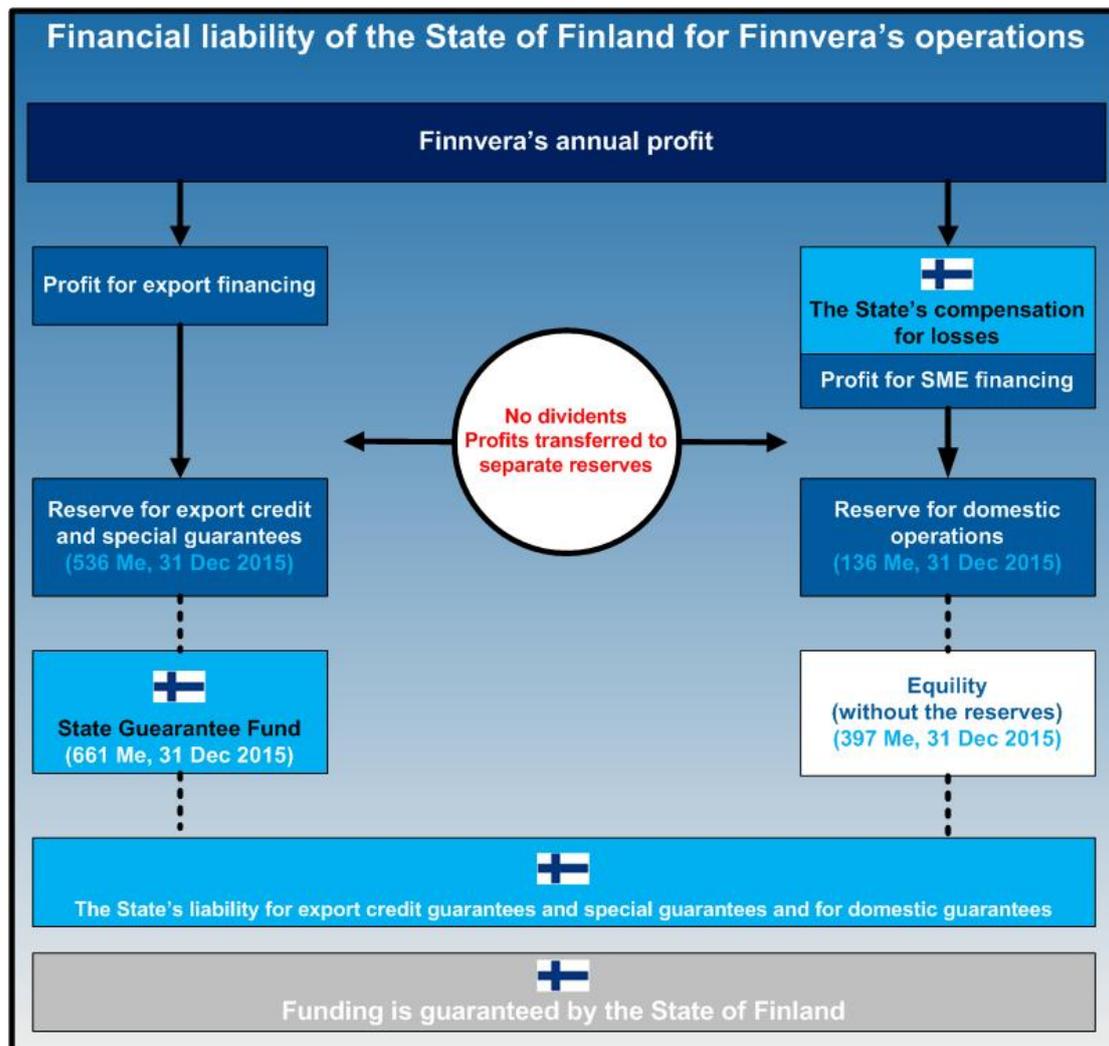
¹⁴ 75% of the funding allocated to start-ups and growth companies.

From Finnvera's risk management perspective, the strong focus in export financing on three sectors may turn out to be problematic. Taken together, the telecommunications, shipbuilding and forest industry sectors represent 84% of corporate liabilities. This exposes the company's risk management to the so-called model risk, if the realisation of corporate liabilities correlate more strongly than anticipated¹⁵. In terms of the government guarantee liability, this would be a problematic situation for at least two reasons. Firstly, it is likely that Finnvera's buffer reserves would prove insufficient, in which case the losses would have to be covered from the State Budget. Secondly, in such a situation, the public finances would already be stressed if the key export sectors were in trouble.

From the perspective of financial and market risk (such as interest rate and currency risk) management, the pressure to provide financing at very competitive rates and with various options is problematic. Loan pricing should be market-based, meaning that all market risks are transparently priced and included in the cost of the loan (i.e. a margin on top of the CIRR and a fee/premium). Similarly, limiting the options offered to customers would facilitate risk hedging. The opportunities for providing market-based export credit are generally limited by competitive factors, as Finnvera strives to offer similar terms to public export financing institutions in competitor countries. For risk management purposes, one of the key objectives is to make an effort to have the OECD credit loan agreement terms modified to achieve greater consistency with market terms.

¹⁵ For instance, a wide-spread pandemic would be very problematic for the shipping and shipbuilding industries. It is very difficult to model this type of risk.

Figure 7. Financial liability of the State of Finland for Finnvera's activities



Source: Finnvera Annual Report 2015

Student loans

The portfolio of government guaranteed student loans shrank from the mid-1990s to 2005, since when it has gradually grown to EUR 2 billion in 2015.

The amount of guarantee liability receivables being collected through a recovery procedure in 2015 totalled EUR 143.3 million, and loans repayable by the government under its guarantee commitment amounted to EUR 13.3 million (approximately EUR 4,384 per debtor). Guarantee liability receivables and loans repayable by the government have been falling since 2000. Compared to 2014, the amounts payable by the government as guarantor decreased by almost EUR 4 million. Annual revenue from recovery procedures has been close to annual guarantee liability expenditure. In 2015, revenue amounted to EUR 17.7 million against guarantee liability expenses of EUR 20 million. So-called statute-barred receivables totalled EUR 5.1 million in 2015. Legislation on statute-barred debt was amended in 2008 so that a debt will become statute-barred in 15 years. The proportion of statute-barred guarantee liability debt has remained unchanged over the past few years.

Bank of Finland

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. Maximum government guarantees for the Bank of Finland's IMF commitments totalled EUR 8.2 billion at the end of 2015. These guarantees comprise the member's quota, the NAB arrangement¹⁶, and a bilateral loan. Approximately 5–10% of the funding granted by Finland to the IMF has been used in recent years. Outstanding commitments amounted to about EUR 0.6 billion at the end of 2015.

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

The IMF financing involves, first and foremost, credit risks associated with the solvency of the eventual beneficiary. To limit these credit risks, debt sustainability analyses are carried out before any financing is granted, various economic policy conditions are attached to lending, and financing is offered in tranches, with disbursement tied to the implementation of an adjustment programme. In addition, the position of IMF as the lender of last resort for its member countries gives it a preferred creditor status, which reduces the credit risk of its financing. In its 70 years in existence, the IMF has only resorted to debt write-downs, mainly in the poorest member countries, as part of more extensive debt relief programmes.

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 for 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 corporations. 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.

¹⁶ New Arrangements to Borrow

In practice, almost the entire guarantee portfolio of off-budget funds consists of housing loan guarantees for state-subsidised housing production. The Government housing finance guarantee portfolio stood at EUR 12.3 billion at the end of 2015. In the past ten years, the housing loan guarantee portfolio has shown rapid growth 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 9.8 billion in 2015, are linked to interest-subsidised loans granted by financial institutions to rental and right-of-occupancy housing corporations. 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, and the government debt may be fully repaid. A government guarantee is granted for the full amount of these converted loans. The guarantee fee is 0.5% 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 accounted for EUR 2 billion of the total portfolio in 2015. 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. No guarantee decisions were granted in 2015.

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 have no longer been 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. Interest risks on subsidised loans paid from the National Housing Fund have grown following temporary reductions in the co-payment portion of interest and an annual increase of approximately one billion euro of the subsidised loan portfolio. The reduced co-payment portion, 1%, was discontinued at the end of 2015. The co-payment portion of government-issued loans is currently 3.4%, 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% interest expenditure from the existing subsidised loan portfolio would grow to approximately EUR 1.5 billion during the remaining maturity of the portfolio while at the current interest rate they would be EUR 39 million.

Until now, guarantee fee income has significantly exceeded the credit losses on loans. About 82% of the principal of the loan portfolio fall under the very low risk category. At the highest, payment delays affected four per cent of the principals in 1994. However, the volume of delays took another upward turn in 2009. Between 2000 and 2012, delays remained at below 1.5% but since 2013 the development trend has been alarming. At the moment, loans with delayed repayment represented 2.8% of the total loan portfolio. This proportion is expected to show continued growth, largely because the loans repaid early or according to plan are removed from the Arava loan portfolio, which means the loan portfolio contains a relatively larger proportion of loans made to customers struggling to make the payments specified in the loan terms. Rental housing corporations struggling with payments are typically located in areas where the population is decreasing. These same regions tend to have problems with their collateral since the value of the property is insufficient to cover the remaining loans in full or, in the worst case, at all. Until now, credit and collateral risk have mainly applied to the Arava loan portfolio, but it is anticipated that they will also affect interest-subsidised loans in the future. The difficult economic conditions are not the only cause of problems; structural change, especially migration to growth centres, are also key contributors. Credit and collateral risks mainly materialise in regions experiencing a population loss following a decrease in housing needs and the ageing and devaluation of the housing stock. Another risk-increasing factor is that home loan repayment schedules tend to leave the biggest instalments for the final years, when homes are in need of full refurbishment.

Other

Unemployment Insurance Fund

The Unemployment Insurance Fund (TVR) answers for the expenses arising from earnings-related unemployment security in cases where responsibility does not fall on the State or individual unemployment funds. In April 2015, the government granted the Unemployment Insurance Fund a guarantee for a syndicated loan arrangement with banks for a sum of no more than EUR 700 million. The guarantee also covers any interest on such loans on condition that the total sum of the guaran-

teed loan principal and interest does not exceed EUR 770 million. No fee is charged for the government guarantee.¹⁷

In spring 2015, the Unemployment Insurance Fund concluded a loan arrangement with banks after it had secured a government guarantee decision. However, it has not withdrawn a single instalment under the arrangement, which means that no government guarantees for the Fund are currently in effect. Instead, it has raised funds on the bond markets without any government guarantee.

Saint Petersburg Foundation

The operations of Finland House in St. Petersburg are run by the Saint Petersburg Foundation, which is an independent private entity. The Foundation has taken out a loan for the renovation of Finland House, for which the Government granted guarantees totalling EUR 13.5 million in 2008 and 2009. The current loan balance is approximately EUR 9.3 million.

The Saint Petersburg Foundation has had financial problems for a long time. The renovation costs of Finland House turned out to be much higher than anticipated. In recent years, the situation has escalated, and in November 2012 the Foundation was unable to make repayments to Danske Bank and, as the guarantor, the government had to pay approximately EUR 2.6 million in total in 2012–2015. The State Treasury has initiated standard collection proceedings in order to secure the government's position.

In terms of decision-making regarding an increase in the government's guarantee liabilities, the key problem is that no general government finance restrictions apply to these guarantees. Since guarantees may be granted without any immediate costs, they are considered inexpensive for the State, despite the risks involved. But, as the case of Finland House in St. Petersburg proves, sometimes risks do materialise, resulting in significant costs.

Liabilities associated with financial assistance programmes in the euro area

Finland's total liabilities arising from the euro crisis that began in 2010 amounted to EUR 9.6 billion at the end of 2015. These consist of a bilateral loan to Greece, guarantees given for fundraising to the European Financial Stability Facility (EFSF) and capital contributions paid into the European Stability Mechanism (ESM). In 2015, financial assistance programmes in the euro area were under way in Greece and Cyprus.

¹⁷ According to the Act on State Lending and State Guarantees, a fee is charged for any state guarantee given subject to the Finnish Parliament's approval. According to the Act on State Lending and State Guarantees, the Government may, for special reasons, decide not to impose a guarantee fee. Such special reasons were not specified in any detail in the preparation of the legislation. However, the Act on State Lending and State Guarantees by default involves the collection of a guarantee fee, which is why the special reasons referred to in the Act should be considered exceptional in relation to the objectives generally set for the guarantees. Yet in practice, the Government has deemed special reasons to apply to almost all guarantees falling within the scope of application of the guarantee fee referred to in the Act on State Lending and State Guarantees, effectively turning what was intended as an exception into the actual rule.

Table 5. Liabilities associated with financial assistance programmes in the euro area

	Bilateral loans	EFSF loans	ESM loans	IMF	EFSM loans	Total	Finland's calculated share*
Greece	52.9	130.9	21.4	15.5	-	220.7	3.99
Cyprus	-	-	6.3	1.0	-	7.3	0.12
Portugal	-	26	-	20.5	24.3	70.8	1.00
Ireland	(4.8)**	17.7	-	4.7	22.5	49.7	0.73
Spain	-	-	35.7	-	-	35.7	0.64

*Finland's calculated share of the financial support given. The figure is different from Finland's guarantee and capital liabilities. The figures do not include interest on the EFSF/ESM's or any other items.

**Great Britain, Sweden and Denmark made a bilateral loan to Ireland amounting to a total of EUR 4.8 billion.

Bilateral loan to Greece

As part of Greece's first programme, Finland granted Greece a bilateral loan of EUR 1.005 billion in 2010–2011. The loan was granted under an intergovernmental loan agreement. The loan repayment period is 2020–2041, and the interest is 3-month Euribor + 50 basis points. Greece will pay annual interest on the loan. Cumulative interest and commissions at the end of 2015 totalled EUR 70 million. The interest rate has been lowered and the repayment period was extended three times in 2011–2012. The loan was conditional on a commitment by the Greek government to make economic policy reforms, whose implementation is supervised by the European Commission in cooperation with the European Central Bank.

European Financial Stability Facility (EFSF)

EFSF 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. These member states are responsible for raising funds for the EFSF. The guarantee also covers interest and over-guarantee. 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 has been 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 6.23 billion on 31 December 2015.

On 31 December 2015, the loan receivables of the EFSF from Greece amounted to EUR 130.9 billion, from Ireland EUR 17.7 billion, and from Portugal EUR 26 billion. Receivables from Greece decreased from the end of 2014 following the return by the Hellenic Financial Stability Fund (HFSF) to the EFSF of its bonds worth EUR 10.9 billion on 27 February 2015. The bonds were intended for capital contributions to banks. Portugal and Ireland have exited their financial assistance programmes and have been able to successfully return to the bond markets. Greece's EFSF programme expired on 30 June 2015. Financial assistance totalling EUR 13.7 billion was undisbursed for Greece's second programme, reducing the need for the EFSF to raise funds towards the year-end.

The EFSF fundraising programme approved in February 2012 totalled EUR 241 billion, of which a EUR 184.6 billion loan principal, or EUR 205 billion including net interest, was in use in December for the funding of financial assistance programmes of Greece, Ireland and Portugal. Finland's share of the used principal and net interest was approximately EUR 3.9 billion, and with over-guarantees approximately EUR 6.23 billion. From the end of June 2015, Finland's guarantee liabilities fell by approximately EUR 510 million.

The lending terms of the EFSF programmes for Greece, Ireland and Portugal were eased several times during the programme period. In 2011–2012, the countries were given a grace period of 10 years, which will end in 2022, and loan maturities for Ireland and Portugal were extended to 21 years and for Greece to 32.5 years. The interest rate was lowered to match the EFSF fundraising expenses. In 2012, an agreement was made to capitalise the interests of Greece's EFSF loans for a period of 10 years. New fundraising is required to cover this capitalisation. Changes in the lending terms mean a prolonged fundraising need for the EFSF, which will only start diminishing when loan repayment begins. As a result, the EFSF will continue to need guarantees on its fundraising.

European Stability Mechanism (ESM)

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 704.8 billion subscribed capital of the ESM consists of EUR 80.55 billion in paid-in capital and a maximum of EUR 624.3 billion in callable capital. The ESM shareholder contribution key is based on the ECB capital subscription.

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. 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 whether new 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% of Finland's GDP. Paid-in capital of EUR 1.44 billion accounts for less than 1% of GDP. This is not a contingent liability; instead, it is regarded as a government asset.

On 31 December 2015, the ESM's lending capacity amounted to EUR 500 billion, with EUR 63.4 billion being used. A maximum of EUR 67.3 billion of the available lending capacity may be used on the financial assistance programmes of Cyprus and Greece currently under way. On 31 December 2015, EUR 130.7 billion of the ESM lending capacity was tied to the programmes of Spain, Cyprus and Greece while EUR 369.3 billion was available. Of the loan capacity, paid-up loans amounted to EUR 63.4 billion. Finland's calculated share of the tied-up loan capacity was approximately EUR 2.3 billion, and of the paid-up loans approximately EUR 1.1 billion.

Management of risks related to the euro area stability mechanisms

The financial impacts, liabilities and risks associated with financial assistance programmes are assessed from Finland's perspective before programme approval. Financial assistance programmes require a unanimous decision of the euro area countries. After the start of a programme, many other factors limit the risk involved. All decisions and actions affecting the nominal value of the loan require a unanimous decision. According to article 125 of the Treaty on the Functioning of the European Union, a Member State shall not be liable for the commitments of another Member State. Therefore, it is not possible to record losses by cutting the nominal value of a loan. In risk assessment, consideration may be given to the fact that, historically speaking, insolvency among developed economies is extremely rare.

The main vehicle for managing liability risk is the conditionality of financial assistance, specified in detail after the approval of a financial assistance programme. Programmes may be conditional on certain reforms designed to rehabilitate the economy and society; progress made with such reforms is monitored and assessed regularly. These mid-term evaluations are carried out by the commission and the ECB, in cooperation with the IMF where necessary. A representative of the ESM/EFSF also takes part in the evaluation. Payment of loan tranches during the programme is conditional on the country in question meeting the agreed mid-term financial reform objectives (conditionality).

The duration of a financial assistance programme is three years in most cases. After the close of the programme, the country in question will remain in post-programme monitoring until 75% of the financial assistance it was granted has been repaid. In connection with the semi-annual reporting, which is part of the post-programme monitoring, the risk of the country failing to repay its EFSF, EFSM and ESM loans is assessed.

A low interest rate reduces the interest expenditure arising from the assistance loans given to the programme countries; this decreases the risk associated with repayment. In 2015, the interest rate on the EFSF and ESM loans was under 1.35% and the loan period was 20–30 years. The inexpensive loans and the reforms the programme countries are required to implement will improve their competitiveness and the sustainability of public finances, particularly in the medium to long term. This will make them better equipped to repay their loans and decrease Finland's liability risk.

The ESM's preferred creditor status, immediately after the IMF, limits the risks to which the ESM and thereby the euro area countries are subject. Bilateral and EFSF loans do not have a similar status. According to the ESM agreement, any losses would be covered firstly from the reserve fund and, if the fund is insufficient, from paid-in capital. A return also accrues on the ESM's paid-in share capital of EUR 80.55, which can be placed in the reserve fund. If these are not sufficient, losses will be covered from the callable capital. If paid-in capital was used to cover losses, a simple majority decision may be made to restore the paid-in capital to its previous level.

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 in-

volves operational risks and counterparty and market risks which may, to some extent, materialise regardless of the beneficiary's solvency.

Finland has received collateral payments to limit the risks associated with financial assistance provided under the second programme for Greece and the programme for Spain. The value of the collateral arrangement represents 40% of Finland's calculated share of the loan. The market value of collateral accumulated in Spain's programme is approximately EUR 0.3 billion and in Greece's programme approximately 0.93 billion. In total, the market value of collateral given to Finland stood at EUR 1.23 billion on 31 December 2015. 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).

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%, 2) in the event of insolvency, the write-down on EFSF funding is 40% and for the ESM it is 10%. 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's crisis funding would come to approximately EUR 700 million. If the probability assumption for insolvency rises to 50%, 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.

Expiration of Greece's second programme and a new ESM programme

The EFSF programme for Greece expired on 30 June 2015. Disbursements under the programme totalled EUR 130.9 billion, which means that, of the total EUR 144.6 billion earmarked for the programme in 2012, approximately EUR 13.7 billion was not used. At the time the EFSF programme was discontinued, funds totalling EUR 40 billion remained undisbursed. Similarly, Greece did not receive the ECB related income – SMP/ANFA profits – of EUR 8.5 billion and IMF loan tranches totalling EUR 17 billion.

Due to the programme's expiry, the EFSF revised its fundraising programme and cancelled the issues planned for 2015. The reduced need for fundraising affected the guarantees given for EFSF fundraising. Low interest rates have reduced the EFSF's need for fundraising and increased the risk associated with additional guarantees in the short and medium term. The decision made in 2012 to capitalise the interests of Greece's loans in the first 10 years prompted the EFSF to increase its fundraising, as it will need more funds to cover the interest expenditure.

From Finland's perspective, the recognition of an imputed return on Greek government bonds acquired through the ECB Securities Market Programme (SMP) as revenue for Greece had a direct positive effect on the Finnish State Budget. The agreed recognition as revenue of EUR 27 million scheduled for July 2015 was cancelled due to Greece's failure to implement the agreed reforms by the time the second programme had expired. Cancellation of the revenue recognition scheduled for 2015–2025 generates a positive budget impact of EUR 101 million for Finland, as the Bank of Finland is able to recognise the same amount as revenue for the State of Finland.

In August 2015, an agreement was signed on the third programme for Greece under the European Stability Mechanism (ESM). The maximum financial assistance provided under the programme over a period of three years is EUR 86 billion.

The programme will increase the ESM's balance sheet and thereby its financial risks. This will also indirectly increase Finland's risks. Finland's calculated share of Greece's ESM loan is EUR 1.54 billion (1.79%) at most. Use of the ESM eliminates any direct budget impacts of Greece's third programme for Finland (which the 1st programme had) and the need to increase the Finnish government's guarantee liabilities (which the 2nd programme did). This is because the ESM operates with paid-in capital, and funds needed for the loan programme are raised through a bond issue. The paid-in capital of the ESM is EUR 80.55 billion, with Finland contributing EUR 1.44 billion. The third financial assistance programme for Greece did not change Finland's capital contribution to the ESM. By 31 December 2015, the loans paid out to Greece under the ESM amounted to EUR 21.4 billion.

The alternative scenario to the third programme would have been Greece's insolvency, which could have resulted in a lengthy debt settlement process and, most likely, in write-downs of up to EUR 4 billion over time. A possible short-term scenario could have been the realisation of EFSF guarantees. If insolvency had resulted in Greece's exit from the euro, both the ECB and the Bank of Finland would have been forced to prepare for write-downs and, consequently, significant losses.

Finland's calculated share of the loans granted to Greece comes to approximately EUR 4.52 billion. Including Finland's collateral arrangements in the EFSF programme, approximately EUR 0.93 billion, net liabilities amount to about EUR 3.59 billion. These figures illustrate the scale of direct programme losses incurred by Finland in the event of Greece's insolvency. The maximum liabilities associated with Greece's programmes which the Finnish govern-

ment has approved are larger than those referred to above, considering the over-guarantees for EFSF fundraising that involve risks that cannot materialise for reasons related to Greece. Finland's total EFSF guarantee liabilities, including over-guarantees, amounted to EUR 6.23 billion at the end of 2015. This covers the expired second programme for Greece, and the financial assistance programmes from which Portugal and Ireland have already exited.

Government liabilities

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

Table 6. Government liabilities in 2005-2015, EUR billion

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Liabilities / state budget economy ¹	66.40	88.25	93.57	96.13	99.48	103.34	110.43	116.96	115.38	130.14	129.56
Other multi-annual liabilities, appropriations required	-	-	-	-	-	-	6.79	8.69	8.95	7.48	6.81
Government pension liability ²	57.60	79.30	82.70	85.60	88.40	90.60	89.70	92.60	94.00	95.40	95.70
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	9.28
Liabilities / Off-budget entities	-	-	-	-	-	0.32	0.39	0.53	0.58	0.74	0.92
Other multi-annual liabilities, appropriations required	-	-	-	-	-	-	0.05	0.06	0.06	0.07	0.16
Investment commitments	-	-	-	-	-	0.32	0.34	0.47	0.52	0.67	0.76
Liabilities / State enterprises	-	-	-	-	-	1.41	1.46	1.51	1.62	1.77	1.64
Senate Properties' loans	0.54	0.71	0.84	1.08	1.29	1.00	1.06	1.20	1.22	1.35	1.08
Rental liabilities	-	-	-	-	-	0.27	0.25	0.25	0.26	0.26	0.36
Leasing liabilities	-	-	-	-	-	0.01	0.01	0.01	0.01	0.01	0.01
Investment commitments	-	-	-	-	-	0.13	0.15	0.06	0.13	0.14	0.20

¹ In addition to the below, includes the government capital liabilities presented in table 7.

² The calculation formula for government pension liabilities changed in 2006, therefore any previous figures are not comparable.

Source: State Treasury.

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 included in the government pension system.

Besides the expected return on investment, other factors affecting pension liabilities include the life expectancy of the insured, the retirement age, and the number of people retiring due to disability. In practice, pension liability changes annually: those employed continue to earn more pension, new people retire, and people entitled to pension die. At the end of 2015, government pension liabilities totalled approximately EUR 95.7 billion and the funding rate was 19%.

Government pensions amounted to approximately EUR 4.4 billion in 2015. 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. In 2015, the amount recognised as revenue was exceptionally increased by EUR 500 million. A total of EUR 1,785 million will be transferred into the central government budget in 2016. Considering that the estimated contributions in 2016 will amount to about EUR 1,496 million, the fund's net contributions come to EUR -289 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. The development of pension expenditure involves uncertainties. 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.

At the end of 2015, equity investments account for 43% of the State Pension Fund's investments, interest investments for 49% and other investments for 8%. An investment plan annually approved by the government 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 government on a quarterly basis.

Other multi-annual liabilities amounted to approximately EUR 7 billion in 2015. These include i.a. rental agreements for government agencies and universities, compensation payable under government accident 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. In the 2000s, appropriations based on authorisations granted in the budget year or earlier grew, and reached a peak of EUR 14.5 billion in 2012. In 2015, the appropriations required due to authorisations had decreased to just over EUR 9 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 760 million in 2015.

The Senate Properties finances some of its real estate investments through loans from financial institutions. The Senate Properties is a state enterprise, and the government answers for any loans it takes out from financial institutions. The Act on State Treasury was amended in 2014 such that the State Treasury is permitted to

manage Senate Properties' borrowing in conjunction with the government's current borrowing. In 2015, Senate Properties withdrew loans totalling EUR 335 million through State Treasury. Funding through State Treasury keeps Senate's own financing expenditure lower. New loans taken out by Senate Properties in 2015 amounted to EUR 335 million. Loan repayments during the year totalled EUR 296 million. Net borrowing remained at EUR 39 million.

Government liabilities for the loans of Senate Properties stood at EUR 1,693.8 million at the end of 2015 (EUR 1,655.9 million). Government loans accounted for EUR 617.6 million (364.5 million) and loans from financial institutions for EUR 1,076.2 million (1,291.4 million). The Senate Properties has a high equity ratio: 62% in the financial statements for 2015, 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.

3.2.3 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 (ESM). The liabilities associated with ESM are discussed in more detail in section "Liabilities associated with financial assistance programmes in the euro area" of this report.

Table 7. Government capital liabilities, EUR billion

	2008	2009	2010	2011	2012	2013	2014	2015
Asian Development Bank (AsDB)*	0.12	0.12	0.40	0.41	0.40	0.38	0.41	0.44
African Development Bank (AfDB)*	0.11	0.10	0.11	0.35	0.35	0.33	0.35	0.38
Inter-American Development Bank (IDB)**	0.11	0.11	0.12	0.12	0.13	0.14	0.18	0.22
European Bank for Reconstruction and Development (EBRD)	0.18	0.18	0.18	0.30	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	1.15
European Investment Bank (EIB)	2.00	2.82	2.82	2.82	2.82	2.82	2.82	3.10
Council of Europe Development Bank (CEB)	0.04	0.04	0.04	0.06	0.06	0.06	0.06	0.07
Nordic Investment Bank (NIB)	0.69	0.69	0.69	1.01	1.01	1.01	1.01	1.09
European Stability Mechanism (ESM)	0.00	0.00	0.00	0.00	11.14	11.14	11.14	11.14
Total	3.96	4.75	5.10	5.83	17.01	17.06	17.25	17.89

* 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

3.2.4 Contractual liabilities¹⁸

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).

3.2.5 Liabilities associated with the banking sector

Background

Financial and banking crises are rare¹⁹, but the resulting costs are extremely high. 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 measures to ensure the continuity of financial operations necessary for the economy and society, even though such measures are not required by law.

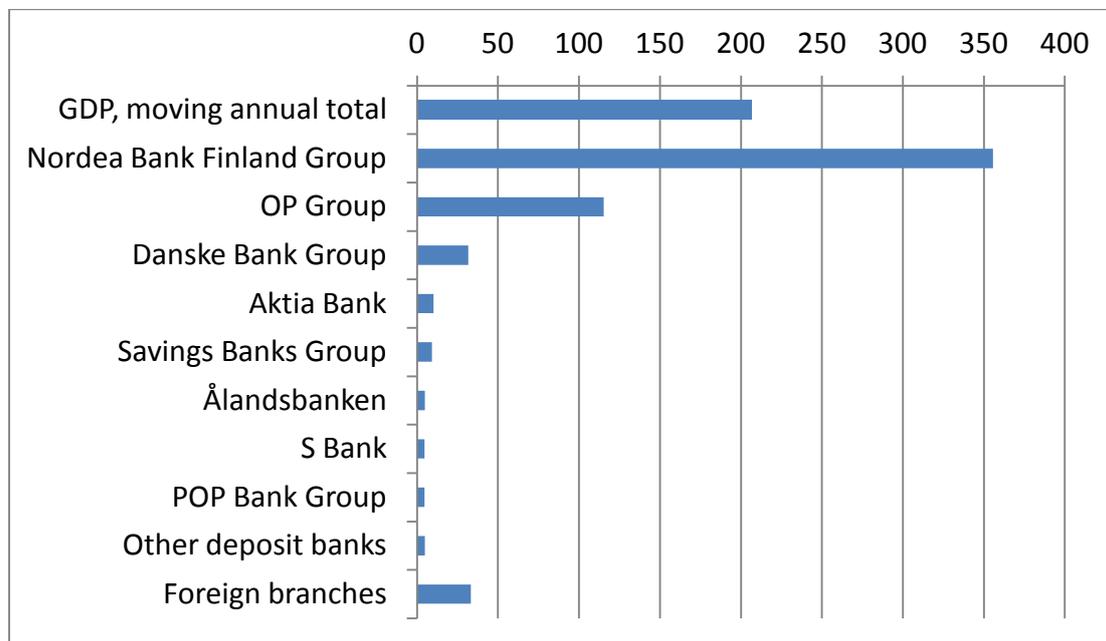
Considering the size of the Finnish economy, the banking sector is fairly large (the combined banking balance is approximately 270–280 per cent of GDP) and the dominant features include a centralised structure and strong links to other Nordic countries. (Figure 8) Three credit institution groups control 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 centralisation 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

¹⁸ The government's contractual liabilities are not discussed extensively in this review.

¹⁹ 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.

Finnish banking sector is subject to a systemic risk arising from its structure. Systemic risk usually enhances cyclical risk and vice versa.

Figure 8. Balance sheet totals and nominal GDP of Finnish deposit banks and branch offices of foreign banking groups on 30 June 2015, EUR billion



Source: Financial Supervisory Authority, Statistics Finland

Financial situation of the Finnish banking sector

Challenging operating environment

Recent years have seen very subdued development of national economy, and the European interest rates have fallen significantly. Besides the international financing market risks which could spread into Finland, the threats undermining the stability of the Finnish financing system largely emanate from the weak development of the real economy. With cost-cutting and business model adjustments, banks have, however, been able to maintain a healthy profitability. Similarly, impairment losses, which materially affect banks' performance, have remained very moderate. Credit losses represent only 0.1% of the banks' credit portfolio, which is very low by European standards.

The operating environment is expected to remain challenging in the short term. No changes in interest rates are foreseeable, and Finland's economic growth is expected to remain weak.

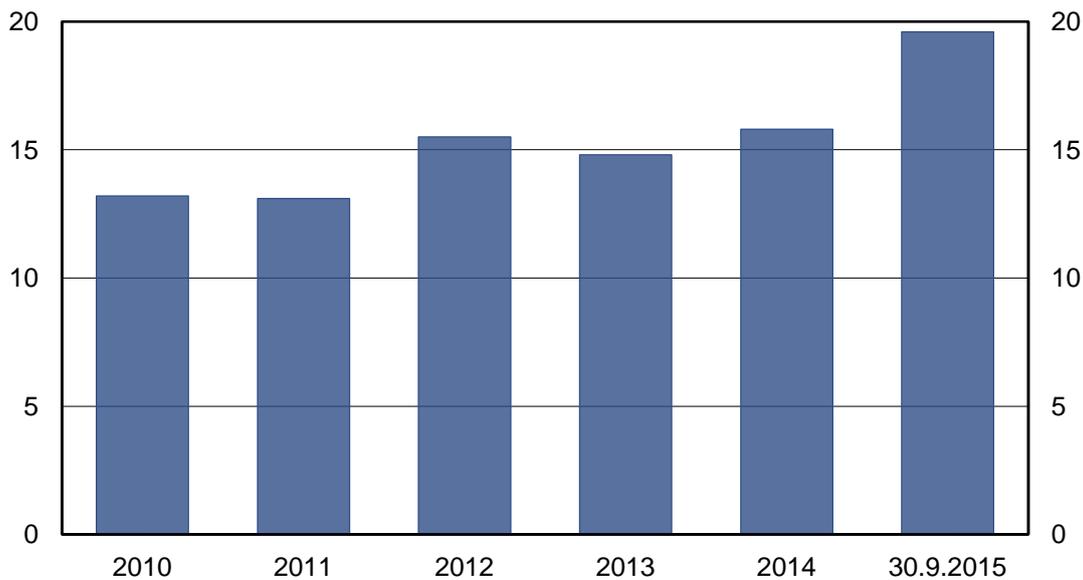
Healthy capital adequacy and liquidity

Finnish banks have been able to maintain a solid financial performance despite the declining operating conditions. At the end of 2015, the banks' average Core Tier 1 ratio (CT1) was 19.6% (figure 9). From the end of 2014, capital adequacy, measured by CT1 ratio, improved by almost 4 percentage points. Although the increase in own funds accounted for most of this growth, the banks were also able to use internal

models to reduce risk-weighted items on their balance sheets to some degree. At the end of September, the Finnish banks' own funds in excess of the minimum target level totalled more than EUR 13 billion.

Since the beginning of 2016, a capital add-on, which is specified separately for each credit institution but is no more than two per cent, is required of banks of systemic importance in Finland (Nordea Bank Finland, OP Group, Danske Bank and Municipality Finance). For the two largest banks, the capital add-on is 2% and for the other two it is 0.5%.

Figure 9. Core Tier 1 ratio of the Finnish banking sector, %



Source: Financial Supervisory Authority

The **leverage ratio** of banks improved last year. The own funds to non-risk-weighted balance sheet items ratio rose from 4.6% in December 2014 to 5.2% in September. The Basel Committee on Banking Supervision has proposed a minimum leverage ratio of 3% but no decision has yet been made in the EU. The European Banking Authority (EBA) is currently preparing a report, which will serve as the regulatory basis within the EU.

So far, Finnish banks have been able to **raise funds and maintain good liquidity**-without any problems. However, it should be borne in mind that, by international comparison, the Finnish banking sector relies fairly heavily on market-based fund-raising, and has strong links to other Nordic countries.

Despite multiple uncertainty factors such as the fluctuation of the international equity and currency markets, the Finnish banking sector has remained stable, with no major disruptions in the domestic financial markets or in the provision of financing. However, the global economic outlook is uncertain, and market disturbances with repercussions in Finland are possible if the global economy fails to recover as expected.

Structural change

The Finnish banking sector is undergoing a radical structural change following the decision by Nordea Bank to modify its corporate structure. At the end of 2014, the Finland-based Nordea Bank Finland Group held a 29% market share of loans and a 29% market share of deposits. The change will affect the supervision, deposit guarantees and crisis resolution of banks operating in Finland. A full impact assessment is still under way.

European deposit insurance scheme

The objective of the Commission's Communication and a proposal for a Regulation of November 2015 was to reduce risks in the banking sector and to build a European deposit insurance scheme in three stages by 2024. The proposed scheme would represent the third pillar of the Banking Union alongside bank supervision and bank resolution, which have already been implemented. The Single Supervisory Mechanism (SSM) was established in November 2014, and the Single Resolution Mechanism (SRM) at the beginning of this year. It is estimated that these reforms, implemented as part of the banking union, will offer significantly more leverage to the authorities and protect taxpayers from having to pay the costs of bank bailouts.

For Finland's centralised banking system, the common deposit insurance scheme could, when implemented correctly, reduce the risk exposure of the central government finances. However, it is extremely important that prior to introducing a common system, determined steps are taken to reduce the relative risks between banking sectors in order to ensure fair and equal distribution of the benefits of the system.

3.2.6 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 2016, the total number of joint municipal authorities was 140. Joint municipal authorities represented approximately 25% 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 current status and development of the economy.

According to municipal accounting, the annual contribution margin has been positive but, aside from a few exceptional years, insufficient to cover depreciation and net investments. This has resulted in an increase in municipal 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 19.87 per cent in 2016.

Municipal loan portfolio

Municipal loans have been growing annually, and according to the final accounts estimate for 2015, municipal loans currently amount to around EUR 15.24 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 level. The total loan portfolio of municipalities and joint municipal authorities stood at EUR 17.3 billion at the end of 2015. Total loans of the local authority corporation²⁰ amounted to EUR 31.4 billion at the end of 2014. 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.

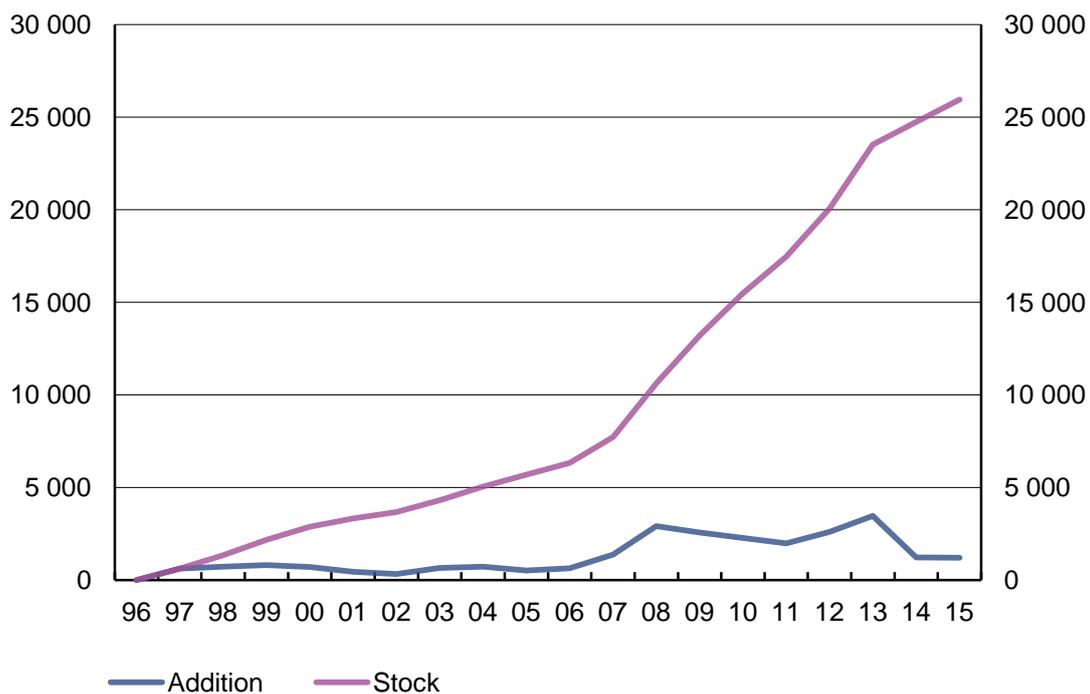
²⁰ According to Chapter 1, section 5.1 of the Accounting Act and section 6 of the same, a Group relationship between a municipality and another entity is based on control. A Group relationship may be formed on the basis of the majority of voting rights or some other situation involving effective control.

Municipality Finance provides approximately 50–60% of municipal loans. Currently, some 65% of new loans and 75% of the financing for government-subsidised social housing production is provided by Municipality Finance. Municipality Finance is a credit institution owned by municipalities, municipal companies and the local government pension institution Keva, with the State holding a 16 per cent stake. Other funding providers include commercial banks and the European Investment Bank.

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

The number of guarantees given by the Municipal Guarantee Board has grown on a par with the operations of Municipality Finance. Its guarantee portfolio has multiplied in less than ten years from EUR 5 billion in 2005 to EUR 26 in 2015. Since 2014, the portfolio has grown by about EUR 1.2 billion.

Figure 10. The guarantee portfolio of the Municipal Guarantee Board, 1996–2015



Source: Municipal Guarantee Board

The shared mission of Municipality Finance and the Municipal Guarantee Board is to ensure competitive funding for the local public sector and for social housing production in all market conditions. Thanks to the clean credit history of Finnish municipalities and legislation that addresses the financial problems of individual municipalities, the Finnish municipal sector has been able to maintain a high credit standing in the financial markets; as a result, there are no major differences 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 on reasonable terms, which may then be used to maintain liquidity instead of making financially sound investments aimed at ensuring basic services.

However, the inability of an individual municipality to repay its loans is very unlikely, and would be caused by highly exceptional circumstances. If a municipality would be in such a financial hardship that loan repayment would be impossible, the creditors' interests would be primarily protected by the Guarantee Board's fund and, if needed, additionally by the municipalities. If the loan was obtained from the private sector, the lender would, as a rule, record a credit loss.

The government is also 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.

Healthcare, social welfare and regional government reform

According to Government policy outlines of November 2015 and April 2016, the responsibility for the organisation of healthcare and social services will be transferred from municipalities and joint municipal authorities to 18 counties. In the future, public administration will be organised into three levels, which are state, regional and municipal. The future multisectoral counties will be established on the basis of the existing county division. According to Government policy outlines, counties will, in addition to healthcare and social services, be assigned the following duties as from 1 January 2019:

- Emergency services, taking into account the potential needs to organise services across a wider area if a more extensive geographic coverage and population base is required;
- Regional development and financing duties falling within the remit of regional councils, including the organisation of financing from EU programmes and regional land-use planning;
- Regional development and business development duties handled by Centres for Economic Development, Transport and the Environment (ELY Centres), including rural business development and financing; and
- possibly environmental healthcare.

The objective of the healthcare, social welfare and regional government reform is to narrow the general government's finance sustainability gap by nearly EUR 3 billion by 2029.

The reform involves a complete overhaul of the structure, provision and financing of social welfare and healthcare services. The objective is to reduce health and wellbeing inequalities, to improve the equality and availability of services, and to curb costs. The reform also involves transferring the responsibility for social welfare and healthcare financing from municipalities to the State. The reform will fundamentally impact the system of central government transfers to local government and the tax system. More details of the overall impact on public finances will become available as preparations proceed. As part of these preparations, there may be an inevitable need to examine public sector guarantees and other liabilities.

Similarly, responsibility for duties specified in the Rescue Act (379/2011) will be transferred from municipalities to counties at the beginning of 2019. More information on the effects of this transfer on the municipalities will become available in connection with the preparation.

The purpose of the regional administration reform is to harmonise the State regional administration with the county administration to be established, and to rationalise the organisation of the public sector's regional administration (State, regions and municipalities). As the primary solution, the Government Programme envisages the centralisation of functions into clear, autonomous regions in terms of tasks and authority. More information concerning the impacts of the reform of regional and central administration on municipalities and municipal finances will become available as the preparations proceed.

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.²¹

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 2014 show that total municipal guarantees amounted to EUR 8.5 billion, EUR 1.1 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 0.9 billion of which was for extra-Group entities. Joint municipal authorities had considerably smaller guarantees: in 2014, their guarantees for intra-Group entities amounted to EUR 207 million and for others EUR 52 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.

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. Accord-

²¹ 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.

ing to the respondents, realisation in all cases could be attributed to a non-Group entity. The amount of realised guarantee liabilities was EUR 1 – 500,000.²²

The analysis above does not include municipal liabilities for guarantees of approximately EUR 26 billion issued by the Municipal Guarantee Board. Municipalities' share of these liabilities is calculated on a euro-per-capita principle, which means liabilities amounted to approximately EUR 4,700 per capita in each municipality. This sum includes EUR 13 billion in guarantees issued by Municipality Finance, in other words, it does not include the portion recorded as local government debt in statistics. It consists of government-guaranteed loans for non-profit housing production represent of about EUR 7 billion and investment assets of EUR 6 billion associated with the liquidity of Municipal Finance.

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.

²² 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.

3.2.7 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% of the shares and voting rights.²³

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 2015, the Ownership Steering Department was responsible for 29 companies, and different ministries were responsible for 22 special assignment companies, which involve 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 an annual report, which the companies are required to prepare under the Limited Liability Companies Act (624/2006). In addition, the Accounting Act (1336/1997) contains 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, according to the Accounting Act, 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.

The Accounting Board operating under the auspices of the Ministry of Employment and the Economy offers instructions and statements regarding the application of the Act. The Board has issued general instructions (on 12 September 2006) on the estimate for key risks such as operational risks, financial risks and damage risks, which is to be included in the annual report. The means and methods used to manage risks and uncertainty factors must also be presented. 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.

²³ 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.

The most significant materialised risks in terms of capital lost were the investments of EUR 150 million made by Solidium Oy in the Talvivaara Mining Company, starting from 2011. The investment was written off after the bankruptcy of Talvivaara Sotkamo Oy in November 2014.

In addition, the production method used at the Talvivaara mine caused significant environmental harm. Attempts were made to prevent such harms by providing approximately EUR 165 million through the State budget, and loss compensation of EUR 44 million was paid to Finnvera plc for its guarantees to the mining company. All in all, the funds provided from the budget for preventing environmental harms arising from the mining operations of Talvivaara Sotkamo Oy, loss compensation paid to Finnvera, and the investment losses of Solidium come to a total of EUR 360 million.

Whether the mining operations at Talvivaara can be successfully ramped up and whether the bio heap leaching method will work remains uncertain. The establishment of Terrafame Oy to continue the operations has so far required additional capital of EUR 209 million. In the next few years, it will need to be resolved whether more capital is to be provided to continue operations, given the fact that shutting down the operations will also require a significant investment.

3.2.8 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. 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.

3.3 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, central government financial assets reduced by more than EUR 13 billion, accounting for over 8 percentage points of GDP. This was largely explained by the falling share prices. Similarly, financial assets fell significantly in 2011. Since 2011, financial assets have grown due 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. During the peak year of 2007, the share of dividend income was nearly 4 per cent. The sale of holdings will naturally reduce the dividend yield permanently.

Fiscal accounting offers information on the financial balance sheet and financial transactions in all sectors of the national economy. Fiscal accounting is part of the national economic accounting system. Fiscal 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	2014	2015
Financial assets, EUR billion €	56.3	62.2	64.9	51.7	58.5	63.7	55.5	58.5	59.4	60.6	61.1
% GDP	34.3	36.0	34.8	26.7	32.3	34.1	28.2	29.3	29.2	29.5	29.5
Real assets, EUR billion €						47.7	49.5	51.1	52.4	51.8	-
% GDP						25.5	25.1	25.6	25.8	25.2	-
Total, EUR billion €						111.4	105.1	109.6	111.8	112.4	-
% GDP						59.5	53.4	54.9	55.0	54.8	-

Source: Statistics Finland

3.4 General government overall income statement and overall balance

In line with the objectives of the government programme, the central government accounting practices will be modified during this parliamentary term to achieve transparency and openness such that the Parliament will, in connection with its review of the budget proposal and financial statements, also review asset items, in other words the balance sheet. A requirement to present a review of the state budget economy, revenue and expense statements and balance sheets for state enterprises and off-budget funds, and assets and off-balance sheet liabilities in the Government's annual report was added to the State Budget Decree (118/2016). The State Treasury has prepared overall statements for the State, in other words a revenue and expense statement and balance sheet for 2014 and 2015. The data in the new overall statements is provided for informative purposes; the statements were prepared on the basis of the official but unaudited financial statements of the units referred to above.

The objective of these overall statements (revenue and expense statement and balance sheet, see Appendix 1 and 2) is to provide a better overall picture of the central government finances under the steering of State Treasury (legal entity). The overall statements were prepared by consolidating the budget economy, state enterprises and off-budget funds. Companies and associates controlled by the state are included in the statements under 'Securities'.

In the overall statements, the impact of internal central government finance items, in other words transactions between government agencies, funds and state enterprises, have been eliminated. These include internal rents, the asset items of state enterprises and profit recognised as revenue, cash assets of funds, internal pension contributions and transfers to budget economy.

3.4.1 Revenue and expense statement

The revenue and expense statement indicates whether revenues generated during the fiscal year were sufficient to cover the expenses incurred. The deficit totalled EUR 6.2 billion in 2015, showing a decrease of EUR 0.8 billion from 2014. The deficit recorded in the overall statements is EUR 1.5 billion bigger than the deficit in budget economy. This difference can be attributed to the elimination of internal transactions, the largest ones being funds transfers (e.g. EUR 2.3 billion from the State Pension Fund) and the profits of state enterprises recognised as revenue (EUR 0.7 billion) in the budget economy. The overall statement offers a more accurate view of the deficit in the budget economy than separate revenue and expense statements. The State has had to resort to the borrowing and liquidation of its assets to cover annual operating expenses.

3.4.2. Balance sheet

The balance sheet reflects the entity's financial position on the closing day of the fiscal year, in other words its assets and liabilities. Assets include national assets (cultural and natural heritage such as historical buildings, national parks), fixed assets and other long-term expenditure (such as land, buildings, information systems) and current and financial assets. Balance sheet values are based on central government accounting, and are acquisition cost based.²⁴

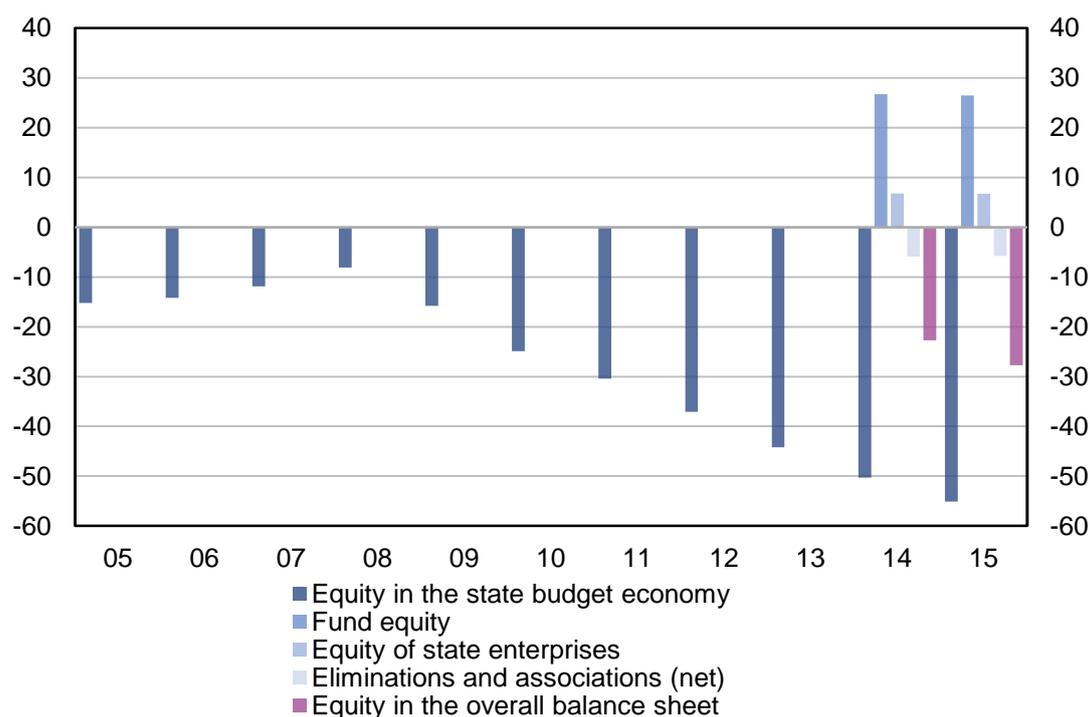
Liability items include provisions (used only by funds) and liabilities divided into current and non-current liabilities. A liability, or part thereof, maturing in or after one year is considered non-current. Equity indicates net assets after provisions and liabilities have been deducted from asset items.

Equity

Equity in the overall state balance sheet consists of the equities of funds, state enterprises and the State as a budget entity. Equity in the overall balance sheet was EUR 27.7 billion negative in 2015. From 2014, negative equity has increased by EUR 5.1 billion.

²⁴ The concept of financial assets presented in chapter 3.3 deviates in many respects from the concept of assets in the state overall balance presented in this chapter.

Figure 11. Changes in equity 2005–2015, EUR billion



Lähde: MoF, State Treasury

The equity shown in the overall balance sheet is clearly less negative than the equity shown in the state budget economy. This can be attributed to the positive equity of the funds and state enterprises. However, combined equity has decreased in the last two years, for which data was available. This is largely due to the deficit in the state budget economy.

In the opening balance of the state budget economy of 1 January 1998, equity was EUR 30 billion negative. This could be attributed to heavy government indebtedness in the early 1990s, and decisions made regarding the preparation of the opening balance. Some national assets were excluded from the balance sheet, and the assets of state enterprises were valued very cautiously. As a rule, central government revenue and expense statements were positive in 1998–2008, which strengthened the central government's assets. In 2008, equity in the state budget economy was only EUR 8.1 billion negative.

Because of the financial crisis, financial statements of the state budget economy have shown a deficit since 2009. This has undermined the central government's asset position and prompted negative equity growth. As of 2012, the central government's nominal asset position has been weaker than in the opening balance in 1998. Similarly, the increase in assets has not been on a par with the increase in liabilities. Expenses other than investments have been covered by borrowing.

Liabilities

The overall balance sheet of 31 December 2015 shows total liabilities of EUR 112 billion; an increase of EUR 6 billion. Borrowed funds were used in 2015 for investments and to cover operating expenses.

Publicly quoted securities

Table 9 shows the carrying amounts and market values of publicly quoted shares held by the state budget economy, State Pension Fund and Solidium. For the state budget economy, only investments held as fixed assets and other long-term investments are shown.

Table 9. Publicly quoted shares and holdings, EUR billion

	State budget economy		State Pension Fund		Solidium		Total	
	Carrying amount	Market value	Carrying amount	Market value	Carrying amount	Market value	Carrying amount	Market value
Total 2015	5.7	10.2	14.4	17.5	3.7	7.3	23.7	35.0
Total 2014	5.7	10.9	14.3	17.1	4.1	8.1	24.0	36.1
Change 2015 vs 2014, %	0.0	-0.6	0.1	0.4	-0.4	-0.8	-0.3	-1.1
Change 2015 vs 2014, %	0.0	-5.9	0.9	2.2	-10.7	-9.9	-1.3	-3.0

Source: State Treasury

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 will not be possible to identify all fiscal risks.

Table 10 shows a summary of government assets and the nominal values of specific, definable liabilities. Because the explicit assessment of risks related to liabilities is difficult, nominal values of liabilities have been used in this report for the purpose of clarity. Information on the central government's real and financial assets is based on fiscal accounts, and may differ from the figures shown on the overall balance sheet. The difference can be attributed to the extensive scope of the concept of the State, and the treatment of asset items.

Table 10. Government assets and liabilities

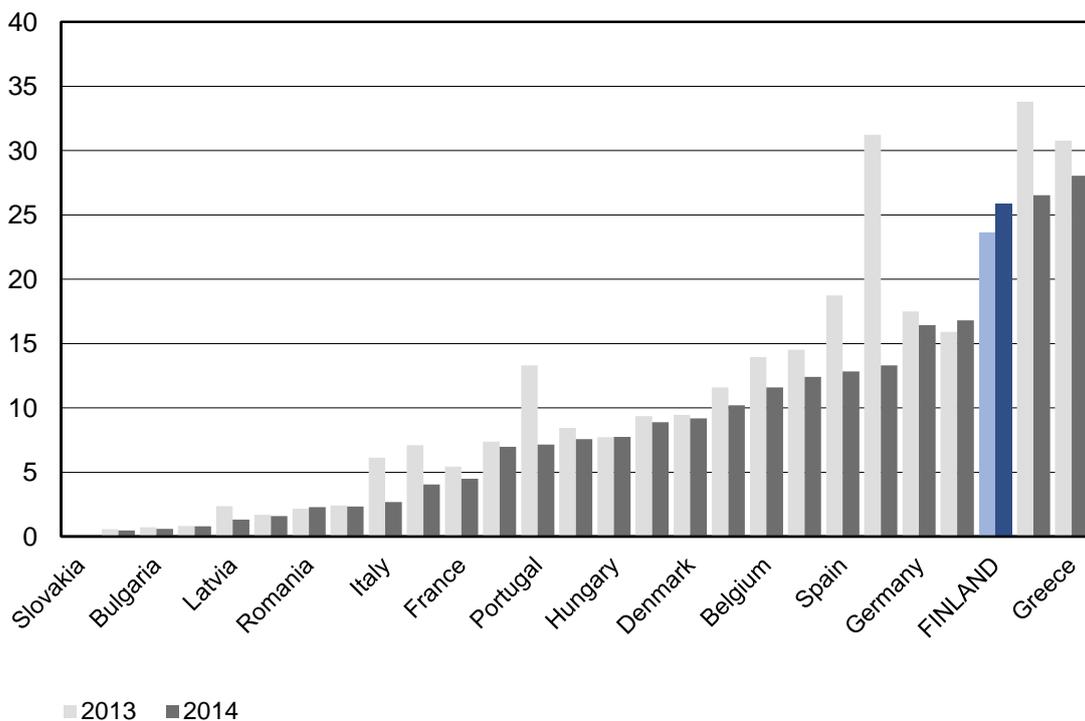
	2009	2010	2011	2012	2013	2014	2015
Assets							
Central government real assets	-	47.7	49.5	51.1	52.4	51.8	
% GDP	-	25.5	25.2	25.6	25.8	25.2	
Central government financial assets	58.5	63.7	55.5	58.5	59.4	60.6	61.1
% GDP	32.3	34.1	28.2	29.3	29.2	29.5	29.5
of which							
Central government liquid assets	9.6	11.2	10.3	7.4	4.6	3.1	4.4
Solidium	7.6	9.3	6.9	7.2	8.2	7.6	6.8
Other quoted shareholdings	10.4	12.1	8.6	7.8	9.5	10.9	10.2
Loan receivables from the National Housing Fund	8.6	8.2	7.7	7.2	6.5	6.0	5.4
Liabilities							
Central government debt	64.3	75.2	79.7	83.9	89.7	95.1	99.8
% GDP	35.5	40.2	40.5	42.0	44.1	46.3	48.2
Municipal debt	10.0	10.6	11.4	12.9	14.9	16.8	17.8
% GDP	5.5	5.7	5.8	6.5	7.3	8.2	8.6
Government guarantees	22.4	22.7	27.7	33.1	35.1	41.3	49.2
% GDP	12.6	12.4	14.3	16.8	17.5	20.1	23.7
Finnvera	13.6	13.2	14.4	15.4	15.7	20.3	27.7
Student loans	1.3	1.4	1.4	1.5	1.6	1.7	2.0
EFSF	0	0	2.1	5.1	6.2	6.6	6.2
Bank of Finland						0.5	0.6
Government funds	6.3	7.9	9.1	10.2	11.2	11.8	12.3
Other	1.2	0.3	0.6	0.8	0.5	0.3	0.3
Capital liabilities	4.7	5.1	5.8	17.0	17.1	17.2	17.9
% GDP	2.6	2.7	3.0	8.5	8.4	8.5	8.6
Other liabilities	99.5	105.1	112.3	119.0	117.6	132.6	132.1
% GDP	55.0	56.2	57.0	59.6	58.2	65.0	63.8
State budget economy	99.5	103.3	110.4	117.0	115.4	130.1	129.6
Off-budget entities	-	0.3	0.4	0.5	0.6	0.7	0.9
State enterprises	-	1.4	1.5	1.5	1.6	1.8	1.6

Central government liabilities, in addition to debt and pension liabilities, largely comprise guarantees, the nominal amount of which has increased significantly in recent years. Guarantees issued by Finnvera and central government funds — in practice, government-backed mortgages — have seen particularly high increases. The domestic guarantee portfolio (mainly Finnvera, government funds, student loans) grew by EUR 8.3 billion in 2015. Since 2009, these guarantees have grown by about EUR 20 billion.

The nominal value of all government guarantees has doubled in a few years' time to just over EUR 49 billion, or 24 per cent of GDP. In addition, the amount of capital liabilities payable upon request to international financial institutions has multiplied following the measures for managing the financial crisis in the EU. Their nominal amount, as a share of GDP, is approximately 9 per cent (nearly EUR 18 billion).

On a global scale, Finland's guarantees are at a high level. Different reporting practices, among other reasons, make it difficult to compare the nominal values of guarantees between countries. However, according to the statistics compiled by Eurostat, Finland's general government guarantee-to-GDP ratio is the third highest of all EU countries (Figure 12).

Figure 12. General government guarantees in EU countries in 2013–2014, % of GDP



■ 2013 ■ 2014

The liabilities concerning on the administration of the finance crises in European Union are not included

Source: Eurostat

Risks related to general government finances are usually, and under any circumstances, linked to the general economic trends. Weaker-than-predicted economic development tends to result in a higher-than-expected increase in government borrowing. Especially in times of deep recession and depression, public debt has clearly outgrown projections.

The sensitivity of Finnish government finances to economic cycles has been assessed by organisations such as the OECD. Finland is, due to the size of the government finances and the structure of national economy, more sensitive to macro-economic 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 with tax revenues sensitive to economic cycles, such as corporation taxes, and with unemployment-related expenditure.

However, using average elasticity as a sensitivity indicator may provide an unrealistic picture of the risks associated with macroeconomic development. Under exceptionally hard economic circumstances, general government finances may be eroded for several reasons. Risks related to macroeconomic development, general government debt, government holdings, the export guarantees issued, and other risks related to other government liabilities are correlated with each other. Typically, under the conditions of normal cyclical fluctuations, only some of these risks will be realised.

The costs arising from the realisation of government liabilities may result in a significant burden on the national economy. The instability of the external environment places a special emphasis on the careful monitoring and management of economic liabilities.

REFERENCES

Bova, Elva, Marta Ruiz, Frederik Toscani & H. Elif Ture (2016): "The Fiscal Costs of Contingent Liabilities: A New Dataset", IMF Working Paper, WP/16/14, International Monetary Fund.

Laeven, Luc & Fabian Valencia (2012): "Systemic Banking Crises Database: An Update", International Monetary Fund.

Polackova, Hana (1989): "Contingent Government Liabilities: A Hidden Risk for Fiscal Stability." Policy Research Working Paper 1989. World Bank, (Washington, D.C.).

Polackova Bixi, Hana & Ashoka Mody (2002): "Dealing with Government Fiscal Risk: An Over-view", in Polackova Bixi, Hana & Allen Schick (ed.): Government at Risk: Contingent Liabilities and Fiscal Risk, World Bank, (Washington, D.C.).

Ministry of Finance (2015): "Development of the government's financial risk reporting and management". Working group report

Appendix 1

State overall revenue and expense statement				
<i>EUR 1,000</i>	<i>1 Jan – 31 Dec 2015</i>	<i>1 Jan – 31 Dec 2014</i>	<i>Change</i>	<i>Change, %</i>
OPERATING INCOME				
Service revenue	1,501,310	1,804,711	-303,401	-16.8 %
Rental revenue and charges for utilities paid	119,703	108,191	11,512	10.6 %
Other operating income	1,772,380	1,680,676	91,704	5.5 %
Total	3,393,394	3,593,578	-200,185	-5.6 %
OPERATING EXPENSES				
Materials and consumables				
Purchases during the year	828,442	1,205,822	-377,379	-31.3 %
Increase (-) or decrease (+) in inventories	188,189	143,946	44,243	30.7 %
Personnel expenses	3,855,668	4,096,836	-241,168	-5.9 %
Rents	249,931	240,181	9,751	4.1 %
Purchases of services	2,703,679	2,611,003	92,675	3.5 %
Other expenses	776,023	817,401	-41,377	-5.1 %
Increase (-) or decrease (+) in stocks	-1,498	-3,244	1,746	53.8 %
Manufacture for own use	-95,155	-89,290	-5,866	-6.6 %
Depreciation	1,282,030	1,294,246	-12,216	-0.9 %
Total	9,787,310	10,316,901	-529,591	-5.1 %
DEFICIT I	-6,393,916	-6,723,323	329,407	4.9 %
FINANCIAL INCOME AND EXPENSES				
Financial income	1,320,928	2,103,401	-782,473	-37.2 %
Financial expenses	-2,252,487	-2,309,650	57,163	2.5 %
Total	-931,559	-206,248.67	-725,310	
EXTRAORDINARY INCOME AND EXPENSES				
Extraordinary income	115,204	143,499	-28,295	-19.7 %
Extraordinary expenses	-15,908	-16,031	123	0.8 %
Total	99,296	127,468	-28,172	-6.2 %
DEFICIT II	-7,226,179	-6,802,103	-424,076	-6.2 %
INCOME AND EXPENSES FROM TRANSFER FINANCES				
<i>Income from transfer finances</i>				
From local administration	151,879	160,971	-9,092	-5.6 %
From European Union agencies and other agencies	1,125,390	880,621	244,768	27.8 %
Other income from transfer finances	110,680	89,519	21,161	23.6 %
Total	1,387,949	1,131,111	256,837	22.7 %
<i>Expenses from transfer finances</i>				
To local administration	11,515,201	11,033,241	481,960	4.4 %
To social security funds	12,255,825	12,294,829	-39,004	-0.3 %

To the business sector	3,399,160	3,434,054	-34,894	-1.0 %
To non-profit organisations	2,478,188	3,306,562	-828,374	-25.1 %
To households	5,010,535	4,993,685	16,849	0.3 %
To European Union agencies and other agencies	1,767,432	2,029,748	-262,316	-12.9 %
Foreign	884,085	978,220	-94,134	-9.6 %
Other expenses from transfer finances (incl. universities)	3,205,036	2,959,265	245,771	8.3 %
Repayment of expenses from transfer finances		-212,279	212,279	-100.0 %
Total	40,515,462	40,817,326	-301,864	-0.7 %
DEFICIT III	-46,353,692	-46,488,318	134,626	0.3 %
INCOME FROM TAXES AND STATUTORY PAYMENTS				
Taxes and charges comparable to tax	39,966,580	39,268,676	697,904	1.8 %
Other statutory payments	154,524	208,065	-53,542	-25.7 %
Total	40,121,104	39,476,741	644,363	1.6 %
SURPLUS/DEFICIT FOR THE FISCAL YEAR	-6,232,588	-7,011,577	778,989	11.1 %
Income from taxes and statutory payments. Based on the Tax Administration's statistics for allotment ratio on the corporation tax, 61% of the income tax paid by state enterprises has been eliminated. The State portion of the withholding tax of the state budget economy and off-budget entities under the Tax Administration's allotment ratio on earned income and capital tax has been recognised as tax revenue.				
Expenses from transfer finances. Income transfers from the State Television and Radio Fund to Yleisradio Oy are reported in the overall income and expense statement under 'Expenses from transfer finances to central government administration.' Expenses from transfer finances to the business sector include a transfer of EUR 507,948,000 to the central government administration.				
Corrections to the financial statements of the Financial Stability Fund. The income and expense statement of the Financial Stability Fund for 2015 was corrected at such a late stage that these corrections have not been taken into account in the overall statements. Corrections were made to Income from commercial projects (decrease of EUR 2.3 million), Other operating income (increase of EUR 76.3 million), and Expenses from transfer finances (decrease of EUR 76.3 million).				

Appendix 2

Government overall balance				
<i>EUR 1,000</i>	<i>31 December 2015</i>	<i>31 December 2014</i>	<i>Change</i>	<i>Change, %</i>
ASSETS				
NATIONAL ASSETS				
Land and water	1,201,084	1,181,466	19,618	1.7 %
Building land and water	54,400	55,161	-761	-1.4 %
Buildings	515,354	401,920	113,433	28.2 %
Other national assets	46,722	44,656	2,066	4.6 %
Prepayments and procurement in progress	45,346	9,199	36,147	392.9 %
Total	1,862,906	1,692,404	170,503	10.1 %
FIXED ASSETS AND OTHER LONG-TERM INVESTMENTS				
INTANGIBLE ASSETS				
Immaterial rights	39,006	48,281	-9,275	-19.2 %
Other long-term expenditure	419,331	322,777	96,555	29.9 %
Prepayments and procurement in progress	188,895	139,831	49,064	35.1 %
Total	647,232	510,889	136,343	26.7 %
TANGIBLE ASSETS				
Land and water	2,573,451	2,573,015	436	0.0 %
Building land and water	1,596,522	1,590,658	5,864	0.4 %
Buildings and structures	3,290,350	3,347,262	-56,912	-1.7 %
Structures	18,042,222	17,516,261	525,960	3.0 %
Machinery, equipment and furniture	543,262	586,400	-43,138	-7.4 %
Other tangible assets	121,544	118,704	2,841	2.4 %
Prepayments and procurement in progress	1,133,829	1,674,467	-540,638	-32.3 %
Total	27,301,180	27,406,767	-105,587	-0.4 %
SECURITIES AND OTHER LONG-TERM INVESTMENTS				
Securities	15,662,572	15,571,885	90,687	0.6 %
Investments in euros	18,148,631	18,401,188	-252,556	-1.4 %
Investments in foreign currencies	3,432,702	3,370,235	62,468	1.9 %
Total	37 243 906	37,343,308	-99,402	-0.1 %
CURRENT AND FINANCIAL ASSETS				
CURRENT ASSETS				
Materials and supplies	424,856	436,783	-11,928	-2.7 %
Work in progress	13,643	12,838	806	6.3 %
Finished products/Goods	1,051,578	1,308,819	-257,241	-19.7 %
Total	1,490,077	1,758,440	-268,363	-15.3 %
NON-CURRENT RECEIVABLES				
Non-current receivables	5,718,237	5,732,432	-14,196	-0.2 %
CURRENT RECEIVABLES				
Accounts receivable	182,460	197,716	-15,256	-7.7 %
Loan receivables	287,982	267,362	20,619	7.7 %
Accrued income	308,768	380,583	-71,815	-18.9 %
Other current receivables	2,747,643	2,635,456	112,187	4.3 %

Prepayments	874,908	807,612	67,295	8.3 %
Total	4,401,761	4,288,730	113,031	2.6 %
MARKETABLE SECURITIES AND OTHER CURRENT INVESTMENTS				
Purchase of bonds denominated in euro	752,727	1,099,81	-346,654	-31.5 %
Other investments denominated in euro	2,660,000	1,599,980	1,060,020	66.3 %
Purchase of bonds denominated in foreign currencies	99,965	0	99,965	100.0 %
Total	3,512,692	2,699,361	813,331	30.1 %
CASH AT HAND AND IN BANK				
	2,243,815	2,007,902	235,913	11.7 %
CURRENT AND FINANCIAL ASSETS TOTAL				
	17,366,582	16,486,865	879,717	5.3 %
TOTAL ASSETS				
	84,421,806	53,830,172	780,315	1.2 %
LIABILITIES				
EQUITY				
Government equity on 1 January 1998	-30,048,198	-30,048,198	0	0.0 %
Equities of off-budget central government funds	-13,098,058	-9,508,171	-3,589,887	-37.8 %
Change in previous fiscal years' equity	21,650,325	23,896,539	-2,246,214	-9.4 %
Surplus/Deficit for the fiscal year	-6,232,588	-7,011,577	778,989	11.1 %
Total	-27,728,520	-22,671,408	-5,057,112	-22.3 %
FUND EQUITIES				
Other government funds and donations	7,929	7,701	229	3.0 %
PROVISIONS				
Provisions	5,739	2,700	3,039	112.6 %
LIABILITIES				
LONG-TERM				
Euro-denominated loans	86,506,204	84,858,637	1,647,567	1.9 %
Foreign currency denominated loans	1,480,980	1,667,789	-186,810	-11.2 %
Non-current accrued expenses	67,110	127,007	-59,897	-47.2 %
Other non-current liabilities	488,120	495,567	-7,447	-1.5 %
Total	88,542,413	87,149,000	1,393,413	1.6 %
CURRENT				
Repayments to be made in the following fiscal year	9,767,528	7,862,155	1,905,373	24.2 %
Current loans	5,426,082	4,423,453	1,002,629	22.7 %
Liabilities placed under government management	393,731	330,580	63,150	19.1 %
Advances received	424,106	428,578	-4,472	-1.0 %
Accounts payable	623,578	584,007	39,571	6.8 %
Accrued expenses	2,611,432	2,646,253	-34,820	-1.3 %
Other current liabilities	4,347,788	2,677,214	1,670,574	62.4 %
Total	23,594,244	18,952,239	4,642,005	24.5 %
LIABILITIES				
	112,136,657	106,101,239	6,035,418	5.7 %
TOTAL LIABILITIES				
	84,421,806	83,440,232	981,574	1.2 %
Corrections to the financial statements of the Financial Stability Fund. The balance sheet of the Financial Stability Fund for 2015 was corrected at such a late stage that these corrections have not been taken into account in the overall statements. Corrections were made in equity (decrease of EUR 74.0 million) and in items to be re-settled (increase of EUR 76.3 million).				