

A Self-Renewing, Resilient and Sustainable Society

Contribution by the officials of the Ministry of Finance

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Abstract

In the document 'A Self-Renewing, Resilient and Sustainable Society', the key economic and governance policy issues for the coming parliamentary term are reviewed from the perspective of the Ministry of Finance. Development prospects for the coming parliamentary term are also analysed in the publication and there is discussion on the main challenges facing Finland and the policy choices associated with them. The publication has been jointly prepared by the Ministry's departments and the work was coordinated by the Ministry's Group of Directors.

Finland has been a success story over the past century. However, in the coming years and decades, Finland is facing a number of difficult problems, such as climate change, ageing of the population, technological transformation and a high level of structural unemployment. Moreover, the fiscal buffers for the next downturn are slim and the sustainability problem remains unsolved.

Structures of society can be renewed by political decisions so that Finland can focus its resources effectively and appropriately. We must also make full use of the opportunities created by technological advances and digitalisation. Finland must also be better prepared for the risks and threats facing its economy and society.

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Suomi on ollut menestystarina kuluneen sadan vuoden aikana. Seuraavien vuosien ja vuosikymmenten aikana Suomella on kuitenkin edessään monia vaikeita ongelmia, kuten ilmastonmuutos, väestön ikääntyminen, teknologinen murros ja korkea rakenteellinen työttömyys. Lisäksi julkisen talouden puskurit seuraavan taantuman varalle ovat ohuet eikä kestävyysongelmaa ole vielä ratkaistu.

Poliittisilla päätöksillä voidaan uudistaa yhteiskunnan rakenteita siten, että yhteiskunnan voimavarat kohdentuvat tehokkaasti ja tarkoituksenmukaisesti. Lisäksi meidän tulee käyttää teknologisen kehityksen ja digitalisaation tuomat mahdollisuudet hyväksemme. Erilaisiin taloudellisiin ja yhteiskunnallisiin riskeihin ja uhkiin tulee myös varautua entistä paremmin.

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Finland har varit en framgångssaga under de senaste hundra åren. Under de kommande åren och årtiondena står Finland dock inför många svåra problem, såsom klimatförändringen, den åldrande befolkningen, den tekniska omvälvningen och den höga strukturella arbetslösheten. Dessutom är de offentliga finansernas buffertar inför nästa recession tunna små samtidigt som hållbarhetsproblemet ännu inte lösts.

Genom politiska beslut kan man strukturera om samhället så att samhällsresurserna fördelas på ett effektivt och ändamålsenligt sätt. Dessutom bör vi utnyttja de möjligheter som den tekniska utvecklingen och digitaliseringen för med sig. Vi bör också vara bättre förberedda på olika ekonomiska och samhälleliga risker och hot.

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TO THE READER

In this document, titled 'A Self-Renewing, Resilient and Sustainable Society', the key economic and administrative policy issues for the next parliamentary term are reviewed from the perspective of the Ministry of Finance. Development prospects for the next parliamentary term are also analysed in the publication and there is discussion on the key challenges facing Finland and the policy choices associated with them. The purpose of the document is to serve as a contribution to the debate on the policy decisions to be made during the next parliamentary term and to provide a basis for the necessary discussion on the choices facing Finland.

The publication was jointly prepared by the Ministry's departments. The preparation was the responsibility of the Economic Policy Coordinator, Director General Sami Yläoutinen and the work was steered by the Ministry's Group of Directors. Finalising the report for publication was the responsibility of Financial Specialist Ilari Ahola and Senior Specialist Antto Korhonen.

February 2019

Martti Hetemäki,

Permanent Secretary of the Ministry of Finance

Executive summary

Finland should develop its strengths and take advantage of its opportunities

Finland has been a success story over the past century. In just a few generations, our country has risen to become one of the most prosperous nations in the world. Finland's success and strong average economic growth are the result of a functioning democracy and its ability to make decisions; a stable and secure society based on trust; investments in the education, welfare and social security safety net of its people; and utilisation of natural resources. These strengths have also helped Finland to cope with even the most severe economic fluctuations and to turn the changes that have shaken the very bedrock of economy and society into opportunities i.e. new forms of business activities and jobs.

In the years and decades to come, Finland will be facing a wide array of difficult challenges, which need solutions. Climate change, an ageing population, technological revolution and tensions in world politics will put us and other Western democracies to the test, both economically and politically. Finland will be dealing, in particular, with the pressures of an ageing population before many other nations: working age population is shrinking; pension expenditures and the need for public services are growing. Furthermore, structural unemployment remains high and productivity growth has slowed down.

The strengths mentioned above and their further development will allow Finland to tackle future challenges, turn major societal changes into its advantage and stay at the forefront of developed countries. This, however, requires that we will also be able to make the necessary political decisions and implement them. Structures of society can be renewed by political decisions so that the resources of the society can focus effectively and appropriately.

In particular, an educated, skilled workforce provides a strong foundation for coming up with and putting into effect even the most difficult solutions. We must also make full use of the opportunities created by technological advances and digitalisation. Digitalisation makes it possible to improve the productivity and customer-orientation of both the public and private sectors. Real-time information and the improvement of its quality can significantly accelerate the identification and rectification of potential problems. Smart solutions based on data, machine learning algorithms and robotics will help to effectively allocate scarce resources, thus improving productivity growth.

Biggest strengths and weaknesses of Finland's public finances and public governance and their opportunities and threats

Strengths	Weaknesses
— Functioning democracy and government	— Unfavourable demographic trends
— Stable and secure society based on trust	- Thin buffers of public finances for the next economic recession
- Highly educated population	and large legal and contractual obligations
– Comprehensive, high-quality public services	- High structural unemployment and low employment rate
— Comprehensive safety net and risk-bearing capacity	- Sparsely populated country
provided by social security	- High cost of housing in growth centres
— Functioning and stable financial system	- Lack of horizontal co-operation across administrative
- Forest, extractive minerals and water reserves, pristine nature	boundaries
Opportunities	Threats
— Utilisation of new technologies, digitalisation and data	— The spread of disturbances in the global economy or
resources	politics to Finland
resources — Reform of the service system and social security	politics to Finland — Climate change
 Reform of the service system and social security Increasing the sectoral, occupational and regional mobility 	'
 Reform of the service system and social security 	- Climate change
 Reform of the service system and social security Increasing the sectoral, occupational and regional mobility 	Climate changeInability to renew

Strengthening of public finances should continue

The buffers of public finances are thin and the sustainability problem has not been solved

After having long been in deficit, public finances are regaining balance due to a strong economic upswing and the fiscal adjustment measures taken. However, economic growth is slowing down and the possibility of another economic recession occurring during the next parliamentary term cannot be ruled out. Public finances are in a significantly weaker position to deal with the next recession than it was before the financial crisis that began in 2008. In 2008, the public debt-to-GDP ratio was below 33%. Today, that figure is nearly 60%. (For more information, see section 2.1.)

The structural deficit in public finances and increased debt ratio along with large guarantee responsibilities have compromised the ability of public finances to withstand disturbances that typically spread to Finland from the world economy. Even a moderate recession would push the deficit in public finances above the 3% budget deficit limit specified in the EU Stability and Growth Pact. The debt ratio reference value of 60% would also be exceeded quickly. Avoiding the need for contractionary fiscal adjustment measures in a recession would require strengthening of public finances during economic upswing. (For more information, see section 2.2.)

The sustainability problem of public finances has not yet been solved. The sustainability gap is the result of annual increases in pension, health and long-term care costs, with no new decisions being made based on existing legislation. Consequently, new adjustment measures are needed each year to keep the fiscal deficit and public debt from growing. According to a recent Economic Survey published by the Ministry of Finance in December 2018, the sustainability gap is nearly 4% relative to GDP, i.e. EUR 10 billion at 2023 level. There is, however, a great deal of uncertainty associated with the sustainability gap estimate.

On one hand, the sustainability gap has been reduced by substantial fiscal adjustment measures and pension reform. On the other, it has increased because of the new population projection and the updated assumptions used in calculation. In addition to this, it should be pointed out that the impacts of many of the structural reforms that have been and are being made have not yet been taken into account in the calculating the sustainability gap. The sustainability gap calculation does not take into account the targets for limiting costs to EUR 3 billion set for regional government and health and social services reform, nor the EUR 1 billion savings target set for improving the efficiency of public finances. Secondly, it remains to be seen how much of the growth in employment enjoyed in recent years will be permanent, even in the face of an economic downturn, and how much of it is only the temporary phenomenon caused by an economic upswing. (For more information, see box 2.1.)

Target: Strengthening the buffers and sustainability of public finances

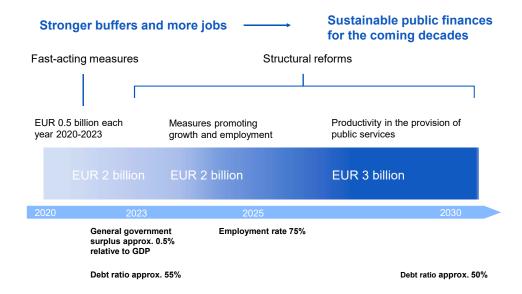
Public finances should show a surplus during the next government term if economic policy is based on strengthening the buffers and sustainability of public finances. In this respect, direct fiscal adjustment measures would strengthen public finances by a total of EUR 2 billion by 2023. In the light of most recent forecasts, this would lead to a budget surplus of approximately half a per cent relative to GDP in public finances. The estimate will be revised when the Ministry of Finance publishes its next economic forecast at the end of March.

Measures that quickly boost public finances are crucial to building buffers for the next recession. If no new decisions are made, public finances will deteriorate when an ageing population increases pension, health and long-term care costs year after year. Furthermore, there is uncertainty associated with the impacts of structural reforms, which will only bear fruit in the long-term.

In order to ensure that sustainability of public finances can be secured also over the long term, it is necessary to keep making structural reforms. The target should be to strengthen public finances by approximately EUR 5 billion through structural reforms by the end of the 2020s. This target can be reached if it can be ensured that regional government and health and social services reform will keep EUR 3 billion in costs growth in check and decisions will be made on measures, which will make it possible the employment rate to increase to 75% by 2025. An increase in the employment rate of three percentage points would require the addition of approximately 100,000 employed persons compared to the current level.

The above-mentioned target recommendations are illustrated in the figure below. The target recommendations are used to ensure the sustainability of public finances for the next few decades, but it will not be enough to cover the entire sustainability gap over the long term. As a result, there is still work to be done to close the sustainability gap also for the future parliamentary terms. (For more information, see section 2.3.)

A decision has been made to assess the sustainability of the pension system on a regular basis. If the sustainability of the pension system seems to be at risk, the necessary measures should be taken early enough. As the current level of pension contributions are quite high, there is no room for further increases. On the contrary, preparations should be made to institute reforms, which would help to reduce pension contributions from their current levels. This could, if necessary, make room for state tax increases. (For more information, see box 2.1.)



The management of public finances cannot count on economic growth stronger than forecast. Sustainable economic growth that is faster than forecast is, however, possible and can fill the funding gap in public finances if the conditions for growth in employment and productivity can be enhanced by, for example, political decisions. This would require reforms in line with the scale of the challenges faced. Furthermore, the impacts of structural reforms can be considered a factor that reduces the need for fiscal adjustment measures, provided that they can be included in the central government spending limits based on calculations approved by the Ministry of Finance.

In the coming parliamentary term, a 0.5% surplus relative to GDP budgetary target for 2023 should be set as the basis for fiscal policy. The budgetary targets for central government, future county government, local government and social security funds, and also spending limits for the state finances and government programme tax policies would be scaled based on this target. All the preconditions set in EU and Finnish legislation must also be taken into consideration when setting these targets. Furthermore, outlooks concerning public finances must be examined on an annual basis when drafting the general government fiscal plan. In this case, the Government would have to decide on corrective measures if there is an indication that the set targets are unattainable. (For more information, see section 9.)

How the resilience of society and the sustainability of public finances can be strengthened?

Cost pressures should be reduced and tax expenditure should be examined critically

Public finances can be quickly strengthened by cutting costs and raising taxes. Finland's ageing population will increase public spending every year for several decades. Attention must be given to the amount and appropriation of public spending also in the future, in order to ensure that any increase in costs can be kept in line with the carrying capacity of the economy while taking the needs of all segments of the population into consideration. In addition, the funding of new expenditure needs arising during the next parliamentary term should be covered by re-allocating appropriations. Cost cuts should, wherever possible, be targeted in such a way that they do not undermine the conditions for economic growth.

When looking for ways to strengthen public finances, taxes can only be raised to a very limited extent so that economic growth and employment are not adversely affected. When considering potential tax hikes, international tax competition and the impact that taxation has on the incentives of work and business activities should be taken into account. The least harmful approach would be to target tax hikes on consumption and real

estate. Tax revenues can also be increased by eliminating ineffective forms of tax expenditure. A tax structure that improves the conditions for growth promotes the sustainability of public finances. A net decrease in taxes is not possible due to the sustainability gap. (For more information, see section 3.)

Incentives to work and matching of labour supply and demand should be improved

Inclusion in working life prevents marginalisation. A high employment rate is therefore a key objective when securing resilience of society and basis for public finances. The importance of promoting employment is emphasised when the working-age population is shrinking. In addition to this, Finland's employment rate is lower than that of the other Nordic countries. Employment can be increased by reducing unemployment, encouraging people outside the workforce to join labour market, or promoting work-based immigration. A higher fertility rate would also increase employment over the long-term, but influencing the fertility rate is easier said than done.

Employment can be improved by reforming the social security, tax and service systems, which affects the incentives to work, among other things. This should be done in a fiscally sustainable manner. Furthermore, it should be critically assessed if the current resources on active labour market policies could be allocated even more effectively. Active labour market policy measures should not be taken in areas where employment would occur even without them.

In order to improve the matching of supply and demand for labour, the sectoral and occupational mobility of people should be facilitated, but attention must be given to the cost-effectiveness of the measures taken. For example, opportunities for continuous learning could be promoted throughout working careers. In particular, this need applies to people whose qualifications do not meet the requirements of the labour market. An effort can be made to promote regional labour mobility by improving the functionality of the housing market. In addition to this, the number of people with only comprehensive school education must be reduced.

It would be possible to further increase the employment rate of older workers by providing support for staying in the workforce and limiting the pathways to early exit from labour force. Where youths are concerned, an effort could be made to accelerate access to education and the duration of studies. It would also be possible to improve the employment rate of mothers with small children with a family leave reform. Increases in the cost of, for example, day care, would, however, weaken public finances. (For more information, see section 4.)

Favourable conditions for investment and competence promote productivity development

Productivity development can first be promoted by ensuring that Finland is an attractive investment environment. This would bring in new, more profitable capital stock and foreign investment. More extensive international corporate activity in Finland could also promote the dissemination of knowledge and best practices in the country. As a rule, the more effective utilisation of international research and development results would be profitable.

Increasing labour mobility from low-performance to higher performance companies increases productivity. Thus, productivity can be targeted indirectly by increasing the regional, occupational and other forms of labour mobility. Ensuring healthy competition between companies is also important. In this respect, it is essential that new companies have free access to the market and less profitable companies shut down their operations, thus putting the resources tied up in them at the disposal of profitable companies.

In the knowledge economy, growth is often created through interaction. In dense urban environments, encounters with other fields creates new sources of growth. Productivity growth can thus be promoted by eliminating obstacles to urbanisation as well as by streamlining zoning and construction. (For more information, see section 5.)

The tax structure should be steered in a more growth-oriented direction

Economic growth and employment can be promoted by a neutral, clearly-defined and predictable tax system. The tax structure can be steered in a direction that is more conducive to economic growth and employment by shifting the focus of taxation from labour to consumption. Greater emphasis can be put on consumption taxes by, for example, increasing reduced value added tax rates, which would also improve the efficiency of the tax system. Reducing the high marginal tax rates on earned income would encourage people to build their competence and reduce the incentives to convert earned income into capital income.

Changes and opportunities brought about by technological progress should be taken into consideration and used in the development of the tax system. The requirements for obtaining information necessary to the implementation of taxation must also be ensured. The international competitiveness of corporate taxation must be ensured and the corporate income tax base must be secured. Furthermore, dividend taxation would need to be reformed in an effort to correct the problems associated with it. (For more information, see section 6.)

Public administration should jointly ensure the sustainability of public finances

Public administration and its services should be developed as a whole. The delegation of responsibilities between central government, future county government and municipalities, along with their effective co-operation, should be provided for in order to ensure the sustainability of public finances. The appropriate delegation of responsibilities and development of the service structure are determined by the functionality of services, cost efficiency and sustainability of public finances. When implementing reforms, it should be identified at which level of government can the continuity of vital functions be assured, where productivity benefits can effectively be achieved, and how the availability of well-functioning and effective services can be secured. In addition to this, a wide and open public debate on reforms should be enhanced.

Government unity and the openness of public administration must be enhanced

A good, efficient public administration lays the foundation for social and economic development. A prerequisite for a successful government term is the identification of key strategic objectives. Right at the beginning of the government term, the Government and ministries must have the same interpretation of the Government Programme and clearly-defined solutions for responsibilities, resources and modus operandi. This interpretation must be strengthened and retained through communications. Regular opportunities for a dialogue between the members of Government and civil servants are needed to promote a shared situation assessment and interaction. At the same time, the ability of the government to serve as a single entity should be enhanced. Difficult horizontal problems can be solved and extensive reforms can be implemented only through the purposeful joint steering of ministries, the allocation of resources and expertise, and communications.

Trust between citizens and the government is crucial to ensuring a sustainable and resilient society and functioning public sector. Trust should be built upon common ethical and good governance principles in a rapidly changing operating environment. Information produced by the public administration must be easy to find and use. Documents, services and reforms should be clearly presented and comprehensible in order for them to be truly public. Information on topical matters should be presented during the preparatory phase to give the public a genuine opportunity to influence the decisions. There must be better opportunities for citizen participation in preparations for the decision-making process and planning of services. (For more information, see section 7.)

The development of digital modus operandi and e-services must be continued

The Government should implement and promote actions geared toward improving productivity in an effort to reform modus operandi of public administration and control increases in public spending. The quality and interoperability of information as well as

functional, secure information systems play a key role in effective digital operations and production of public services. Government agencies should offer citizens and companies accessible, high-quality digital services. Companies should be obligated to use these services whenever dealing with government agencies. Citizens should be steered toward and encouraged to use these services in order to make them the most frequently used transaction channel. (For more information, see section 7.3.)

Information policy is needed for the effective utilisation of information and artificial intelligence

The more efficient exchange of information between various actors as well as between information resources and registers must be supported by means of information policy, such as new service entities and legislation. The possibilities offered by rapidly developing technologies, such as artificial intelligence, must also be exploited. This would facilitate the even more effective utilisation of Finland's extensive information resources in developing services for the private and public sectors as well as in the governance and steering of the public administration. This requires uniform, internationally agreed ethical and legal principles and practices concerning the management and disclosure of information, clearly-defined principles on charging fees for information, and a clarification of the roles to be played by different actors. (For more information, see section 7.3.)

An extensive situation assessment is needed for the management of municipal differentiation

Regional government and health and social services reform as well as, for the most part, municipal differentiation resulting from demographic trends have a significant impact on the roles of municipalities and their financial capacity. Regional government and health and social services reform lightens the duties of municipalities, reduces cost pressure and alters the financing structure. Even after the reform, the vitality of municipalities and their ability to provide services will still be differentiated as a result of demographic trends.

These changes raise questions concerning the equality of access to services for citizens and their funding as well as the effective use of public resources. When examining the outlook for municipalities, an extensive national situation assessment based on the latest population projections and special reports and studies should be conducted. Based on such an assessment, policy choices based on parliamentary preparations that extend across government terms should be made in an effort to determine how the various problems experienced by municipalities, both those gaining in population and those losing, can be controlled in the future.

The problems being experienced by municipalities of different sizes and in different situations cannot be solved using the same approaches. Instead, a set of complementary measures would be needed. An analysis must be made of what can be achieved by bolstering municipal structures and how municipal funding and an equalisation of differences between them can be developed to meet various needs. At the same time, an assessment must be made as to what the constitutional preconditions are for providing statutory services by different means in different municipalities and whether municipalities can perform different duties in the future. Furthermore, a more long—term oriented, more highly co-ordinated and more diverse urban policy can be implemented to meet the development needs of cities.

The basis for this is, and will continue to be, that local government finances will not be able to handle any addition or expansion of duties unless a corresponding number or scope of duties in other areas would be reduced. There is a significant cost risk hidden in the building stock of municipalities. Reorganising the building stock and reducing the maintenance backlog require more goal-oriented, systematic decisions and work from municipalities. Demographic trends require a reassessment of the service network. The central government can support these efforts by improving the usability of the knowledge base for building stock and facility use; and the conditions for knowledge-based management. (For more information, see section 8.)

The continuity of regional government and health and social services reform should be ensured

In order to control the cost pressures on public finances brought about by an ageing population, it is necessary that the responsibility for providing health and social services will be shifted to providers that are stronger than the municipalities. The continuity of regional government and health and social services reform should therefore be ensured during the next government term. The reform should facilitate the development of horizontal and phenomenon-based services. Regardless of the model, the reform must also include a spending limit, which will curb growth in cost by EUR 3 billion. In order for the reform to be successfully implemented, preparations already made at the regional level must be fully exploited.

In implementing the reform, attention should be given to, in particular: the integration of services; conditions for knowledge-based management; possibilities for digitalisation; and the functionality of interaction-based steering. These are the prerequisites for achieving the target of cost control and ensuring the equal provision of services to citizens. A clearly-defined delegation of responsibilities in general government should also be ensured in implementing the reform: every effort should be made to prevent administrative redundancies. Special attention should be given to interfaces between local and regional

government and suitable approaches to providing services must be assessed, such as whether a certain task should be shared by a region and larger municipalities. (For more information, see section 8.)

Eurozone member states should assume responsibility for the consequences of their respective economic policies

Finland's objective in developing the Economic and Monetary Union (EMU) should be a monetary union that is stable both economically and politically. Economic policy coordination plays an important role in the EU, but it should respect national economic sovereignty and democratic accountability. The governance structure of the EMU should be developed in such a way that the economic policy mistakes of one member state will not create a burden for other member states to bear. In order for these targets to be achieved, the spreading of risk in the private sector should be developed through the European Banking and Capital Markets Union. The basis for a Eurozone crisis management framework should be effective investor responsibility and market discipline, so that any necessary restructuring of private creditors would be controlled. Following several reforms and clarifications, the EU framework for fiscal policy has become complicated and every effort should be made to simplify it. The EU and its budget should strive to generate value added for Europe. (For more information, see section 10.)

Finland should also be better prepared for the risks and threats facing its economy and society

The mitigation of climate change requires cost-effective actions

Climate change poses a grave threat to the well-being of future generations. Finland must lead the way in demanding that the international community take decisive action to prevent climate change. Society will be forced to adapt to climate change and the private sector will bear a majority of the costs incurred to adjust to this new reality. On the other hand, change also creates opportunities, with those at the at the forefront of technology reaping the greatest benefits.

Cost-effectiveness must be the key principle of our national climate policy. This will ensure that the costs borne by citizens, companies and public finances will remain as low as possible and there will be sufficient financial resources for other uses. Before implementing new steering measures, their impact, cost-effectiveness, feasibility and compatibility should be thoroughly examined. Coordination of climate policy should be increased. There is a need for an inter-administrative, research-based understanding on the guiding principles of climate policy and cost-effective steering measures. Furthermore, the

financial system should be incentivised to effectively price credit, market and operative risks caused by climate change. This would require, among other things, more comprehensive information when assessing the risks posed to companies. (For more information, see section 11.1.)

If necessary, it should be possible to limit the growth of household debt

Finnish households' indebtedness has increased to all-time-high levels. If continued, the growth in debt level is a risk in the next recession. In that situation, households would be forced to cut consumption in order to manage their debts. At present, there are practically no macro-prudential instruments in Finland that would effectively limit excessive household debt. Consequently, new instruments of this kind should be introduced so that they could be taken into use, if deemed necessary. These instruments should comprehensively apply to all loans taken from banks and other lenders as well as to indirect debt (e.g. housing company loans). Regulatory provisions should also more clearly encourage all creditors to properly assess the real debt sustainability of their customers. (For more information, see section 11.2.)

The risk management of government guarantees should be developed

There has been a significant increase in government guarantees over the past few years. These have also been concentrated among a small group of customers and sectors. As a result, any disturbance in the global economy that spreads to Finland could incur major guarantee losses. Increased guarantee liabilities require development in risk management. The guarantee granting procedure must be developed as part of this. Comprehensive assessments of the risks and costs of liabilities are needed to support decision-making, and the assessment process has to be consistent in all administrative sectors. Furthermore, consideration should be given to measures for limiting the risks of guarantees. The comprehensiveness of using guarantee fees should also be increased. (For more information, see section 11.3.)

Precautions for dealing with threats and disturbances to the continuity of society's vital functions

Threats and disturbances to the digital environment have increased in recent years. In all aspects of society, we are becoming increasingly dependent on maintaining the continuous availability and accuracy of information as well as the proper function of technical systems and co-operative networks. However, Finland does not have an adequate national operative capacity to ensure all of society's vital functions, even in the event of serious disturbances and emergencies. In order to correct these shortcomings, legislation must further clarify and create the necessary national back-up systems and procedures. In

particular, the continuity of vital financial market services should be secured at the national level. Correspondingly, an effort should be made to ensure the procurement and allocation of general government finances, secure the availability of human resources and key information resources, information systems and telecommunications solutions required for them. (For more information, see sections 11.4 and 11.5.)

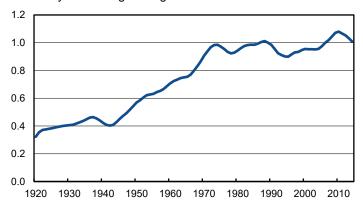
1 Finland should develop its strengths and take advantage of its opportunities

- Finland has been a success story over the past century. In just a few generations, our country has risen to become one of the most prosperous nations in the world.
- A well-functioning democracy, a stable and secure society based on trust, and investments in the education and welfare of the population are some of the factors behind the success.
- At the same time, however, the ageing of the population is causing the working-age population to shrink, and will increase the need for public services. Structural unemployment in Finland remains high and productivity growth has slowed down.
- Finland must take advantage of its strengths and take advantage of the opportunities created by technological advances and digitalisation. Achieving cost-effectiveness improvements in public administration is one of the opportunities provided by digitalisation.
- Finland must make many choices so that it can improve its longterm growth prospects. The key issue is to create a framework for growth in employment, productivity and investments. By adopting a consistent policy, Finland can boost its economic growth potential and ensure effective use of its resources.

By many yardsticks, Finland has been a success story

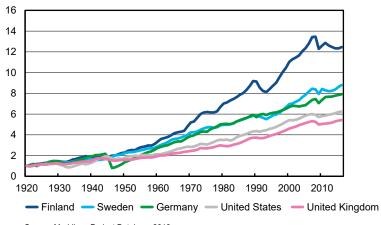
In many respects, Finland has been a huge success story over the past century. A poor agricultural country located on the fringes of Europe has risen to become one of the most prosperous nations of the world and a Nordic welfare state within a few generations. Only a century ago, Finland's GDP per capita was less than half of the levels of its Nordic reference countries (Denmark and Sweden) and only a third of the levels of the United Kingdom and the United States (See Figure 1.1). Especially since the 1950s, the Finnish economy grew more rapidly than in other countries, which allowed us to narrow these prosperity gaps. As a result, our standard of living grew more than tenfold within a period of 100 years (See Figure 1.2). (Pohjola M., 2017a and Maddison Project Database, 2018).

Figure 1.1
Finland's GDP in relation to United Kingdom's GDP
GDP per capita at purchasing power parity
five-year moving average



Source: Maddison Project Database 2018

Figure 1.2 Long-term economic growth GDP per capita, index 1920 = 1



Source: Maddison Project Database 2018

Finland's success and strong average economic growth are the result of a well-functioning democracy, a stable and secure society based on trust, and investments in the education and welfare of its citizens and in a social security safety net. Finland has also built public-sector service buildings, modernised its infrastructure and made effective use of its natural resources. In fact, when examined against this background, Finland is one of the top-ranking countries of the world.

Economic growth has not been steady, however

History has shown that the Finnish economy has not grown steadily and that we have also experienced strong cyclical ups and downs over the decades. As a small open economy, Finland is dependent on global economic trends and political developments in the world. Heavy reliance on exports means that the effects of these external factors cause the Finnish economy to fluctuate more strongly than the economies of many other countries.

Among the post-war economic downturns, the recession that hit Finland in the early 1990s was probably one of the deepest that we have ever experienced. However, the recovery was also fairly rapid. The latest downturn was the consequence of an international economic and financial crisis and it caused the Finnish GDP to fall by about eight per cent in 2009. Compared with the earlier downturns, the recovery from this latest double-dip recession was very slow and only now has Finland achieved the pre-recession GDP levels. In fact, when examined from a long-term perspective, these crises may only be seen as bumps on an otherwise smooth growth path.

Continuing success requires solutions to a wide range of different problems

Even though Finland has experienced strong economic growth over the past few years, it is facing a number of difficult problems over the coming years and decades. Climate change, an ageing population, technological revolution and tensions in world politics will put us and other Western democracies to the test, both economically and politically. In particular, the ageing of the population is causing the working-age population to shrink, and will increase the need for public services. Furthermore, structural unemployment in Finland remains high and productivity growth has slowed down. Weak productivity growth is a result of global trends, an increasingly service-based economy and the problems faced by a quite narrow-based export sector. These factors have weakened the growth prospects for the Finnish economy and they are also at the root of the long-term sustainability problems of our public finances (For more information, see Section 2.1).

Technological revolution opens up new opportunities

In order to solve these problems, Finland should take advantage of its strengths and the opportunities available. Technological advances and digitalisation are such opportunities. They can replace and supplement the labour force and create new jobs. New technologies also have a strong impact on business models, the way in which the public sector operates and the consumption patterns of households.

The efficiency benefits arising from the information economy may be substantial. From the perspective of public governance, digitalisation also provides a basis for productivity improvements (for example, by changing operating practices). Furthermore, the

findability and usability of the information can be enhanced and services can be made more customer-oriented. Using these opportunities would, however, require systematic implementation of information policy measures, high-quality digital services, a secure and well-functioning ICT infrastructure and a clear and enabling regulatory environment.

A framework for employment and economic growth is needed

In the long term, Finland should prepare for a substantially slower economic growth, unless we are able to tackle the challenges discussed above and unless the Finnish economy is able to adapt. According to the latest forecasts, economic growth in Finland will slow down to between 1 and 1.5%, which is substantially below the average growth rate of the past few decades.

The strengths mentioned above will allow Finland to tackle these challenges, turn the major societal changes under way into its advantage and stay at the forefront of developed countries. Finland must, however, make a number of choices so that it can improve its long-term growth prospects. Raising the employment rate and enhancing productivity are the key issues in this respect. By adopting consistent policies, Finland can boost its economic growth potential and make efficient use of its resources, which is a prerequisite for stronger economic growth. The service and social security system can be reformed and taxation improved so that they provide incentives for work and entrepreneurship. These instruments are discussed in more detail in the sections below.

2 Strengthening of public finances should continue

2.1 Finland's public finances are not on a sustainable basis in the long term

- Finland is close to achieving balance in its public finances, a result
 of strong economic growth. However, economic growth is slowing
 down and the possibility of an economic downturn occurring during the next parliamentary term cannot be ruled out.
- After a long period of weak economic growth, Finland's public finances are in a significantly weaker position to cope with the next downturn than before the financial crisis that began in 2008.
- The sustainability problem facing public finances has not yet been solved even though the scope of the challenge has been substantially reduced, a result of determined measures.
- According to the latest Economic Survey published by the Ministry of
 Finance in December 2018, the sustainability gap is nearly 4% relative
 to the GDP, or some EUR 10 billion at 2023 level. However, there is a
 great deal of uncertainty associated with the sustainability gap estimate. For example, such factors as the effects of the regional government, health and social services reform have not been considered in the
 estimate as they depend on the practical implementation of the reform.
- In particular, the growth in the population aged over 75 puts more
 pressure on care expenditure, for which Finland is not yet properly
 prepared. Even though the Finnish pension system would seem to
 be on a solid basis when examined on its own, it is not well-placed
 to cope with major negative surprises.
- In addition to an ageing population, climate change, maintenance backlog in the infrastructure, and major defence materiel purchases are also posing challenges to the management of public finances.

Finland's public finances are less well-placed to cope with unpleasant surprises than in the past

The short-term prospects of Finland's public finances are better than for many years. Finland is close to achieving balance in its public finances, a result of strong economic growth. For the past two years, the Finnish economy has grown at a rate of almost three per cent, the number of people in employment is increasing at a rapid pace and unemployment is falling. However, when continuing, such rapid growth would soon cause the Finnish economy to overheat and for this reason, the growth is expected to slow down to between 1 and 1.5% in the next few years. The possibility of a downturn during the next parliamentary term cannot be ruled out either because the US economic upswing has reached a fairly mature stage and a downturn in that country would, after a while, also affect Europe. Finland, a country dependent on exports, would be particularly hard hit.

After a long period of weak economic growth, Finland's public finances are in a significantly weaker position to cope with the next downturn than before the financial crisis that began in 2008. In 2007, the general government surplus-to-GDP ratio was 5.1% or nearly EUR 10 billion, while the general government debt-to-GDP ratio was only 34%. In 2019, Finland's public finances are expected to post a slight deficit and the general government debt-to-GDP ratio will continue to fall (it now stands at nearly 60%). Despite a growing debt burden, low interest rates have actually caused a substantial reduction in debt servicing costs. However, sooner or later, interest rates are expected to start rising again, which will also mean higher debt servicing expenditure.

In addition to the long economic downturn, a rapid increase in the number of pensioners has also contributed to the weakening of Finland's public finances. Growth in pension expenditure is one reason why Finland has been unable to balance its public finances despite an economic upturn and even though consolidation measures have been introduced during the current parliamentary term in the form of spending cuts and before also in the form of tax increases. Ensuring the stability of public finances would, however, require the building of fiscal buffers during a period of rapid growth, which could then be used during downturns and in the event of unpleasant surprises.

The sustainability problem facing public finances has not yet been solved

The retirement of the baby boomer generation is only the beginning of the demographic challenges that Finland is facing in the coming decades (See Figure 2.1). Finland still has a substantial sustainability gap in its public finances, which means that in the long term, there is not enough general government revenue to cover the expenditure. In particular, an increase in the ageing population will mean higher health and long-term care expenditure, for which the current total tax rate will be inadequate in the future. Furthermore, the working-age population, which is financing Finland's welfare services and social security

through taxes, is shrinking. For this reason, a permanent gap between revenue and expenditure threatens to make the growth in general government debt an unmanageable problem in the long term (see the baseline of Figure 2.9 in Section 2.3).

dependents per 100 persons of working age

90
80
70
60
50
40
30
20
10

2010

Dependency ratio (dependents aged to 14 and over 65)
 Old-age dependency ratio (dependents aged over 65)

2030

2070

Figure 2.1

Dependency ratio and old-age dependency ratio dependents per 100 persons of working age

The pension system is on a stable basis but not free of risks

1950

Source: Statistics Finland

On its own, the Finnish pension system would seem to be on a fairly sustainable basis. Pension expenditure in relation to GDP will continue to grow throughout the 2020s but will start declining after that, a result of the pension reforms introduced over the years. At the same time, the number of pensioners will no longer increase at the same rate as before. Finland has also prepared for the increase in pension expenditure by accumulating reserves and by raising pension contributions. However, it is forecast that the pension expenditure will start growing again in the 2050s, and preparations for this situation must be taken early enough.

Finland's pension system will not be able to cope with major negative surprises differing from the current forecasts. For example, a permanent fall in investment income or birth rates would substantially weaken the funding base of the Finnish pension system. The pension contribution of 24.4% now paid by the private sector is already fairly high. This means that the rate should not be increased from its current levels when consideration is given to the overall sustainability problem of public finances (For more information, see Box 3.1). One of the instruments available in the pension system that would strengthen Finland's public finances would be to further limit pathways to early exit from labour force, which would raise the employment rate among the aged population.

Cost pressures in long-term care are on the increase

The most prominent cost pressures in health and long-term care expenditure, caused by the ageing of the population, will be faced in the future, whereas in pension expenditure, the cost pressures are already being felt. Baby boomers are only now approaching the age when the need for care is increasing (See Figure 2.2). As shown in Figure 2.1 above, the old-age dependency ratio will continue to grow after baby boomers. This is not a temporary phenomenon as the proportion of the elderly population will remain higher than now on a permanent basis. Moreover, unlike in its pension system, Finland has not made any preparations for funding the increases in health and care costs by accumulating reserves.

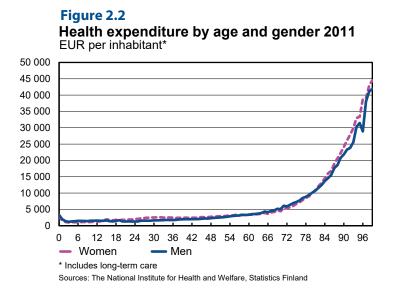
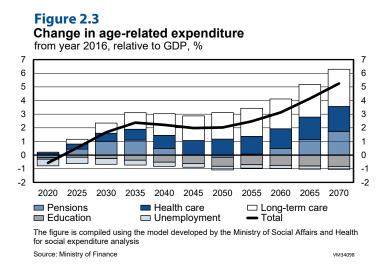


Figure 2.3 shows that the ageing of the population will primarily increase service needs in long-term care (in housing and home care services intended for the elderly). Increases in service needs are also expected to generate cost pressures in health services but the expenditure-to-GDP ratio is still substantially lower in long-term care than in health care. Thus, in relative terms, the pressures to increase expenditure are substantially lower in health care than in long-term care. During the current parliamentary term, the Government has responded to these pressures by drafting a regional government, health and social services reform, in which the aim is to slow down the increase in health and social services spending by some EUR 3 billion by the early 2030s. However, only the practical implementation of the reform will show whether this target will be achieved.



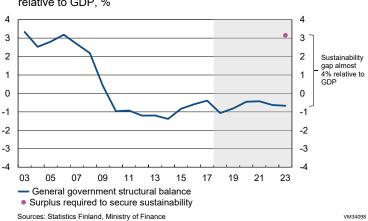
The latest estimate put the sustainability gap at some EUR 10 billion

According to the latest Economic Survey published by the Ministry of Finance in December 2018, the sustainability gap in Finland's public finances is nearly 4% relative to the GDP, or some EUR 10 billion at 2023 level. This means that Finland's public finances should be about three per cent in surplus in relation to GDP during normal economic growth in order to cope with the expenditure pressures arising from the ageing of the population in the coming decades without additional measures. In fact, Finland's public finances are expected to post a structural deficit of slightly more than 0.5% in 2023 (See Figure 2.4).

It is clear that the sustainability gap estimate is associated with a great deal of uncertainty because it is sensitive to assumptions about future developments. However, the calculations provide a consistent basis for examining the challenges facing Finland's public finances and what should be done to solve them. The sensitivity of the sustainability gap calculations to the assumptions used are examined in Section 3.3.

¹ Only the decisions whose effects on public finances can be estimated with sufficient certainty are considered in the sustainability gap estimate. Thus, such factors as the effects of the regional government, health and social services reform are not considered in the calculations.





BOX 2.1 CHANGES IN THE SUSTAINABILITY GAP ESTIMATE DURING THE CURRENT PARLIAMENTARY TERM

In spring 2015, at the start of the current parliamentary term, the Ministry of Finance put the sustainability gap at about EUR 10 billion. The exact figure was EUR 10.7 billion when the GDP forecast for 2019 produced at the time is used as a basis. The figure is EUR 11.0 billion when the latest GDP forecast for 2019 (published in December 2018) is used. The sustainability gap estimate presented in spring 2015 was the first forecast in which consideration was given to the effects of the pension reform, which had been negotiated in autumn 2014 and which took effect at the start of 2017.

According to the latest estimate of the Ministry of Finance, presented in December 2018, the sustainability gap is nearly 4% relative to the GDP, or some EUR 10 billion at 2023 level. This estimate is only comparable with the estimate presented at the start of the parliamentary term if it is calculated on the basis of the latest GDP forecast for 2019. On this basis, the current sustainability gap estimate is exactly EUR 9.2 billion.¹

¹ The comparisons made here are based on accurate sustainability gap estimates. However, the sustainability gap estimates are usually presented as rounded figures because there is uncertainty in the estimates. The sustainability gap estimate is calculated as a percentage relative to the GDP but giving it in euros is more illustrative in this context. However, there is no definite answer to which year's GDP figure should be used as a basis for the euro figure.

When comparable figures are used, the sustainability gap estimate produced by the Ministry of Finance has decreased by about EUR 1.8 billion during the current parliamentary term. However, the sustainability gap has increased during the same period because the long-term assumptions used in the calculations have been updated. The most important of the updates are the new population projection presented by Statistics Finland in autumn 2018 and the new assumptions of long-term economic growth presented by the EU Working Group on Ageing Populations and Sustainability (AWG). When put together, the updated calculation assumptions have increased the sustainability gap by about EUR 1.4 billion during the current parliamentary term.

When both comparable GDP forecasts and comparable long-term calculation assumptions are used, the sustainability gap estimate has decreased by about EUR 3.2 billion during the current parliamentary term (See Table 2.1). This figure contains all the changes in the medium-term forecast for public finances and the changes arising from Government decisions and other factors. The spending cuts set out in the Government Programme and implemented during the current parliamentary term have been the most significant factor reducing the sustainability gap. However, it is difficult to separate the effects of the Government decision from other changes in the forecasts.

Many of the structural reforms will only have a delayed impact on sustainability gap calculations

When the latest sustainability gap estimate is examined, it should also be remembered that the effects of many of the structural reforms that have been introduced or are being drafted have not yet been taken into account in the sustainability gap calculations. The sustainability gap calculation does not take into account the target of slowing down cost increases by EUR 3 billion set for the regional government, health and social services reform, or the EUR 1 billion savings target set for the efficiency improvements in public finances. This is because the implementation of these measures is associated with a great deal of uncertainty. By the time when the savings generated by the reforms will start slowing down growth in general government expenditure, the estimates of the sustainability gap will become more favourable.

The recent upswing in the Finnish economy has only slightly improved the sustainability gap estimate because according to the estimate the recent improvements in the employment situation are of cyclical nature, rather than of permanent or structural character. If, however, the improvements in the employment situation are permanent, they will have a delayed impact on the sustainability gap estimate when the long-term assessments used in the sustainability gap calculations are updated by the AWG.² For this reason, the effects of the structural measures that have helped to improve the employment rate are not considered in the estimate shown in Table 2.1.

² The assumptions are updated every three years and the statistical data for the last ten years are used in them as baseline data.

Table 2.1 Changes in the sustainability gap estimate during the current parliamentary term

	Sustainability gap, in relation to GDP, %	Sustainability gap, EUR billion*
Sustainability gap, spring 2015	4.6	11.0
Updated underlying assumptions (population projection and long-term economic outlook, etc.)	0.6	1.4
Measures introduced by the Government and other changes in the medium-term forecast for public finances	-1.3	-3.2
Sustainability gap, December 2018	3.8	9.2

^{*} Calculated on the basis of the nominal GDP for 2019, Ministry of Finance forecast December 20188

Climate change, maintenance backlog and defence materiel purchases are adding to the pressures

In the public finances sustainability gap calculations, the focus is on the pressures created by the ageing population on public finances (Figure 2.3). There are, however, also other pressures facing public finances whose effects may be difficult to estimate.

The most concrete cost pressures on public finances in the 2020s are caused by the strategic defence capability projects of the Finnish Defence Forces. These projects are the purchase of new fighters for the Finnish Air Force (HX project: EUR 7-10 billion) and the materiel purchases of the Finnish Navy (Squadron 2020 project: EUR 1.2 billion). If the strategic defence capability projects of the Finnish Defence Forces are financed entirely with borrowed money, they will permanently raise the debt ratio by between three and four percentage points.

However, the purchases are a one-off expenditure items rather than permanent spending increases, which means that they will have a fairly small impact on the sustainability gap in public finances. In the existing EU rules on public finances, the expenditure arising from defence materiel purchases is treated like any other expenditure. It is thus possible that the 3% deficit ceiling set by the EU will be exceeded during one or more years because in the national accounts, defence materiel purchases are only entered as expenditure when the equipment is delivered.

It is also estimated that renovation investment needs ('maintenance backlog') have accumulated in public buildings and other infrastructure. In other words, these structures must be repaired if they are to be kept in usable condition in the future. It is difficult to give an exact figure for the maintenance backlog but it is nevertheless substantial because a large

number of buildings and structures must soon be modernised or renovated. The maintenance backlog, especially the situation in municipalities, is examined in more detail in Section 8.5.

Climate change will probably be a greater challenge to Finland's public finances than the issues discussed above. Climate change will have a multitude of different effects, some of which are difficult to anticipate, and for this reason, their effects on public finances are not easy to determine. It is clear, however, that the mitigation of climate change and preparing for its effects will generate substantial costs. At the same time, however, these challenges could also open up market opportunities for Finnish companies offering solutions to the problems. This in turn would generate new business and economic growth. Climate change is examined in more detail in Section 11.1.

2.2 Finland's public finances are sensitive to macroeconomic shocks

- The Finnish economy is sensitive to shocks in the global economy through foreign trade and financial markets. Macroeconomic shocks will quickly also lead to higher general government deficits and debt ratio.
- General government deficits and higher debt ratio have made Finland's public finances more sensitive to external shocks. Public finances should be strengthened during an economic upturn so that procyclical fiscal policy would be avoided in the next downturn.
- The growth in contingent government liabilities has considerably increased risks to public finances in recent years. A global downturn may trigger off substantial guarantee liabilities and lead to a need for capital injections from public funds.

The ageing of the population is creating challenges to public finances in the longer term. However, in the management of public finances, preparations should also be made for rapid and unexpected cyclical fluctuations. Preparing for them is important from the perspective of a stable and predictable fiscal policy. It would eliminate the need for a tighter fiscal policy in a downturn, which would further slow down economic growth.

The capacity of public finances to cope with a sudden downturn can be simulated with the help of a stress test. In a stress test, the effects of an external macroeconomic shock on general government revenue and expenditure, realisation of contingent liabilities and indebtedness are examined.

The stress test is based on the macroeconomic risk scenario used by the European Banking Authority (EBA) in the stress testing of banks.² In the scenario, political instability and shocks affecting the financial markets cause a macroeconomic shock as a result of which the Finnish GDP will end up 8.4% below the baseline scenario over a period of three years.³

The stress test for public finances examines the direct and indirect effects on public finances caused by a macroeconomic shock. However, the shock is not expected to trigger off the need to provide capital injections for domestic banks or other financial institutions, considering the assessment made by EBA in its 2018 stress test. Furthermore, the shock is not expected to reignite the euro area debt crisis again in a manner that would lead to the realisation of Finland's guarantee liabilities connected with the financial support programmes for euro area countries.

A shock affecting global financial markets would quickly spread to Finland

In the stress test, a global financial market shock triggered off by political uncertainty and geopolitical tensions would increase the risk premium for loans and cause share prices to collapse. A shock originating in the United States would spread to Europe and thus also to Finland through financial markets and by weakening export demand.

Weaker export demand, higher financing costs and growing uncertainty would lead to a fall in exports and investments. The economic downturn would lead to higher unemployment and lower company profits, which would both have a negative impact on private consumption and housing prices. In the scenario, Finnish GDP growth would slow down by 3.4% in the first year, compared with the baseline calculations, while in the two years after that, growth would slow down by 4.1% and 1.3%, respectively (Table 2.1). The weakening economic situation is only expected to have a delayed impact on wages because the pay rises for 2019 have already been agreed.⁵

The macroeconomic shock set out in the stress test is similar in scale to the downturn triggered by the euro area debt crisis that hit Finland in 2012 but less severe than the financial crisis that started in 2008 (Figure 2.5).

 $^{{\}bf 2} \quad https://www.eba.europa.eu/documents/10180/2106649/Adverse+macroeconomic+scenario+for+the+E-BA+2018+Stress+Test.pdf/56989522-f7e5-413e-accc-5c39d23fdffa$

³ The baseline scenario used in this calculation is the same as the one used by the Ministry of Finance in its Economic Survey published in December 2018.

⁴ http://storage.eba.europa.eu/documents/10180/2419200/2018-EU-wide-stress-test-Results.pdf

⁵ The estimates of changes in wages and private consumption contained in the scenario are based on the Ministry of Finance estimates of changes in them in similar situations because the EBA scenario does not contain explicit assessments of changes in wages and private consumption.

Table 2.2 Macroeconomic assumptions made in the stress test

	Baseline growth %		Change to baseline, pp.			Risk scenario growth, %			
	2019	2020	2021	2019	2020	2021	2019	2020	2021
GDP volume	1.5	1.3	1.1	-3.4	-4.1	-1.3	-1.9	-2.8	-0.2
Volume of private consumption	1.6	1.3	1.2	-1.2	-1.4	-0.5	0.4	-0.1	0.8
Inflation	1.5	1.7	1.8	-0.2	-1.0	-1.7	1.3	0.7	0.1
Index of wage and salary earnings	2.7	3.0	2.8	0.0	-1.1	-1.6	2.7	1.9	1.2
Unemployment (level)	6.9	6.7	6.6	0.5	1.9	3.1	7.4	8.6	9.7
Interest on 10-year Finnish gover- nment bonds (level)	1.0	1.5	2.1	0.7	0.8	0.7	1.7	2.3	2.8
Housing prices	1.2	1.1	1.9	-11.6	-12.5	-4.0	-10.4	-11.4	-2.1
Share prices	0.0	0.0	0.0	-27.5	-25.1	-19.9	-27.5	-25.1	-19.9

Figure 2.5
GDP growth in baseline scenario and stress test scenario



Effects of a macroeconomic shock on Finland's public finances

A macroeconomic shock would significantly impact general government revenue and expenditure. Weaker economic growth would slow down the growth in tax revenue, while higher unemployment would mean higher public spending. Furthermore, higher interest rates on government loans and the debt burden boosted by growing deficits would mean higher interest expenses. At the same time, falling share prices would lower the value of the assets held by the state and pension funds. The assumption in the scenario is that the

⁶ The effects of the shock on public finances have been assessed using the scenario model for public finances developed by the Ministry of Finance by comparing it to the forecasts made by the Ministry in its December 2018 economic survey.

fiscal policy will remain unchanged, which means that there will not be any discretionary adjustment or stimulation of public finances with respect to the baseline. However, automatic stabilisers are allowed to function unhindered.

Lower employment and slower wage rises would mean a lower wage bill, which would decrease central and local government income tax revenue as well as the social security contributions collected by social security funds. Lower share prices and housing prices would also mean less revenue arising from taxes on capital gains. At the same time, lower private consumption and slower inflation would have a negative impact on the receipts of indirect taxes, such as the value added tax. At the same time, lower share prices and weaker company profits would push down the dividend income of the public sector. Even though higher interest rates would boost the interest income of pension funds, overall property income would be lower than in the baseline. In 2021, total general government revenue would be EUR 7 billion lower than in the baseline.

With increasing unemployment, general government expenditure would be mainly elevated by the growth in unemployment expenditure and other social current transfers. At the same time, as a result of a slower inflation, index-linked current transfers would grow slightly more slowly throughout the period in review, while slower wage rises would mean less growth in public-sector wage expenditure and prices of outsourced services in 2020 and 2021. Higher interest rates on central and local government loans and growing debts would boost interest expenditure as maturing loans and growing deficits would have to be financed through loans with higher interest rates. As a whole, the overall direct effects of a weaker economic situation would increase public spending by almost one billion euros at 2021 level in relation to the baseline.

The combined impact of lower revenue and higher expenditure would weaken general government budgetary position by about EUR 7.5 billion (slightly more than three per cent in relation to GDP) in 2021.⁷ The growth in the deficit and a decline in nominal GDP would increase the debt-to-GDP ratio by about eight percentage points in relation to the baseline by the year 2021. In fact, the debt-to-GDP ratio would reach 65% over a period of three years, whereas in the baseline, it is expected to fall to 57%.

⁷ The results are in line with the scenario presented in the overview of general government risks and liabilities published in spring 2018. The scenario presented above contains more detailed estimates of the effects of asset prices on capital income and the effects of slower wage rises on local government personnel expenditure. The updates resulted in larger decreases in tax revenue and smaller increases in general government expenditure but the total impact of the shock on public finances remains largely unchanged.

Realisation of contingent liabilities would increase general government expenditure

According to the scenario, in addition to resulting in direct spending increases, the realisation of contingent liabilities would also increase general government expenditure. The assumption in the scenario is that a global downturn would push Finnvera's largest guarantee customer into insolvency. Even though, the collateral covers 43% of the guarantee receivables, the total losses arising from the insolvency would still amount to EUR 1.4 billion. The losses would deplete both export financing risk buffers (export guarantee and special guarantee reserves as well as the State Guarantee Fund).

In the situation described above, the state would not have any formal obligation to provide Finnvera with a capital injection and the export guarantee would not be formally released because the risk buffers would be able to cover the losses arising from the insolvency. The assumption in this scenario is that the state would nevertheless provide the reserves with a capital injection by replenishing the buffers to half of their current value (EUR 700 million). This would be considered necessary so that the trust of investors and credit rating agencies in the company could be maintained after a major guarantee event. It is not assumed in the scenario that a larger group of Finnvera's customers would face payment difficulties during the period in review.

For the National Housing Fund, the assumption in the scenario is that a fall in housing prices would drive a customer with an exposure of EUR 1.4 billion into insolvency. The realisation of property collateral is assumed to cover 50% of the liabilities, which means that the credit losses would total EUR 700 million. The National Housing Fund has cash funds totalling EUR 1.7 billion, which means that no budget financing would be required to cover the guarantee liabilities and there would be no need for capital injections. Even though the realisation of the guarantee liabilities would not have any direct budgetary effects, it would cause the state cash assets to shrink because the cash reserves of the National Housing Fund are connected with the overall cash funds of the state.

The losses arising from the contingent liabilities would total EUR 2.1 billion by the end of 2021 when the collateral on the guarantees have been realised. However, the realisation of the contingent liabilities would not directly increase general government debt as the dissolution of the reserves would not have any debt effects and the money flow required for the capitalisation of Finnvera could be covered by realisation of the National Housing Fund's property collateral.

Figure 2.6
Effects of the stress test scenario on general government budgetary position relative to GDP, %

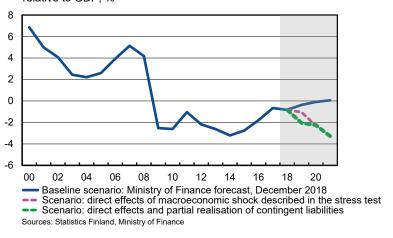
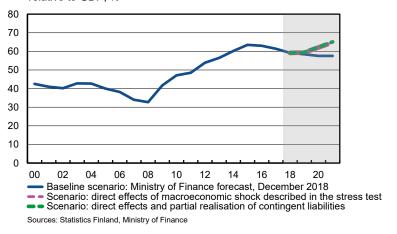


Figure 2.7
Effects of the stress test scenario on general government debt ratio relative to GDP, %



2.3 Fiscal buffers and sustainability of Finland's public finances should be strengthened

- If strengthening the fiscal buffers and sustainability of public finances is adopted as the starting point for Finland's economic policy, Finland's public finances should be in a surplus during the next government term.
- In the light of the latest forecast, achieving a surplus of about 0.5% would require strengthening public finances by two billion euros through direct adjustment measures by the year 2023. Measures that quickly boost public finances are important so that there is time to build fiscal buffers before the next downturn.
- In order to ensure the long-term sustainability of public finances, it
 is essential to continue on the path of structural reforms. The ageing of the Finnish population will increase age-related expenditure
 every year, which in turn will weaken public finances for decades to
 come.
- The target should be to strengthen public finances by about EUR 5 billion through structural reforms by the end of 2020s. This target can be achieved if it can be ensured that the regional government, health and social services reform will slow down cost increases by the targeted EUR 3 billion and decisions are made on measures helping to boost the employment rate to 75% by 2025.

Finland still has a serious sustainability problem in its public finances. The stress test described above also shows that even a medium-sized macroeconomic shock would quickly put Finland's general government debt on a steep growth path. A shock described in the scenario would cause the general government deficit to come close to the deficit limit set in the Stability and Growth Pact and the debt ratio reference value of 60% would be quickly exceeded. In addition to having direct effects on public finances, the realisation of contingent liabilities would also increase general government expenditure.

Finland should continue to strengthen its public finances so that it can build fiscal buffers for future downturns and for unpleasant surprises affecting the economy. Strengthening of public finances would also require the continuation of structural reforms strengthening public finances in the long term.

Fiscal targets and the measures to achieve them should be planned so that the buffers and sustainability of public finances can be strengthened

If the challenges described above are taken seriously, putting Finland's public finances on a path that ensures their short-term and long-term sustainability should be the fiscal policy objective of the next Government. Sustainable public finances are a prerequisite for implementing the fundamental welfare and income distribution objectives of the public sector.

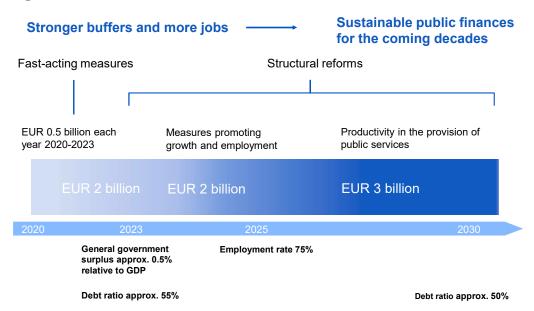
The aim of the fiscal policy should be to ensure that public finances are on such a solid basis that the automatic stabilisers can function freely. In that is achieved, public finances can be allowed to weaken in a normal downturn and there is no need to tighten the fiscal policy in order to stabilise public finances. In the targeted state, reforming economic structures and introducing measures boosting economic growth and the sustainability of public finances in the long term should be at the core of the economic policy.

If the strengthening of the fiscal buffers and sustainability of public finances is adopted as the aim, the following set of economic and fiscal policy objectives and rules would support the achievement of this goal during the 2019-2023 parliamentary term. The scale of the measures required to achieve the objectives has been estimated on the basis of the forecast presented by the Ministry of Finance in December 2018. A more detailed estimate will become available at the end of March, when the Ministry of Finance updates its forecast.

- A surplus of about 0.5% should be set as the target for the nominal general government budgetary position in relation to GDP in 2023.
 This target can only be achieved if the general government budgetary position is strengthened by about two billion euros through direct adjustment measures.
- 2. Finland's public finances should be strengthened by approximately five billion euros by the end of 2020s through structural reforms (including the implementation of the regional government, health and social services reform). Strengthening the prerequisites for employment growth through measures that would raise the employment rate to 75% by the year 2025 would be at the core of the reform package.
- 3. Nominal budgetary targets that are in line with general government surplus targets should be set for general government subsectors. These subsectors are as follows: central government, the future county government, local government, and employment pension schemes and other social security funds.

- 4. Central government spending limits and tax policies should be set out so that they are in line with the achievement of the nominal budgetary position targets.
- 5. Structural budgetary balance should be set as the medium-term objective (MTO) for Finland's public finances.
- 6. Multi-year minimum targets leading to the achievement of the MTO should be set for the nominal central government budgetary position in accordance with the Decree on the General Government Fiscal Plan. The minimum targets should be updated in the General Government Fiscal Plan each year.

Figure 2.8



The objective is to prepare for the downturn described in the stress test by accumulating buffers for public finances by the end of 2020s. If these objectives are met, Finland's public finances would be strengthened by a total of seven billion euros by the end of 2020s, compared with the situation where no action is taken. In this scenario, the general government debt-to-GDP ratio would decline from the current 60% to about 55% by the year 2023 and to about 50% by the end of 2020s.

The outlook for public finances and the achievement of fiscal policy objectives should be reviewed each year as part of the preparation of the General Government Fiscal Plan. The Government should be prepared, throughout the parliamentary term, to take new

measures so that it can ensure the achievement of these objectives. Functioning of the fiscal policy rules and objectives is examined in more detail in Section 9.

Strengthening the buffers would require measures that already have an impact during the government term...

Direct adjustment measures that are needed before the long-term structural reforms start bearing fruit. The ageing of the population will automatically boost public expenditure each year, which means that the state of public finances will weaken if no measures are introduced. Direct adjustment measures would compensate for the growth of age-related expenditure but they would also help to create buffers for future economic downturns. The effects of structural reforms are also associated with uncertainty.

In the short term, public finances can be strengthened through measures slowing down growth in expenditure or boosting growth in revenue. These measures strengthening public finances and the benefits and disadvantages arising from them are examined in more detail in Section 3. Measures should also be taken to reduce short-term risks by examining the risks arising from government guarantees, which have increased considerably in recent years (For more information, see Section 11.3).

In addition to introducing direct spending cuts or tax increases, public finances should also be strengthened during the government term by ensuring a more efficient use of public expenditure and more efficient operations of the public sector, and by taking measures raising the employment rate and enhancing the prerequisites for growth. The measures must, however, have immediate impact and be of concrete nature, specific and credible.

From the perspective of the economic cycles, the measures should be front-loaded. It is entirely possible that economic growth will slow down and that Finland will be hit by a new downturn by the year 2023. Adequate buffers should be accumulated for public finances before the next downturn so that a procyclical tightening of the fiscal policy in a downturn can be avoided. The front-loaded nature of the measures also enhances the credibility of the measures because a Government cannot make any binding decisions on behalf of its successors.

...but ensuring sustainability also requires measures that strengthen public finances in the long term

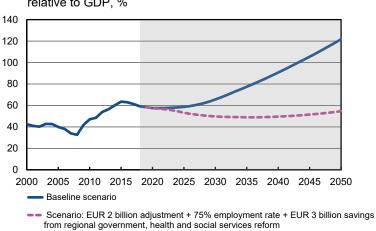
In order to enhance its public finances, Finland also needs solutions impacting economic structures that increase general government revenue and slow down expenditure growth over the long term. In this manner, Finland can prepare for the expenditure pressures arising from the ageing of the population and for unpleasant surprises in the long term.

Measures providing better prerequisites for employment growth and boosting the efficiency of public-sector service production (such as the implementation of the regional government, health and social services reform) would produce the best results. These instruments for strengthening public finances are examined in more detail in the sections below.

Preparation for the structural reforms should be started early in the government term so that there is enough time for the drafting process. It is also important that the reforms have enough time to strengthen public finances before the growth in age-related expenditure arising from the ageing of the population has significantly weakened the general government debt-to-GDP ratio.



Sources: Statistics Finland, Ministry of Finance



The recommended measures will ensure the stability of public finances for the next few decades, but they will not be enough to cover the entire long-term sustainability gap. As shown in Figure 2.9, the general government debt-to-GDP ratio envisaged in the recommended measures will gradually start increasing again in the 2040s. This means that there will also be work to be done to close the sustainability gap during the coming parliamentary terms.

The long-term sustainability of public finances can be enhanced through mechanisms in which the sustainability of the benefit and service system is regularly assessed and the necessary corrective action is taken at an early stage. It has been agreed that the sustainability of the earnings-related pension system is regularly assessed, in which connection the need for a pension reform can also be regularly discussed. According to the current estimates, the Finnish pension system is on a sustainable basis but pension expenditure will start growing in the 2050s. (See Section 2.1 and Box 3.1).

BOX 2.2 WHAT IF FINLAND IS HIT BY ANOTHER SERIOUS DOWNTURN COMPARABLE WITH THE FINANCIAL CRISIS?

As a small open economy, Finland is sensitive to shocks in the global economy

During the next parliamentary term, economic growth may also be weaker than what is predicted in the Ministry of Finance's forecast. Risk of escalating trade conflicts, geopolitical tensions and (in Europe) the uncertainty arising from Brexit and worries about the direction of the Italian economic policy are some of the factors creating uncertainties in the world economy. Weakening of the world economy would also inevitably impact the Finnish economy through a slowdown in exports.

Serious macroeconomic shocks cannot be ruled out either. Even though the sustainability of the euro area financial system has been enhanced, especially since the financial crisis, factors such as high debt levels still make some of the member states sensitive to shocks. If becoming reality, such shocks could also have a negative impact on the economies of the other euro area countries.

An economic downturn would substantially weaken the state of Finland's public finances as shown by the stress test described in Section 2.2. Experiences of the last few decades also show that a recession or a crisis can put Finland's general government debt-to-GDP ratio back on a rapid growth path. For example, during the 2008 financial crisis, the debt ratio increased by nearly 15 percentage points over a period of two years and the general government budgetary position weakened by almost seven percentage points, which was partially the result of the measures stimulating the economy. The recession of the early 1990s was also accompanied by a rapid growth in the debt ratio and a substantial weakening of central government finances.

Finland should be prepared for unpleasant surprises

The economic policy package presented in this document is based on an assumption where growth is slowing down but will nevertheless stay close to its potential rate and the Finnish economy is not hit by major external shocks. Nevertheless, the Government should also have a plan for serious macroeconomic shocks so that the damage caused by the crisis can be minimised. If Finland was hit by a serious economic downturn in the 2020s, central government would not be in a position to soften its effects in the same manner as after the 2008 financial crisis. This is because the buffers are now too thin. In a severe downturn, major cuts in public services or benefits or other direct adjustment measures would probably be needed if there is a danger of an uncontrollable rise in general government debt or if the trust in Finland's ability to manage its public finances was at risk.

In a serious shock, the additional direct consolidation measures needed to stabilise public finances would have to include both spending cuts and tax increases. They should, however, be directed so that their effects on economic growth potential can be minimised and that they would not slow down the recovery process. It is clear that increases in the total tax rate and the resulting negative effects on the economy could not be fully avoided. Even though measures would have to be taken to substantially slow down spending increases, cuts in such areas as education, R&D expenditure and other areas that are important for Finland's economic growth potential and long-term sustainability of public finances should be avoided.

The total scope and type of the additional measures required would depend on the scale and nature of the economic shock. If there are factors behind the crisis arising from the structures of the Finnish economy, correcting the situation would also require measures having effects through economic structures. Structural reforms can speed up the recovery from the crisis and support the long-term sustainability of public finances. This would also strengthen trust in the stability of Finland's public finances.

3 Finland's public finances can be strengthened through immediate consolidation measures or structural reforms

- The quickest way to strengthen general government budgetary position is to cut spending and raise taxes.
- Narrowing the sustainability gap through immediate measures strengthening public finances are always more justified during an economic upturn than a downturn.
- The new spending needs arising during the next government term should be met by reallocating expenditure. Allocation of expenditure should be based on ensuring that each euro collected as taxes should generate optimum benefits for the economy as a whole.
- In the tax policy, consideration should be given to internationalisation, which has made both companies and individuals and thus also the tax bases more mobile. In any tax increases, priority should be given to the taxation of consumption and real estate.
- Tax revenue can also be increased by reducing the extent of tax expenditure. The objectives set for tax expenditures and their implementation should be carefully assessed and the number of inefficient tax expenditures should be gradually reduced.
- Because of the scale of the sustainability problem facing Finland's public finances, the problem cannot be solved without major structural reforms that would boost economic resources and allow them to be used more efficiently.
- Structural reforms can often simultaneously enhance public finances and support economic growth. However, the effects of structural reforms are often uncertain and difficult to assess.
- The sensitivity analyses of the sustainability gap calculations suggest that raising the employment rate and boosting the productivity of public services are the most effective ways of narrowing the sustainability gap.

The measures to strengthen public finances are often painful

Strengthening of public finances and, consequently, the closing of the sustainability gap can be done by means of immediate consolidation measures, such as tax increases or spending cuts, or by introducing long-term structural reforms. Structural reforms also help to increase revenue or decrease expenditure but only gradually as economic structures and the behaviour of households, companies and public administration changes.

There is a broad range of different instruments available for strengthening public finances. However, the instruments do not always offer easy and painless solutions as many of them have more or less negative effects. They also affect different population groups in different ways, causing political disagreements. This means that sooner or later, we are dealing with a difficult problem of reconciling economic policy needs with social policy needs.

Direct consolidation measures should be taken when the economy is growing

The challenge of ensuring the sustainability of Finland's public finances is of such scale that none of the measures available for the purpose should be rejected out of hand. In principle, the quickest way to strengthen public finances is to introduce consolidation measures that have an immediate impact (spending cuts and higher taxes).

The scale of the immediate consolidation measures also depends on the economic situation. Strengthening public finances through immediate consolidation measures are always more justified during an economic upturn than during a downturn. According to current estimates, Finland's GDP will exceed the level of potential output in the next few years, which means that Finland is in the middle of an economic upswing. This is an argument in favour of introducing immediate consolidation measures.

During the last two parliamentary terms, the focus has varied between expenditure adjustments and tax adjustments

During the past two parliamentary terms, the focus has varied between spending cuts and tax increases. The last parliamentary term (2012-2015) saw the introduction of immediate consolidation measures totalling about six billion euros. The measures were equally divided between spending cuts and tax increases. During the current parliamentary term (2016-2019), the focus has been on expenditure-related measures, as general government spending has been cut by some EUR 4 billion. The policy of the current Government has been to avoid tax increases. In fact, the tax rate has declined during the current government term, partially as a result of the Competitiveness Pact. Some of the tax bases have also grown more slowly than the GDP.

Because of the spending cuts carried out during the previous parliamentary terms, identifying new areas for cuts is more difficult than in the past. Furthermore, it is difficult to achieve substantial savings quickly without weakening public services or reducing current social transfers. For this reason, these measures are controversial, especially from the perspective of income distribution. Moreover, different types of public expenditure affect the economic structures and productivity in different manners. When public spending is cut, it may also happen that savings in one sector may increase costs in another.

3.1 Growth in public expenditure should be slowed down

Service provision, investments and current transfers are the most important public expenditure items

Public expenditure may have a broad range of different aims. In fact, types of public expenditure can be classified in many different ways. For example, they can be divided into consumption expenditure, investments and current transfers. Public consumption expenditure can be divided into compensation of employees and intermediate consumption. In practice, this concerns the wages and employer contributions connected with the services provided by the public sector, and purchases of services and supplies.

The major investment projects often involve the development of public infrastructure, such as the road and rail network. The purpose of these inputs is to ensure an optimal operating environment for private actors, companies and households. Other investments involve the construction of service buildings and defence material purchases.

The purpose of the public-sector current transfers, such as pensions, unemployment security, child benefits, social assistance and student financial aid, is to secure the livelihood of citizens in different stages of life. Current transfers are often also associated with an idea of fairer income distribution between different population groups or during life stages of individuals.

Examination of public expenditure should not be limited to on-budget entities

When decisions on the allocation of expenditure are made, all expenditure and the needs behind them should be reviewed together. Basically, none of the activities funded by the public sector should be left outside the review. The State Budget plays a key role as a fiscal policy instrument when public expenditure requirements are estimated. However, public expenditure should be examined from a wider perspective than the Budget. For example, it would be natural to assess the objectives and resources concerning off-budget funds when decisions on the Budget are made.

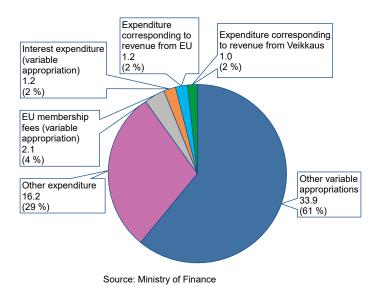
Changing the existing expenditure structure is difficult

The principle behind expenditure decisions should be that each euro generated as tax revenue and allocated to a specific purpose should produce optimal benefits in overall terms, when consideration is given to value-based political decisions. In practice, preparing cost-benefit assessments across the boundaries of administrative branches is difficult because the objectives concerning the different categories of public expenditure are rarely commensurate. For example, it is difficult to find a yardstick for comparing the societal effectiveness of the inputs aimed at enhancing Finland's security policy status with the measures improving the quality of life of the elderly.

Figure 3.1

Budget expenditure 2019

EUR billion (%)



The problems connected with the measuring of the objectives of individual administrative branches and making comparisons between them easily lead to a situation where changing the existing expenditure structure is difficult. Moreover, changing public expenditure would often require legislative changes. For example, nearly 70% of the expenditure in the 2019 Budget are variable appropriations, which are largely based on the legislation in effect. This means that changing these appropriations would require changes to the decisions contained in the Budget and to the corresponding calculation criteria laid down in the law. The expenditure structure becomes increasingly inflexible when more and more criteria concerning the allocation and sizing of expenditure are incorporated into the law.

Agreement-based or otherwise non-discretionary items such as debt interest payments and EU membership fees are also considered as variable appropriations. In the 2019 Budget, a total of EUR 1.2 billion is allocated to debt interest payments and EUR 2.1 billion to EU membership fees. Moreover, some of the expenditure contained in the Budget involve the relaying of funding received from elsewhere to specific purposes. For example, the revenue generated by gambling totalled EUR 1.1 billion in the 2019 Budget, and this sum is channelled to a variety of purposes, as laid down in the Lotteries Act. Moreover, under the 2019 Budget, the EU will contribute EUR 1.2 billion to a number of different projects.

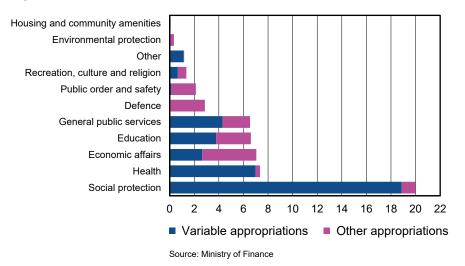
Social security, healthcare and the promotion of business and industries are the biggest expenditure items in the Budget

In Figure 3.2, the expenditure in the Budget is broken down in accordance with the CO-FOG classification. This method provides a better picture of how the expenditure entered in the Budget is allocated. The figure shows that social security, health and economic affairs are the biggest expenditure items. Social security accounts for nearly EUR 20 billion of all expenditure in the Budget. Almost 95% of this expenditure is classified as statutory variable appropriations. In healthcare expenditure, too, statutory appropriations account for a substantial proportion of the total.

Figure 3.2

Budget expenditure according to COFOG classification 2019

EUR billion



Growth in expenditure should be slowed down and new spending needs should be met through reallocation

The experiences of the past two parliamentary terms have shown that slowing down spending increases is possible and that most of the immediate consolidation measures carried out during the period were budgetary measures. As in the previous parliamentary terms, measures tackling the growth in public spending are also needed in the future. Spending cuts nearly always have negative effects and these effects can be mitigated by allocating the cuts correctly. In this connection, the chances of reallocating appropriations within the Budget should also be carefully considered.

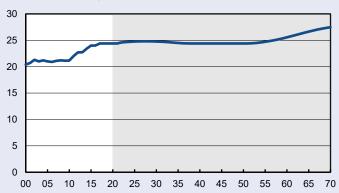
The consolidation measures carried out during the two previous Governments and global economic growth are helping Finland to gradually balance its public finances. When policies impacting expenditure trends are considered in the future, the challenges arising from the long-term outlook cannot be overlooked and we should not imagine that we can solve the problem by relying on structural reforms, which usually have a slow impact. When expenditure needs are estimated, the effects of demographic trends must also be considered. Effective use of existing appropriations and spending reallocations should also be a consideration in the future, instead of spending increases.

BOX 3.1 EARNINGS-RELATED PENSION EXPENDITURE IS ALSO PUBLIC EXPENDITURE

The pension reform that took effect at the start of 2017 will also help to strengthen the sustainability of public finances. For example, the raising of the retirement age and linking it to future life expectancy will extend working careers. In fact, when examined separately, the current earnings-related pension system is probably on a sustainable basis. However, the private-sector employment pension contributions are already quite high and there are pressures to increase them in the coming decades (See Figure 3.3). For this reason, alternatives to the existing pension system should be considered if Finland's public finances as a whole are on an unsustainable basis.

Savings in earnings-related pensions would make it possible to lower employment pension contributions, which would allow leeway for changes in other taxes and provide a basis for strengthening public finances. Especially if the trend of the past few years continues and the birth rate remains at lower-than-expected levels, there will also be more pressures to take a critical view of the earnings-related pension system as part of public finances. At least decisions that would further increase pension expenditure should be avoided.

Figure 3.3
Private-sector employment pension contribution relative to wage bill, %



Source: Long-term projections of the Finnish Centre for Pensions 2016

3.2 Tax competition leaves less room for tax increases

Most of the funding for the public sector comes from tax revenue and payments similar to taxes. Finland's public sector and thus also the level of taxation have been fairly high when compared to other countries. No clear link between the overall level of taxation and economic growth can be established on the basis of research literature. It would seem, however, that the Nordic model in which such services as education and social security are funded from tax revenue can be fairly successful in terms of economic growth and wellbeing. However, the way in which the taxes are collected is of great importance, especially in countries with a large public sector. The characteristics of a good tax structure and the incentive effects of taxation are examined in more detail in Section 6.

In addition to the tax structure and the incentive effects of taxation, there are also other issues in the tax policy that need to be considered. In addition to a more specialised division of production in international scale, globalisation has also led to more tax competition. Moreover, digitalisation will further increase the role of tax competition as it becomes easier for companies to move operations to other countries. Against this background, it is clear that tax increases can be used to strengthen public finances only to a limited extent. In fact, to increase tax revenue, there should be more focus on a good tax structure and on broadening tax bases than on simply raising taxes.

As economic integration is progressing, companies and employees will react more quickly to differences in tax levels between countries. It is clear that there are also many other issues that companies consider when making decisions on production locations, such as the predictability of the tax policy, labour costs, supply of skilled workforce, closeness of the markets, transport costs, quality of the infrastructure, and the stability and security of society. Moreover, international competition affects tax bases in different ways. More flexible tax bases are more sensitive to international tax competition.

Tax competition is toughest in corporate taxation

Companies and their profits are the first to react to competition on tax levels and subsidies. Over the past few decades, globalisation and the increasing mobility of capital between countries have in many ways changed business operations and the manner in which taxation affects companies' decisions. The average corporate tax rate of the OECD countries has decreased substantially over the past two decades. A great deal of work has been done in the OECD and the EU to combat harmful tax competition in recent years but so far these organisations have only managed to curb the most blatant forms of tax competition.

Tax competition on tax on capital income (in which savings are taxed) has been less intensive because capital income taxation is based on the principle of country of residence, which means that the taxes are usually collected in accordance with the legislation of the beneficiary's home country. This means that all the capital income of private individuals is taxed in Finland the same way, irrespective of its geographic origin. This requires that the tax authorities of the individuals' home countries are able to supervise the foreign investments made by these persons. The automatic exchange of financial account information between countries which started in 2017 and is continuously expanding has facilitated the supervision of foreign capital income.

In the taxation of earned income, the mobility of the tax base is largely dependent on the educational levels of the workforce. Highly educated individuals are more eager to emigrate than other citizens. Steep progression in the taxation of earned income may thus increase the willingness to emigrate and make it more difficult to attract foreign experts to Finland. This means that tax competition also affects the taxation of earned income. Moreover, raising the highest marginal tax rates would not significantly increase tax revenue. Table 3.1 shows how changes in tax bases of different tax types (such as a one-percentage point change in value added tax) would affect tax revenue.

Table 3.1 Static effects of changes in tax bases on tax revenue, EUR million (forecast)

	Tax revenue 2019 EUR million	Change in tax base	Change in tax revenue EUR million 2019 (estimate) at annual level	
STATE EARNED INCOME TAX SCALE				
First threshold (17,600 - 26,400)		1 percentage point	192	
Second threshold (26,400 - 43,500)		1 percentage point	193	
Third threshold (43,500 - 76,100)		1 percentage point	96	
Fourth threshold (76,100 -)		1 percentage point	50	
All tax recipients, total	5,911	1 percentage point	531	
MUNICIPAL TAXATION	19,910	0.5 percentage points	522	
Average tax rate (19.88% in 2019)		1 percentage point	1,071	
CAPITAL INCOME TAX	3,244			
1 percentage point		1 percentage point	101	
CORPORATE TAX				
tax rate 20%	6,414	1 percentage point	321	
CONSUMPTION TAXATION				
VAT				
- reduced tax rate 10%	789	1 percentage point	79	
- reduced tax rate 14%	2,592	1 percentage point	185	
- standard tax rate 24%	15,415	1 percentage point	642	
FUEL TAXES				
petrol	1,257	1 cent/litre	17	
diesel oil	1,378	1 cent/litre	31	
Electricity tax ¹⁾	951	0.1 cent/kWh	42	

1) Other than industries, server rooms and greenhouses $% \left\{ \left(1\right) \right\} =\left\{ \left(1\right) \right\}$

Source: Ministry of Finance, August 2018

There is less tax competition in the taxation of real estate and consumption

Real estate taxation is perhaps the least problematic area from the perspective of tax competition. As real estate and especially the plots do not move between countries, there is no direct tax competition on real estate taxes. In fact, real estate taxation should be made fairer so that the definition of taxable values would better reflect real market prices.

Value added tax is the most important of the indirect taxes in terms of tax revenue. Value added taxation is determined on the basis of consumption location, which means that the Finnish system of value added taxation treats both Finnish and foreign sellers in the same way and does not burden export companies. Thus, the view is that there is no direct link

between the level of value added taxation and e.g. decisions on production locations of the VAT liable companies. In fact, international tax competition on value added taxes and excise duties on end consumption mainly affects cross-border shopping trips. For Finland, the most important such phenomenon is the shopping tourism to Estonia.

In addition to affecting end consumption, excise duties are also directed at the intermediate inputs used by companies, such as energy. Taxation of production-related intermediate inputs has both fiscal and environmental objectives but excise taxation can also impact the international competitiveness of companies. For example, increases in energy taxation may have a negative impact on international manufacturing competitiveness, especially in the short term. At the same time, competitiveness depends on a broad range of different factors and the tax treatment of companies should be examined from an overall perspective.

More tax revenue through fewer tax expenditures

Even though the prime task of taxation is to provide funding for public expenditure, taxation is also used as an instrument to reduce income differences between citizens. In a progressive tax system, the tax rate increases as income increases, making the distribution of income in the markets more equitable. Taxation is also increasingly used for other tasks in society. For example, it is used to steer citizens' behaviour and to correct market imperfections.

There should be extremely good grounds for taxation deviating from the basic taxation structure because an ideal tax system collects funds for public expenditure with optimal efficiency and neutrality. In that case, the distortions in choices made by consumers and companies on the basis of taxation can be minimised.

If it is decided to raise taxes in order to strengthen public finances, consideration should be given to increasing tax revenue by reducing tax expenditure⁸ detrimental to economic growth or the environment, instead of introducing general tax increases. Some examples of tax expenditures are listed in Table 3.2, of which most are granted to companies. Reducing the number of tax expenditures would also support the efforts to achieve broad tax bases, which would be positive from the perspective of economic growth and efficiency of taxation. Broadening the tax base would make it possible to keep tax rates low and at the same time collect taxes more efficiently because uniform and low tax rates would cause less distortion in the behaviour of economic actors. Different types of tax deductions also make the tax system more complicated, provide more opportunities for tax planning and tax avoidance, and increase the administrative costs of the tax system.

⁸ Tax expenditures are exemptions from normal taxation that are included in the tax system. Their purpose is to support specific industries or groups of taxpayers through tax exemptions, tax deductions or reduced tax rates.

Blanket elimination of tax expenditures would not, however, result in an optimal tax system because more efficient taxation and fairness have been the specific aims of many of the deductions. Tax deductions help to make the tax system more flexible, which could not be achieved by introducing differentiated tax rates.

When new tax expenditures are introduced, it should be considered whether the tax reliefs granted to a large group of taxpayers are the best way to support specific groups or whether the support could be in the form of direct aid or whether the desired steering effects could be achieved through other types of regulation. Tax expenditures granted to companies are business subsidies in the same way as direct aid, and the principles of good business subsidies should also be applied to them. This also means that the expenditures should be granted for limited periods and it should be possible to assess their effects. Because of the large number of beneficiaries, estimating the effects of tax expenditures is often difficult and they may also be inefficiently targeted. New expenditures should also be planned so that their effectiveness can be monitored and assessed.

Table 3.2.Examples of tax expenditures in 2019¹

	EUR million
Reduced VAT rates	2,971
Reduced electricity tax rate for industries, greenhouses and server rooms	603
Reduced tax rate for the light fuel oil for non-road mobile machinery	422
Higher rate of return of dividends of unlisted companies	415
Reduced tax rate for diesel fuel (excluding passenger cars and vans)	407
Tax refund for energy-intensive enterprises	220
Reduced tax rate for peat	189
Entrepreneur deduction	130
Reduced energy-content tax on combined heat and power (CHP)	96
Energy tax refund for professional agriculture	55
Exemption from car tax for campers	50
Liabilities provision granted for capital income in forestry	22
Tax exemption of electricity used in rail traffic	13
Training deduction	12
Tax relief for small breweries	12
Tax exemption of production subsidy for film producers	5

¹ It should be noted that because of dynamic effects, the elimination of a tax expenditure would not increase central government tax revenue by the same amount.

Source: Ministry of Finance

⁹ https://tem.fi/en/general-criteria-for-business-subsidies-on-national-level

3.3 Structural reforms can strengthen the prerequisites for economic growth and public finances

Because of the scale of the sustainability challenge facing Finland's public finances, it would not be reasonable to use immediate consolidation as the main instrument to solve the problem. Instead, structural reforms are probably the better way. The advantage of structural reforms is that they often boost economic growth and strengthen public finances at the same time. The problem with structural reforms is, however, that it is often difficult to estimate their effects. For this reason, the potential of each reform to strengthen public finances remains uncertain.

According to the sensitivity analyses of the sustainability gap calculations, certain types of structural reforms produce more results than others. These sensitivity analyses are listed in Table 3.3. Judging from the sensitivity analyses, it can be concluded that raising the employment rate and boosting the productivity of public services are the most effective tools to narrow the sustainability gap.

Table 3.3 Impact of various factors on the sustainability gap

	Baseline scenario (December 2018)	Change, pp.	Impact on sustainability gap¹, pp.
Growth in general productivity (and real earnings)	on average 1.4%	+0.5	-0.5
Employment rate	will end up at 72.5% by 2070	+1.0	-0.4
Growth of productivity of public health and social services	0%	+0.5	-1.8
General government structural primary balance ² / GDP in 2023	0.3%	+1.0	-1.0
Real rate of return on investments and real interest rate on general government debt		-0.5	+0.7
- of which interest on general government debt and return on central and local government investments in bonds	2%		
- of which return on central and local government investments in shares	4%		
- of which return on employment pension assets	3.5%		

[&]quot;1 The calculations are based on December 2018 MoF sustainability gap calculations (impact of assumption changes are stable over different calculation rounds).

² deficit excl. interest expenditure

The figures suggest that changes in the employment rate have a substantial impact on the size of the sustainability gap because an increase of one percentage point in the employment rate would reduce the sustainability gap by 0.4 percentage points. A higher employment rate would enhance the sustainability of public finances in two ways: Firstly, it would increase GDP and thus also the general government tax revenue (in the sustainability gap calculations this would be seen as lower GDP ratios for all age-related expenditure). Secondly, lower unemployment would reduce public spending arising from the management of unemployment. Ways of raising the employment rate are examined in more detail in Section 4.

Productivity growth in public health and social services also has a major impact on the size of the sustainability gap estimate. If the productivity growth in public health and social services could be permanently improved by, for example, 0.5% each year, this would significantly slow down the long-term increase in public expenditure and would thus also narrow the sustainability gap by about 1.8 percentage points. For this reason, in the implementation of the regional government, health and social services reform, it should be ensured that the reform genuinely boosts the efficiency of the service provision and thus also slows down cost increases in the targeted manner (For more information, see Section 8.2).

At the same time, permanent acceleration of overall productivity growth by 0.5 percentage points (which would be a substantial increase) would only narrow the sustainability gap by 0.5 percentage points. ¹¹ This is because in the long term, growth in overall productivity would boost real earnings in all sectors by equal amount, which would also result in higher labour costs in the public sector. However, it would be very difficult to speed up general productivity growth by even 0.5 percentage points on a permanent basis. Boosting productivity growth is, however, important if the aim is to improve the standard of living in Finland and to enhance the competitiveness of Finnish companies in the international markets (For more information, see Section 5).

¹⁰ The assumption is that about 30% of all new employed persons would come from outside the labour force and about 70% from among the unemployed.

¹¹ In this examination, the assumption is that higher productivity growth would also be reflected in interest rates and dividend income.

4 Achieving higher employment rates would require a broad range of different measures

- Finland's employment situation has improved substantially in the
 most recent year. However, additional measures must be taken to
 raise the employment rate because a high employment rate is key
 to ensuring social stability and the funding base for public finances.
 Boosting employment becomes even more important as Finland's
 working-age population shrinks. Finland's employment rate is also
 lower than in other Nordic countries.
- Employment can be increased by reducing unemployment, by encouraging people outside the labour force to join the labour market or by promoting work-based immigration. A higher fertility rate would also increase the number of people in employment over the long term but boosting the fertility rate is difficult.
- Particularly in comparison to Sweden, there is room for improvement in the employment rate, especially in the age group 55-64.
 It would be possible to increase the employment rate among the aged by providing support for staying in working life and limiting the pathways to early exit from labour force.
- The employment rate among women aged between 25 and 39 is also lower in Finland than in other Nordic countries. In this group, employment could be boosted by introducing a family leave reform though at the same time, such factors as an increase in day-care costs would weaken public finances.
- Higher employment rates could be achieved by reforming the social security, tax and service system, which affects incentives to work, among other things. This should be done in fiscally sustainable manner.

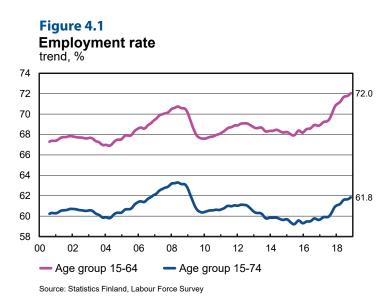
- Active labour market policies can help unemployed people to find jobs. It should be critically assessed how the current active labour market policy resources could be allocated more effectively. Labour market policy measures should not be taken in areas where employment would occur even without them.
- Changes in the sectoral and occupational structures in the labour market are continuing, which will also be reflected in future skills needs. In order to ensure the matching of labour supply and demand, the sectoral and occupational mobility of people should be facilitated, but at the same time, the cost-effectiveness of the measures should also be a consideration. For example, opportunities for continuous learning could be promoted during working careers. In particular, this need applies to people who do not meet the skills requirements of the labour market.
- Measures should be taken to enhance the regional mobility of the labour force so that the regional mismatch between labour supply and demand can be reduced. Except for the functioning of the housing market, it is difficult to influence factors behind the decisions to move through policy measures.
- Poorly educated people are in a weaker position in the labour market. For this reason, the number of people with only the basic education should be reduced.
- Among the young people, measures could be taken to facilitate access to education and shorten study times.

4.1 Rapid economic growth is reflected in the employment situation but structural unemployment remains high

Recently, there has been a substantial improvement in the employment situation but demographic changes mean that the employment rate must be further increased

Mainly as a result of rapid economic growth, there has been a substantial improvement in the employment situation. The seasonally adjusted employment rate has already exceeded the 2008 level, and in November 2018, it stood at 72%. It is, however, difficult to say to what extent the improvement is the result of the economic upturn and how much of it can be attributed to the reforms introduced during the current government term. It remains uncertain how the employment situation will develop when the cyclical situation is normalised.

Inclusion in working life prevents marginalisation. A high employment rate is therefore a key objective when efforts are made to secure the resilience of society and a funding base for public finances. The importance of boosting employment is highlighted when the working-age population shrinks. According to the 2018 population projection of Statistics Finland, the Finnish working-age population (age group 15-74) will decrease by 1.1% and the age group 15-64 by 0.8% between the end of 2018 and the year 2025. To secure the basis for public finances, the employment rate must be raised further. Raising the employment rate is probably not enough as measures must also be taken to increase the working-age population. Work-based immigration would give a rapid boost to the working-age population, while a higher fertility rate would help in the long term.



Employment among the ageing population has improved, while the same cannot be said of the situation among men in the age group 25-34

The rise in the employment rate has been particularly rapid in the age group 55-64 (See Figure 4.2). In this age group, the trend has been upwards for many years. Structural reforms, such as the raising of the age threshold for extended unemployment benefits, the abolition of the individual early-retirement pension and improved health and higher educational levels among the aged are some of the reasons contributing to the positive development.

At the same time, however, the employment situation in the age group 25-44, the people in the prime working age, has not improved after the financial crisis. In particular, the problem affects men aged between 25 and 34, among whom the employment rate was 7.6 percentage points lower in 2017 than in 2008. For comparison, the employment rate in the age group 15-64 declined by one percentage point in the same period. Lower labour

participation rate and higher unemployment are the main reasons behind the weak employment situation among the men aged between 25 and 34. In 2017, unemployment among men aged between 25 and 34 was three percentage points higher than in 2008, while at the same time, the proportion of men in this age group outside the labour force increased by 4.8 percentage points in the same period.

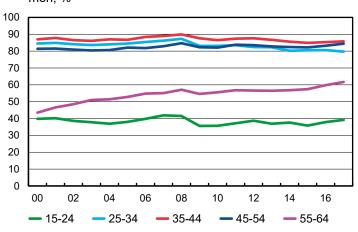
The weak employment situation among young men can be examined in more detail using the employment statistics of Statistics Finland as these statistics also give the reasons for staying outside the labour force.¹² According to the employment statistics, the proportion of unemployed among the men aged between 25 and 34 increased by 2.2 percentage points and the proportion of men outside the labour force by 3.7 percentage points between the end of 2008 and the end of 2017.¹³ Among the women in the same age group, the proportion of the unemployed increased by roughly the same amount (2.4 percentage points) but the number of individuals outside the labour force increased substantially less (by only 1.3 percentage points). The substantial increase in the proportion of men outside the labour force can more or less equally be attributed to a growth in the proportion of students and other individuals outside the labour force.¹⁴ Among women in the same age group, the proportion of students also increased during the period in question, whereas the proportion of other individuals outside the labour force declined. The increase in the proportion of students can at least partially be explained by the fact that a weak economic situation has prompted students to postpone the completion of their studies. However, a bigger question is why an increasing proportion of young men has chosen to remain outside the labour market for reasons other than studying, military or non-military service or retirement.

¹² The employment statistics give a person's main activity at the end of the year and the data used in it is derived from the unemployment data based on the employment service statistics of the Ministry of Economic Affairs and Employment. The employment statistics are registry-based and the definition of unemployment used in them differs from the definition used in the sample-based labour force survey.

¹³ The figures for 2017 are preliminary.

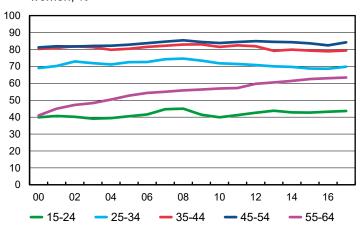
¹⁴ Other than pensioners, students, pupils, conscripts and individuals doing non-military service.

Figure 4.2 (a)
Employment rate by age group men, %



Source: Statistics Finland, Labour Force Survey

Figure 4.2 (b)
Employment rate by age group women, %



Source: Statistics Finland, Labour Force Survey

Finland's employment rate is lower than in other Nordic countries

Despite the good employment situation, Finland's employment rate is lower than in other Nordic countries. In 2017, the employment rate in Sweden was 6.9 percentage points, in Denmark 4.2 percentage points and in Norway 4.0 percentage points higher. Especially in the employment rate among the aged, Finland lags behind Sweden, Denmark and Norway. This despite the fact that in Finland, the employment rate in the age group 55-64 has risen steadily for many years. This means that in Finland, ageing people exit the labour market earlier than in the reference countries.

Figure 4.3 (a) Employment rate 2017

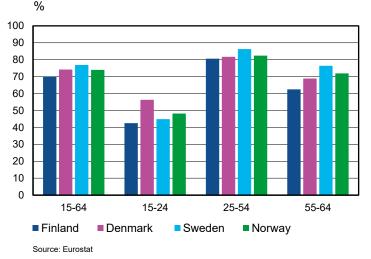


Figure 4.3 (b)
Labour force participation rate 2017
%

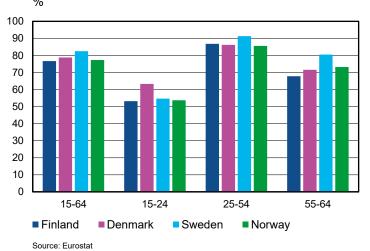
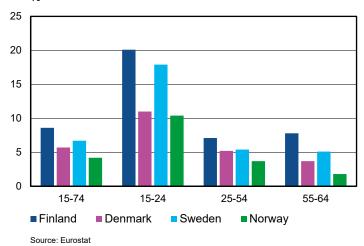
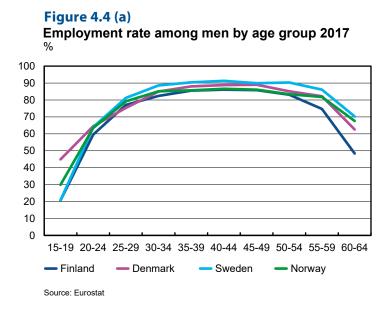


Figure 4.3 (c) Unemployment rate 2017



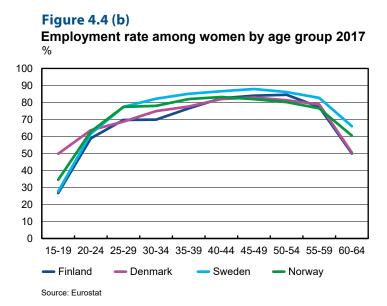
Higher unemployment and a lower labour market participation rate both contribute to the lower employment rate in Finland. In Finland, unemployment is higher than in the reference countries in all age groups, particularly among the people aged between 15 and 24. However, among the young, the proportion of NEET individuals serves as a better indicator than the unemployment rate. NEET refers to those young people who are not in education, employment or training. The proportion of NEET individuals in the age group 15-24 is also higher in Finland than in the reference countries. In 2017, NEET individuals accounted for 9.4% of all people in the age group 15-24 in Finland, compared with 7.0% in Denmark, 6.2% in Sweden and 4.6% in Norway (Eurostat, 2018).¹⁵

The difference in the employment rates is partially explained by the number of hours worked, especially in Denmark and Norway. When the employment rate among full-time employees, as calculated by the OECD, is examined, the difference between Finland and these two Nordic countries disappears. The gap between Finland and Sweden remains substantial, however. In 2016, according to OECD calculations, the employment rate among full-time workers in Finland was 63.5%, compared with 63.8% in Norway, 61.5% in Denmark and 69.4% in Sweden. One reason for this is the low proportion of part-time work in Finland. According to Eurostat statistics, ¹⁶ in 2016, part-time work accounted for 15% of all hours worked in Finland, compared to 26% in Norway, 24% in Sweden and 26% in Denmark.



¹⁵ The Eurostat figure is based on the material in which young people doing military or non-military service are not included in the population.

¹⁶ Proportion of part-time workers of all employed people aged between 15 and 64.



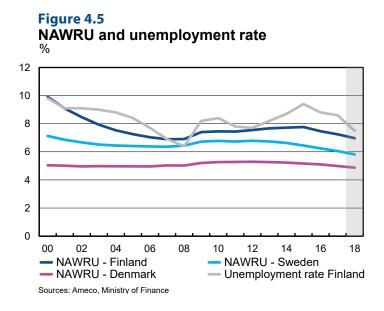
When examined by gender, the employment rate in Finland is lower than in other Nordic countries, especially among the men aged over 55 and women aged between 25 and 39 (See Figure 4.4). The gaps in the employment rates among women aged between 25 and 39 are at least partly linked to parenthood and the family leave system. In the comparisons with Sweden, the different way of compiling statistics of people on family leave may also play a role. However, work participation among the mothers of small children is also substantially lower in Finland than in Sweden when the work attendance rate (the proportion of people at work during the survey week) is considered, which allows for differences in the statistical methods. When the youngest child is aged between one and two, the work attendance rate of Finnish mothers is about 16 percentage points lower than in Sweden, whereas in situations where the youngest child is between two and three, the gap narrows to about 10 percentage points (Pärnänen and Kambur, 2017).

High structural unemployment limits the chances of raising the employment rate

The Finnish unemployment rate has been declining since 2015 and the estimate is that in 2018, it fell close to the structural unemployment level. Even though there is a great deal of uncertainty concerning the estimates of structural unemployment, this type of unemployment is probably higher in Finland than in Denmark and Sweden. Thus, lowering the Finnish unemployment rate close to the reference countries requires measures aimed at reducing structural unemployment.

¹⁷ In Sweden, some of the recipients of parental allowance are registered as employed, whereas in Finland, people receiving parental allowance and child home care allowance are not considered to be in employment.

¹⁸ NAWRU-based estimate of the European Commission. According to the economic theory, when the unemployment rate is approaching its structural level or falls below it, there should be more pressures to raise prices and wages.



The match between labour supply and demand should be improved

Because of a favourable economic situation, the demand for labour has grown, which is reflected in the higher number of job vacancies in relation to the number of unemployed job seekers. However, there are signs that the efficiency of match between labour supply and demand has weakened. The labour market matching efficiency describes the functioning of the labour market (how effectively job vacancies are filled and how well do job seekers find work). The regional and occupational match between labour supply and demand, smoothness of the job application process and institutional factors (wage formation, labour legislation and incentives for work) are some of the factors influencing labour market matching.

One way of examining labour market matching is the Beveridge curve, which describes the relationship between job vacanciesand unemployed job seekers. Between 2012 and 2015, the Beveridge curve moved outwards, which suggests a decline in matching efficiency. Possible reasons for the decline in matching efficiency include the creation of new jobs in sectors that are not attractive to job seekers or in regions where there are no job seekers qualified for the jobs, mismatch between the skills of the unemployed and the skills requirements in the new jobs, and gaps between pay expectations and the pay offered (Pehkonen et al., 2018).

Job vacancies
65 000
60 000
55 000
45 000
40 000
35 000
30 000
2012M1
2014M1
2016M1
2016M1
2010M1

Figure 4.6
Beveridge curve

200 000

Unemployed jobseekers

150 000

Source: Employment service statistics of the Ministry of Economic Affairs and Employment

300 000

350 000

250 000

400 000

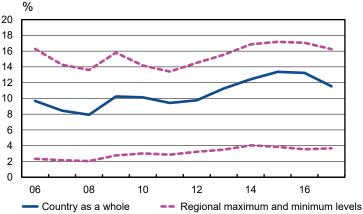
The ongoing change in the sectoral and occupational structure in the labour market may have heightened the labour market matching problems and thus weakened the match between labour supply and demand. The proportion of women-dominated health and social services sectors of all employed people has risen in recent years, whereas the proportion of male-dominated industries has declined (Pehkonen et al., 2018). There have also been changes in the occupational structure. The proportion of professions involving routine middle-level manufacturing and office tasks has declined, while at the same time, the proportion of service professions with low pay and low skills requirements and specialist professions with high pay and high skills requirements has risen Pehkonen et al., 2018; Pekkala-Kerr et al., 2016). There are labour force availability problems in many health care, retail and service sector professions (Ministry of Finance, 2018a).

The second dimension in the match between labour supply and demand labour is the regional match between labour supply and demand. There are substantial differences in unemployment rates between Finnish regions even though the gaps have narrowed slightly over the past two years. In 2017, the regional unemployment rates varied between 3.7% (Åland) and 16.3% (North Karelia). There is also regional variation in the labour shortage perceived by employers and the tightness of the labour market (as measured with the number of job vacancies in relation to the number of unemployed job seekers) (Ministry of Finance, 2018a). This suggests that there is some mismatch between labour supply and demand at regional level.

¹⁹ Annual average unemployment rate based on the statistics of the Ministry of Economic Affairs and Employment.

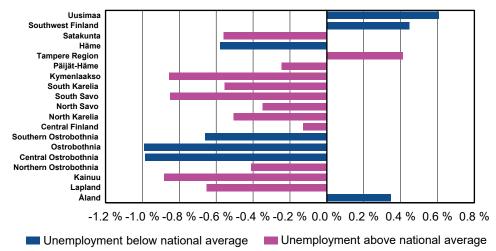
However, working-age people are moving from areas of high unemployment to growth centres. Figure 4.8 shows the net migration between regions in relation to the population in 2017. In 2017, only Uusimaa, Southwest Finland, Tampere Region and Åland had net migration gains in the age group 20-64. Except for the Tampere Region, all of them are areas with lower-than-average unemployment rates. All other regions in Finland suffered net migration losses. Among the regions with the highest net migration losses are areas of high unemployment (Kymenlaakso and Kainuu) and regions with lower-than-average unemployment (Ostrobothnia and Central Ostrobothnia).

Figure 4.7
Regional variation in employment rates
(Ministry of Economic Affairs and Employment)



Source: Employment service statistics of the Ministry of Economic Affairs and Employment

Figure 4.8
Net migration between regions 2017, age group 20-64
% of population¹



¹ Relative to population at the end of 2016

Sources: Statistics Finland, Employment service statistics of the Ministry of Economic Affairs and Employment, Ministry of Finance

Poorly educated people are in a substantially weaker labour market position than other population groups

Education plays a key role in employment as poorly educated people are in a substantially weaker position in the labour market. In 2017, the employment rate among individuals in the age group 25-64 with only basic education was about 20 percentage points lower than among people with upper secondary education. The gap between the employment rates of people with upper secondary education and tertiary education was substantially smaller, about ten percentage points.

age group 25-64 90 80 70 60 50 40 30 20 10 0 14 16 Upper secondary education
 Tertiary education Basic education

Figure 4.9 Employment rate by educational level in the

Incentives for work and the match between labour supply 4.2 and demand should be improved

Social security and tax systems create situations in which working is not attractive

Source: Eurostat

The employment rate can be boosted by providing better incentives for work. Economic incentives for work refer to how an individual's disposable income changes when 1) they move from unemployment to employment, 2) from outside the labour force to employment, or 3) they increase the number of hours worked. If the income only increases slightly or even decreases as a result of employment or additional hours worked, the incentives for work are weak. The social security system, taxation, income-related service charges (such as the early childhood education fees) and pay levels are the factors impacting the economic incentives for work.

The Finnish social security system contains a broad range of different support forms. The criteria for determining and calculating them vary and different types of support do not react to changes in income levels in the same manner. Together with the taxation of earned income, income-related service charges (such as the early childhood education fees), the Finnish social security system constitutes a complex package that may weaken incentives for work, especially among certain groups of people.

Kotamäki and Ollonqvist (2018)²⁰ have estimated incentives for moving from unemployment (or non-employment) to full-time work. They assessed the incentives with the help of the participation tax rate: the higher the tax rate, the weaker the incentives for work. According to the analysis, the incentives for accepting full-time work are particularly weak among families with children and recipients of earnings-related unemployment allowance (See Table 4.1). The proportion of people in the incentive trap (people with a participation tax rate of more than 80%) is the highest in two groups: single parents receiving unemployment benefits or child home care allowance, and unemployed couples with children.

Kyyrä et al. (2018) have examined the incentives of unemployed people to accept part-time or occasional jobs. Their conclusion is that in general, the incentives for work during unemployment are high. The adjusted unemployment benefit and the protected portion of the unemployment benefit, which was introduced in 2014, are the main reasons for this. However, the incentives for part-time employment vary, depending on the type of the unemployment benefit. Among the recipients of the earnings-related unemployment benefit the incentives to accept occasional or part-time jobs are good. The incentives may, however, be weak among recipients of the basic daily allowance and labour market subsidy whose households also receive housing allowance and social assistance. If the acceptance of part-time or occasional work requires the arrangement of chargeable care for children under school age, the incentives for work are weakened. (Kyyrä et al., 2018)

 $^{20\,}$ The study is based on 2014 statistics and the legislation in effect in 2017.

Table 4.1: Participation tax rates of unemployment benefit recipients by family type, number of children, age, educational level, income level and type of social security benefit

FAMILY TYPE					
	Childless singles	Childless couples	Single parents	Couples with children	Other
Mean value	64.1%	61.8%	72.4%	69.8%	62.8%
Share	31%	28%	7%	29%	5%
		NUMBER 0	F CHILDREN		
	0	1	2	3	≥4
Mean value	62.9%	67.3%	71.4%	73.2%	75.4%
Share	63%	17%	13%	5%	2%
		A	GE		
	<30	30-39	40-49	50-59	≥60
Mean value	66.5%	68.1%	65.3%	62.6%	65.1%
Share	14%	26%	23%	25%	12%
		EDUC	ATION		
	Basic education	Upper secondary education	Lower-level tertiary	Higher-level tertiary	
Mean value	65.8%	65.8%	65.3%	63.9%	
Share	16%	49%	24%	12%	
INCOME LEVEL (QUINTILE)					
	1	2	3	4	5
Mean value	64.2%	65.2%	66.0%	66.9%	68.1%
Share	37%	22%	18%	14%	9%
		TYPE OF SOCIAL S	SECURITY BENEFIT		
	Labour market subsidy	Basic unemplo- yment allowance	Earnings-related unemployment allowance		
Mean value	60.6%	59.8%	70.3%		
Share	41%	8%	50%		

Source: Kotamäki and Ollonqvist (2018)

In addition to weak economic incentives, the complexity of the system may also generate bureaucracy and information traps. Such traps may arise because there is uncertainty of how quickly the payment of the benefits reacts to changes in the individual's labour market situation. Acceptance of work may be considered unattractive if the fear is that occasional work causes interruptions to benefit payments. Accepting work may also be considered unattractive if, as a result of the complexity of the multi-benefit system, the recipient fails to understand how accepting work actually affects their disposable income.

Higher employment rates could be achieved by reforming the social security, taxation and service system

Finland's social security, taxation and service system can be reformed in many ways. The critical factor in the reform is how the following three objectives are emphasised: incentives for work, sustainable public finances and equitability of income distribution. Improvements cannot be achieved in all three areas simultaneously. Incentives for work could be enhanced and the employment rate raised by reforming the system in a manner that is sustainable from the perspective of public finances. In the reform, consideration should also be given to the effects of the new forms of work brought by changes in working life, such as digitalisation and the platform economy, on social security and incentives for work.

Attitudes towards the key dimensions of social security, such as universality, conditionality, range of recipients, and means testing would have an impact on the implementation of the reform. Universality refers to how large a proportion of the population is covered by a specific type of social security (de Wispealere, 2016). Social security may be universal and cover everybody or it may be based on a specific cause, such as unemployment, disability, or parenthood, in which case it provides compensation for income losses arising from a specific life situation. Conditionality refers to the conditions and obligations connected to the benefit (such as the obligation to seek work). The range of recipients defines whether the benefit is intended for an individual, a family or a household. Means testing means that the benefit is only granted to those in need of economic support, in which case the need for the support is assessed on the basis of the individual's or household's income and assets (Parpo and Moisio, 2006).

Finland's social security system comprises many different types of benefits and the current model cannot explicitly be characterised on the basis of the above dimensions. At the same time, however, there are differences concerning reciprocity, range of recipients, universality and means testing, depending on the type of the benefit. As Finland's social security system comprises many different types of benefit, one of the key issues in the social security reform is to decide which of the benefits are included in the reform. In other words, how large a proportion of the existing benefits would be replaced with new forms of support and which of the current forms would be retained.

A large number of different alternatives combining existing benefits have been suggested in the discussion on the social security reform. Basic income and the universal credit model, which has been suggested by OECD, have been mentioned. In the basic income model, everybody would automatically receive the same benefit without any conditions or obligations. The types of benefit that the basic income would replace depends on whether a full or partial basic income is used. Partial basic income would replace basic security benefits, whereas the full basic income model would replace most of the existing

social transfers (Kangas and Niemelä, 2017). In the universal credit model suggested by the OECD, existing unemployment benefits, housing allowance, social assistance and a number of child-related benefits and fees would be combined into a single benefit, which would be reduced as income increases. The reduction would be based on a single criterion. Unlike basic income, universal credit would be conditional and household-specific.

Housing benefits have an effect on incentives for work

Housing benefits have an effect on incentives for work. On the one hand, they allow a higher level of housing without earned income. On the other hand, as higher income reduces housing benefits, accepting work becomes less attractive. (Incentive trap working group, 2017b) For example, in 2018, a Helsinki resident living on their own was entitled to a maximum of EUR 406 in general housing allowance each month. As the housing allowance is reduced by about 34 cents for each additional euro earned (Incentive trap working group, 2017b), it weakens incentives for employment. The basic housing allowance and the way in which the allowance reacts to changes in income levels have an effect on employment incentives. The size of the protected portion (the income level beyond with the allowance starts to decline) also has an impact. Increasing the protected portion and reducing the income link are measures that would increase public expenditure. At the same time, restricting the eligibility for housing allowance would reduce the income of those individuals that would not find employment, despite better incentives. The restrictions might also increase the number of social assistance recipients. (Incentive trap working group, 2017a). In addition to the housing allowance, recognition of housing expenses in social assistance weakens work incentives of social assistance recipients. At the moment, reasonable housing expenses can be recognized in social assistance, which is considered a last-resort benefit. The municipality in which the apartment is located and the family size are two of the factors considered when the reasonable level of the housing costs is determined.

The family leave system and early childhood education fees impact the employment of mothers of small children

The employment rate among women in the family-starting age is lower in Finland than in other Nordic countries. It has been suggested that this is partially because of the Finnish family leave system and especially the child home care allowance, which allows parents to care for their children at home until the youngest child is three years old. For example, it has been noted in a Finnish study that if the municipal supplement of child home care allowance is increased by EUR 100 a month, the labour supply of mothers eligible for the allowance falls by about three per cent (Kosonen, 2014).

Incentives for work could be enhanced by reforming the family leave system. From the perspective of the incentives for work, the key factors include the level of parental daily allowances and the duration of parental leaves and the way in which they are divided between the parents (Incentive trap working group, 2017a). The employment rates among mothers of small children could be improved by shortening the duration of child home care allowance or providing incentives for sharing it between parents (for example by quotas). Such measures would probably also have a positive effect on women's working careers and pension accruals as mothers would be absent from work for shorter periods. On the other hand, these measures would also mean higher public expenditure because the demand for early childhood education services would increase and child home care allowance could be partially replaced with unemployment benefits (Incentive trap working group, 2017a).

In addition to the family leave system, work incentives of parents also depend on early childhood education fees. Under the provisions on reduced early childhood education fees, which took effect at the start of 2018, the fees of low-income and middle-income households were lowered and the sibling reduction was increased. The reduction increases work incentives for low-income and middle-income families and families with a large number of children but it will also increase the need for tax funding in the financing of services.

High income taxation weakens incentives for work but it is difficult to improve incentives in a targeted manner through taxation

Taxation, together with the social security system, income-linked service fees and wage levels, has an effect on work incentives. The key issue from the perspective of work incentives is how different income categories, such as earned income and social benefits, are treated in taxation. High income taxation in Finland has been considered a problem from the perspective of work incentives. This is because high income taxation reduces the net earned income, which basically weakens incentives for work. In fact, income taxation has been lowered during the current parliamentary term to improve incentives for work.

However, the key issue from the perspective of employment is how much the lowering of income taxes actually boosts the availability of individuals' labour supply. In other words: how much would tax cuts increase the hours worked by people already in employment and how much would they increase the labour market participation of people outside the labour force? Studies suggest that the impact of changes in income taxation on the number of hours worked is not substantial at the level of the population as a whole, at least not in the short or medium term (Matikka et al.,2015).

Certain groups, such as mothers of small children, may, however, react more eagerly to changes in economic incentives (Matikka et al., 2015) and thus also to changes in taxation. Research findings also suggest that decisions on labour market participation react more strongly to changes in economic incentives than decisions on the number of hours worked (Ministry of Finance, 2010). However, the problem with improving incentives for work through taxation is that it is difficult to target the measures to the groups with the most serious incentive problems (Incentive trap working group, 2017a). If, for example, it is decided to improve single parents' incentives for work, tax cuts could not be targeted to this group alone as they would apply to everybody. For this reason, taxation is not necessarily the most cost-effective way of eliminating incentive traps.

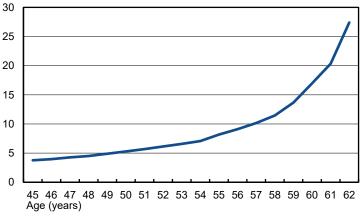
It should be noted, however, that income taxation does not necessarily only impact labour supply decisions. It can also impact working efficiency, education decisions, tax planning and migration decisions (Matikka et al., 2015). These issues are examined in more detail in Section 6 on taxation.

Ageing people should be encouraged to extend their working careers and measures should be taken to reduce early exit from working life

Employment rates among the aged have improved in recent years. The pension reform, which took effect at the start of 2017, is also expected to increase participation and employment rates among the aged. For example, under the reform, the lowest old-age retirement age will be gradually raised.

However, many people also retire before the official old-age retirement age. There is a substantial increase in the number of full-time pensioners after the age of 50 (See Figure 4.10), which also reflects the fact that as people age, they are more likely to retire on disability pension. In addition to retirement transitions, employment among the aged also depends on the right to extended unemployment benefits. At the moment, an individual is entitled to extended unemployment benefits until the age of 65 if they are 61 years old when the maximum period of unemployment allowance ends. It has been noted that the right to extended unemployment benefits increases the risk of unemployment and extended the duration of unemployment among those eligible for the benefit (Kyyrä and Pesola, 2017). Therefore, to raise employment rates among the aged, ageing people should be encouraged to extend their working careers and early exit from working life should be discouraged.

Figure 4.10
Full-time pensioners by age 2017*
% of the population



* preliminary information Source: Employment Statistics

As part of active labour market policy, it should be assessed how the existing resources could be allocated more effectively

Over the past few years, a broad range of different measures have been taken to promote the employment of unemployed job seekers, in which the focus has been on the active role of the job seeker and the reciprocal nature of the unemployment benefits. In 2017, the maximum duration of the earnings-related unemployment benefit was reduced by 100 days and interviews with the unemployed, carried out every three months, were introduced. Under the activation model, introduced in 2018, the unemployment benefit is reduced by 4.65% if the unemployed job seeker fails to fulfil the activity requirement during the review period.

In addition to the unemployment benefits and the obligations linked to them, active labour market policy and the services promoting employment also play an important role in the efforts to boost employment among the unemployed.²¹ In Finland, public expenditure allocated to active labour market policy measures accounted for one per cent of the GDP in 2016. This ratio is lower than in Sweden and Denmark but higher than in Norway (See Figure 4.11). In the same period, the unemployment rate in Finland was, however, higher than in the three Nordic countries referred to above.

²¹ Comprises public employment services and administration, employment incentives, employment by central government, training, education, supported employment and rehabilitation.

There are differences in the structures of active labour market policy measures between the Nordic countries. In Finland, training and education accounted for almost half of all funds allocated to active labour market policy in 2016. In Sweden, more than 40% of the funds was spent on employment incentives (such as wage subsidies), whereas in Finland, they accounted for about 10% of the total. At the same time, Finland allocated less public funds to public employment services²² than Norway or Sweden, both as a percentage of all funds spent on active labour market policy and in relation to GDP. In 2018, Finland spent 0.08% of its GDP on public employment services, compared to 0.09% in Norway, 0.16% in Sweden and 0.07% in Denmark. During the current parliamentary term, additional resources have, however, been allocated for employment and economic services and measures have been taken to develop the services. A total of EUR 22 million in additional appropriations was allocated to efficiency improvements in employment and economic services and to interviews with unemployed job seekers. The measures included the recruitment of additional staff to TE Offices (Ministry of Finance, 2018b).

Aho et al. (2018) have assessed the employment effects of different types of labour market policy using a non-experimental approach, by means of a matching method. The results suggest that there are differences in the employment effects generated by different types of active labour market policy. Aho et al. (2018) noted that employment among individuals in private-sector wage-subsidised jobs and vocational training participants developed more favourably than in the control groups. At the same time, they noted that rehabilitative work activities or public-sector wage subsidies did not have any significant impact on employment.

The qualities of unemployed job seekers also play a role in the targeting of labour market policy measures because there are measures that may not suit all individuals or that are not needed by all job seekers. For example, vocational labour market training often requires basic training and motivation, whereas there are many chronically unemployed persons for whom rehabilitative work activities are the only possible service (Aho et al., 2018). In fact, in the allocation of labour market policy resources, consideration should be given to the employment effects of the measures, and the needs of different categories of unemployed people and whether they are able to benefit from the measures. Labour market policy measures should not be taken in areas where employment would occur even without them.

²² This is included in the active labour market policy category 'Public employment services and administration' (See the figure 'Active labour market policy, public expenditure').

It should also be remembered that the availability of resources is not always the only factor restricting access to and use of the measures. For example, the use of the private-sector wage subsidy, which has been found to be an effective tool, is limited by the number of employer companies willing to employ people on wage subsidy. (Aho et al., 2018) Since the wage subsidy reform of 2017, the use of wage subsidies in companies has not increased in the desired manner and some companies consider wage subsidies as a slow, difficult and bureaucratic system (Prime Minister's Office, 2018). However, from the perspective of effectiveness, it is important that the wage subsidies are targeted, in an optimal manner, to those individuals that would not find work without the subsidy.

Active labour market policy 2016 public expenditure Expenditure in relation to GDP, % Unemployment rate, % 2.0 8 1.5 6 1.0 4 0.5 2 0.0 0 Denmark Norway Finland Sweden Start-up incentives Direct job creation ■ Sheltered and supported employment and rehabilitation ■ Employment incentives ■ Training ■ Public employment services and administration Unemployment rate Source: OECD

Figure 4.11

The education system is relevant from the perspective of labour supply and the match between labour supply and demand

Education-related measures can help to promote employment through labour supply on the one hand, and by improving the match between labour supply and demand on the other. A number of educational reforms in which the specific aim is to improve employment among the young are currently underway. One of the aims of the vocational education reform, which took effect at the start of 2018, is to shape vocational education so that it would better serve the needs and requirements of future working life. One of the aims in the higher education student selection reform, which is now underway, is to speed up the start of higher education studies and in this way extend working careers from their beginning. In Finland, young people do not only start their studies late, but the duration of studies is also long. For this reason, measures aimed at shortening the duration of studies could also make young people available to labour markets more quickly.

The number of people with only basic education should be reduced

Individuals with only basic education have a considerably weaker labour market position than other population groups. Poorly educated people also have fewer incentives to find work because in their case, the income that they would earn when employed would only be slightly higher than what they receive when living exclusively on social security benefits (Incentive trap working group, 2017a). As it may be difficult to change the incentives, the number of people with only basic education should be reduced. By increasing the proportion of young people with at least upper secondary level education, employment opportunities could be improved and it would also prevent exclusion, which may lead to an exit from the labour market.

Changes in sectoral and occupational structures require the promotion of cost-effective continuous learning

Changes in the sectoral structure will probably continue and the role of services in the economy will also continue to grow. The same also applies to changes in occupational structures. As a result of information technology, robotics, artificial intelligence and offshoring, the number of routine, middle-level work tasks will probably decrease, while the number of non-routine tasks and highly paid and low-paid jobs is likely to increase. In order to ensure the matching of labour supply and demand, the sectoral and occupational mobility of people should be facilitated, but at the same time, the cost-effectiveness of the measures should also be a consideration. For example, opportunities for continuous learning could be promoted during working careers. In particular, this need applies to people who do not meet the skills requirements of the labour market. In addition to degree-based education, there should also be opportunities for more flexible and shorter-duration updating of skills. Both the educational offerings and the incentives encouraging individuals to study during working careers are important in this respect. The funding for continuous learning should come from a broad-range of different sources so that the education can be effectively focused.

The key issue in the development of continuous learning opportunities is to reach those individuals who are working in sectors and professions that are threatened by structural change and whose skills do not meet the requirements of the labour market. For example, regarding the adult education subsidy, it has been noted that most of the individuals using the subsidy are not working in professions threatened by automation or offshoring (Kauhanen, 2018). The results of the Adult Education Survey also suggest that participation in education is more common among highly educated individuals and those in employment than among unemployed and poorly educated individuals who might have a greater need for education and training (See Figure 4.12). From the perspective of employment effects it is also important that when making use of the continuous learning opportunities, people acquire skills that boost their employment and income prospects.

Figure 4.12 (a)
Participation in education in the age group 25-64¹ in 2016 according to labour market status participation rate, %

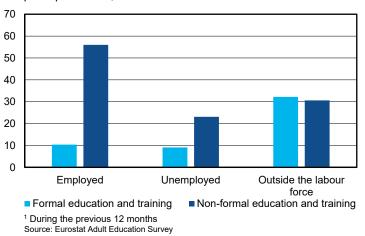
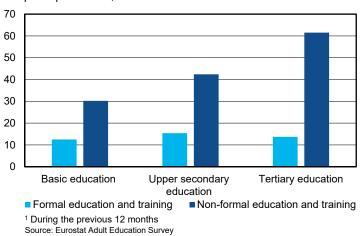


Figure 4.12 (b)
Participation in education in the age group 25-64¹ in 2016 according to educational level participation rate, %



A well-functioning housing market is important for regional mobility

The regional match between labour supply and demand could be improved by promoting labour force mobility from regions with high unemployment to growth centres. It has been noted that job displacement, education level and the liquidity of the housing market in the place of origin (=how quickly can home-owners sell their dwellings) are connected with a higher willingness to move (Maczulskij et al., 2018). At the same time, age, home ownership, family ties in the place of origin, school-aged children, lower pay expectations

at the place of destination and high living costs are factors that reduce the willingness to move (Mazculskij et al., 2018; Holm et al., 2008). Except for the functioning of the housing market, it is difficult to influence the factors described above through policy measures.

High housing costs in growth centres are the key problem affecting the housing market. One way of influencing housing costs is to increase the supply of housing by making more land available through land use planning and supplementary construction.

The public sector also supports housing construction directly through grants and by providing interest subsidies and guarantees for the construction of rental and right-of-occupancy dwellings. State interest subsidies for the construction of ARA rental dwellings and state deficiency guarantees are the most important instruments used to support housing construction. The total effects of subsidised housing on regional mobility are not known (Ministry of Finance, 2013). On the one hand, subsidising construction has a positive impact on the number of dwellings, which enhances regional mobility through lower housing costs. However, as ARA production partially replaces private housing construction, the increase in total construction does not fully correspond to new ARA production (Ministry of Finance, 2018c). The replacement effect of ARA housing construction is estimated at about 40% (Alho et al., 2018). At the same time, however, in regions with a tight housing market, the resident turnover in subsidised housing is low, which means that subsidised dwellings become more slowly available to new residents than other homes (Ministry of Finance, 2013). This reduces the benefits arising from subsidised construction from the perspective of regional mobility.

The high proportion of owner-occupied housing in Finland limits regional mobility. Subsidies for owner-occupied housing have been lowered in recent years by reducing the deductibility of housing loan interest payments.

Raising the employment rate is probably not enough as Finland should also encourage work-based immigration

The number of people in employment can be increased by raising the employment rate and also by encouraging work-based immigration. Measures have already been taken to boost work-based immigration and one of them is the Government proposal adopted in December 2017. Under this proposal, a new residence permit category is established for growth entrepreneurs, the maximum duration of special experts' residence permit is extended to two years and the option of granting a residence permit on the basis of entrepreneurship is introduced (Ministry of Finance, 2018a). A number of other factors that may impact Finland's attractiveness as a destination for work-based immigration have also been mentioned. They include the use of discretion in the supply of foreign labour, and the criteria for granting residence permits to families of foreign employees, in which the

requirement for secure means of support may discourage immigration, especially by individuals prepared to work in low-paid jobs (Ministry of Finance, 2018a).

In the long term, a higher fertility rate would also boost employment

The fertility rate in Finland has declined for eight consecutive years. The reasons for the fertility birth rate are not known. Changing hopes and choices, or economic factors and unemployment may lie behind the trend. For example, low income and economic uncertainty may make it more difficult to start a family.

In the long term, the number of people in employment could be increased by boosting the fertility rate. Influencing the fertility rate is difficult, however. For example, good chances of reconciling family life with the needs of working life and the economic status of people in the family-starting age may have some effect on the fertility rates. If we knew more about the reasons for the falling fertility rate, we could also develop measures to reverse the trend.

5 Favourable conditions for investments and skills boost productivity

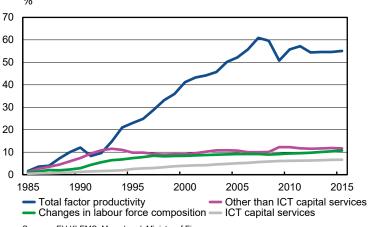
- Ensuring that Finland is an attractive investment environment is key to boosting productivity. This would bring in new and more productive capital stock and foreign investment.
- More extensive international corporate activity in Finland could also encourage the dissemination of knowledge and best practices in our country. More effective use of the results of international research and development activities would be profitable because more than 99% of the R&D investments in the OECD countries are made outside Finland.
- Encouraging labour mobility from low-productivity to high-productivity companies boosts productivity. Thus, productivity can be enhanced indirectly by increasing the regional, vocational and other forms of labour mobility.
- Ensuring healthy competition between companies is important. In this respect, it is essential that new companies have free access to the market and unprofitable companies shut down their operations, thus putting the resources tied up in them at the disposal of profitable companies.
- In the knowledge economy, growth is often created through interaction. In densely built urban environments, encounters between expertise fields create new sources of growth. Productivity growth can thus be promoted by eliminating obstacles to growth in urban environments as well as by streamlining land use planning and construction.

Growth in wellbeing is based on productivity growth

Economic growth is the key source of higher wellbeing. Roughly speaking, the gross domestic product (GDP) can be calculated by multiplying the number of hours worked in the economy by labour productivity. In an ageing society where the working-age population is no longer growing, labour productivity is the main source of economic growth. In addition to labour productivity, economic growth also depends on the amount and quality of capital and labour.

Labour productivity, GDP or value added divided by hours worked, can mainly grow as a result of technological advances, better management and better operating practices. Total factor productivity is the part of productivity growth that is not explained by changes in the amount and quality of labour and capital. Total factor productivity has been and will remain key to enhancing labour productivity (Figure 5.1).

Figure 5.1
Cumulative effect of different factors on labour productivity in Finland
%

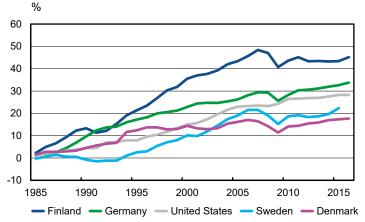


Sources: EU KLEMS, Macrobond, Ministry of Finance

Last century, productivity in Finland grew very rapidly until the financial crisis, despite the recession of the 1990s (Figures 5.2 and 5.3). The growth was partially based on catching up with countries with the highest productivity. Moreover, productivity in the electronics industry grew extremely rapidly in the 1990s and in the early 2000s. Fast productivity growth in Finland was mainly due to an extremely rapid growth in total factor productivity.

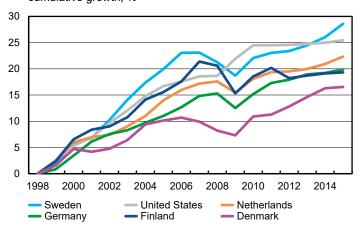
Figure 5.2

Cumulative effect of total factor productivity on labour productivity



Sources: OECD LAMA, Macrobond, Ministry of Finance

Figure 5.3
Labour productivity in the market sector cumulative growth, %



Sources: EU KLEMS, Macrobond, Ministry of Finance

Labour productivity grows when the amount of capital per employee grows. It is also essential how efficiently the capital is used. In the 1990s and in the early 2000s, Finland developed and manufactured a large amount of ICT products but we have failed to use the ICT capital to boost economic growth as effectively as some of our reference countries (Figure 5.4).

Figure 5.4 Cumulative contribution of ICT capital to GDP growth % — United States — Switzerland — Sweden — Germany — Finland

Weakening of the price competition put an end to productivity growth in Finland

Sources: Conference Board TED, Macrobond, Ministry of Finance

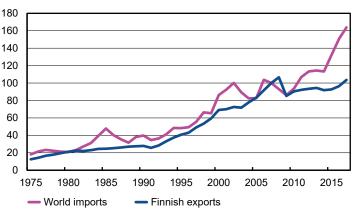
In the last few years, global productivity growth has slowed down compared with the rates of the past decades but in Finland the slowdown was particularly abrupt. Finland has only experienced a significant contraction in total factor productivity as a result of its wars and after 2007 (Pohjola, 2017b).

Productivity trends observed over short periods (a few years) are also impacted by demand as value added fluctuates more strongly than the hours worked. This is partially because companies are reluctant to lay off workers even if there was a fall in demand. By doing so, they are ready to meet the growth in demand when the economy starts to recover. Productivity in a small open economy such as Finland also depends on the competitiveness of the economy and the export sector, which partially affects export demand. For this reason, the halt in productivity growth after 2007 is also the result of a situation where the competitiveness of and export demand for the high value-added products of the Finnish electronics and paper industry has fallen steeply.

The Finnish economy and productivity in particular have recovered extremely slowly from the financial crisis and the difficulties facing the electronics and paper industries. One key explanation to the phenomenon is that the cost competitiveness of the remaining production weakened which slowed down the recovery of the Finnish exports. The continuation of Finland's export problems suggests that there are structural problems behind weak economic and productivity growth that go beyond short-term cost competitiveness and that also impact productivity growth in the longer term (Figure 5.5).

Finland's existing production, labour market and other structures have evolved over several decades. When the demand for key economic sectors and important products falls abruptly and permanently, a need arises to create new production to replace the old. This often requires substantial changes in corporate and job structures, which is painful and takes time. A flexible labour market would make adjustment to such situations easier.

Figure 5.5
Trade of goods and services, volume index 2007 = 100



Sources: World Bank, Statistics Finland, Macrobond, Ministry of Finance

Investments in research and development are key to improving productivity in the long term

Until the early 1990s, material investments in relation to GDP were higher in Finland than in many other countries. Some of them were probably inefficient (Pohjola, 1996). After the recession of the early 1990s, Finland made a shift towards innovation-driven growth. Investments in research and development (R&D) grew in a broad range of sectors, especially in the electronics industries. The financial crisis put an end to this growth.

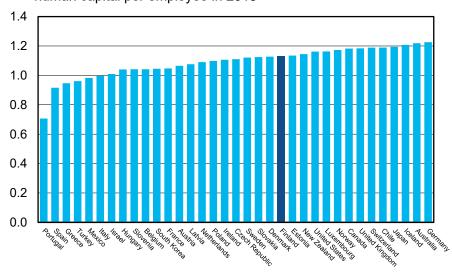
Investments are based on an expectation that the long-term yield would not only exceed the investment costs but would also cover the risk of failure. A stable operating environment, predictable and competitive taxation as well as the availability of low-cost funding are some of the factors that boost investments and that react more quickly to policy measures.

Skilled labour force boosts productivity

According to the PISA and PIAAC surveys conducted by the OECD, Finns have high skills when compared to many other countries. According to a new and not yet published OECD method of measuring human capital, Finnish employees are above OECD average but lag clearly behind the top countries. (Botev et al., 2019). When consideration is given to the

duration of studies and the skills of the working-age population, stagnant productivity growth suggests that Finland is underperforming. For some reason, the high skill levels in Finland are not reflected in productivity growth. We should also focus on the maintenance and updating of the skills possessed by the working-age population and learn from the world's best practices (Enhancement of skills is examined in more detail in Section 4.2 above).

Figure 5.6
OECD's new human capital index human capital per employee in 2015



Source: Botev et al. (2019)

Innovations are the most important source of productivity growth

In innovations, knowledge and expertise are used to generate profits, create new business or develop other benefits. In a way, innovation is the opposite to research and development: In R&D, resources are used to create new knowledge. R&D investments are more concrete than innovations and they are easier to measure. For this reason, more consideration is often given to R&D investments than to the creation of innovations even though from the perspective of productivity growth, the opposite would be more important.

The key challenge in the innovation policy is to prepare good incentives for creating new innovations and to provide a basis for disseminating them. For example, better patent protection encourages innovation but slows down the spread of innovations, and vice versa. A small open economy must consider to what extent it should focus on its own R&D investments and in what other ways it could boost innovation and the spread of innovations.

Finland accounts for only about 0.5% of all R&D investments in the OECD. This means that a vast amount of research and development takes place outside Finland. A small open economy should be able to make better use of these inputs made by others. It is essential that new knowledge and expertise can spread to Finland from other countries. It would be particularly useful if the knowledge and expertise spread to Finland from the locations at the forefront of technology and units applying the best practices. For example, closer cooperation with well-established and new growth-oriented companies could boost the growth of both. For example, the British Nesta organisation organises such activities in a global scale.

Most of benefits generated by the innovation policy manifest themselves in better or cheaper products and services available to consumers and companies. In many cases, a large proportion of these products and services are used outside Finland. This weakens the profitability of the R&D and innovation policy of a small open economy. This is because the benefits generated by innovations for society at large are not significantly larger than the benefits accumulated by the company making the innovations if most of the societal benefits go to other countries.

Especially in the short run, only a limited number of R&D experts is available even though the collapse of the electronics industry may have changed the situation in Finland. Increasing the availability of R&D skills might enhance a country's ability to innovate. It would also enhance companies' ability to adopt new innovations and knowledge generate elsewhere. According to a Norwegian analysis, when the proportion of highly educated employees increased, companies became more capable of adopting new knowledge, which also reduced the volume of in-house R&D activities (Bye et al., 2011).

International interaction supports expertise development

International interaction between companies enhances opportunities for disseminating knowledge and expertise. Only the best companies are engaged in exports and other international cooperation. Internationalisation is like a threshold and to cross it, one needs a company with sufficiently high productivity. At the same time, international interaction may boost the efficiency of the companies engaged in it (Bye et al., 2011). Thus, trade policy may have a significant impact on productivity growth.

Foreign direct investment (FDI) mainly boosts productivity and growth because the companies making the investments have above-average efficiency and bring with them new technologies, innovation and better management practices (Bloom et al., 2012). Haskel et al. (2007) have noted that the effects of FDI also spread to domestically owned companies. Moreover, according to Fons-Rose et al., (2018), FDI boosts competition and enhances the productivity of the most productive companies by helping to spread knowhow.

Indirect innovation policy may be more important than R&D policy

Innovation policy and the subsidies to R&D activities are also justified with the following impact chain:

education ▶ skills ▶ research ▶ product development ▶ innovation ▶ productivity

A well-educated population is a crucial expertise factor in R&D activities and in society at large. However, the question of how well all influence channels ('') in the above chain function is crucial to productivity. The functioning of the influence channel depends on factors other than the innovation policy. At least the following factors influence its functioning: management, flexibility of the labour, commodity and capital markets (the ability of the economy to move resources to better units), companies' entry into the market and market exit, and the intensity of the competition. These indirect components of the innovation policy may be crucial to productivity growth (Takalo and Toivanen, 2018).

Spreading of the best management practices is important to productivity

Management is a key factor in the operations of companies and operating locations. A number of indicators have been developed to measure and compare the quality of management, such as the World Management Survey (WMS). In the WMS project, management practices in dozens of countries have been surveyed over a period of more than ten years. It has been noted in the surveys that the intensity of competition has a clear positive impact on the quality of management practices. It has also been noted that there is a clear positive correlation between the quality of management practices and the productivity, profitability and market survivability of the company and its operating locations (Maliranta, 2017).

According to a similar survey carried out in Finland, the quality of management practices in Finland varies considerably between industrial operating locations. Large operating locations use better management practices that small locations. At the same time, small operating locations of large companies use better management practices than operating locations of small companies.

The management practices used in Finnish industrial operating locations are quite good when compared to practices used in other countries. We might be slightly behind the United States. According to these comparisons, the management practices used in the USA are of higher quality than in any of the surveyed countries. In the United States, the labour force is concentrated at large operating locations more strongly than in Finland and these locations use high-quality management practices. This weakens Finland's industrial competitiveness vis-à-vis the United States (Maliranta and Ohlsbom, 2017).

Thus, it seems that the quality of management is not the factor behind stagnant productivity growth in Finland. There is, however, substantial variation in the quality of management practices. More widespread use of the best practices in poorly managed companies would enhance productivity in these companies and in the Finnish economy as a whole.

Creative destruction accelerates productivity growth

The amount and quality of material and human capital, adoption of innovations and the capability of the supervisors are the factors impacting labour productivity at the level of companies and operating locations. At sectoral level and in the national economy as a whole, creative destruction is an additional factor. Creative destruction means changes in corporate structures boosting productivity in a sector. In creative destruction, companies clash with each other with the help of innovations. Even though ultimately, the innovations may not be successful, they will provide the successful company with a competitive advantage. Innovations may involve new products or services, better processes and ways of organising work, or marketing.

Creative destruction has two sides: creation and destruction. In creation, productivity improves because the new jobs are more productive than the old ones. In destruction, on the other hand, low-productivity jobs disappear. First, there are changes improving productivity, as a result of which low-productivity companies can no longer compete with other companies and they must reduce operations and their workforce or they may even have to exit the market altogether.

Creation takes place when new, higher-productivity companies enter the market. These may be international companies or they may emerge when international companies acquire Finnish operating locations and introduce better international expertise to them. Creation also takes place when more productive companies and operating locations manage to recruit a larger proportion of the workforce.

In Finland, creative destruction started gathering speed in the 1980s when reforms in such areas as competition legislation were introduced. At the same time, exports to the former Soviet Union contracted as a result of falling oil prices and later because of the collapse of the Soviet Union. In the new situation, Finnish companies had to find buyers for their products in the more demanding Western markets. The creative destruction reached its peak shortly before the recession of the early 1990s, during the recession and immediately after it. After that, the creative destruction gradually lost strength. The process of renewal was at its weakest after the financial crisis. A deep downturn also paralyses the renewal process so thoroughly that it takes several years to recover from the stagnation. After the financial crisis, the renewal process started to intensify at operating location level in 2010 and the growth continued until 2015. The renewal of the product structure in Finland's manufacturing industries reached its post-2006 peak in 2015 (Maliranta and Valmari, 2017).

Competition and testing in the market are of crucial importance

There is an extensive research literature available on the role of competition in innovation and productivity (for example, Ahn, 2002; CMA, 2015). On the one hand, intensifying of the competition reduces the benefits arising from innovation, which weakens incentives for innovation. On the other hand, competition encourages companies to innovate so that they would get an edge over their competitors. A monopoly or other absence of competition makes companies lazy as the lack of opportunities to use competitive advantages removes the incentives for improving them. If the competition is too intense, it eliminates the opportunities for long-term development of innovations and competitive advantages.

Protecting the old makes it more difficult to create new. Removing obstacles to market entry and dismantling regulations restricting competition, ensuring healthy competition and eliminating business subsidies protecting old and inefficient business operations boost innovation and productivity. A good competition policy is also, indirectly, good innovation policy.

It is rarely known in advance, which of the products, services or operating practices will succeed. It may only become clear by testing them in practice in the market. In the pressures of healthy competition, only the products, services and operating practices will succeed that provide consumers with new value and customer companies with benefits compared to other offerings.

Importance of the digital economy and intellectual property rights is on the increase

The growing role of the digital economy and intellectual property rights will pose challenges to the competition policy and other areas of regulation. This is not a new phenomenon, however, because already in the case of Microsoft in 1998, the prospect of a 'winner-takes-it-all' market was discussed. Competition in the market may lead to a monopoly because of the benefits of scale in supply and demand and because there is no room for other suppliers in the market. A monopoly should not be artificially prevented through policy measures if the monopoly arises in dynamically developing markets because of best possible offerings.

If competition in the markets leads to monopolisation, it is important to maintain competition for markets and to ensure that the monopoly cannot prevent future competition. A monopoly may, for example, try to erect obstacles to market access, increase the costs of potential competitors, prevent access to customer interfaces, make the availability of production factors more difficult or acquire potential independent competitors.

Restrictions on competition or corporate acquisitions are often directed at new companies that may be able to develop better services challenging the existing monopoly. For this

reason, identifying activities restricting competition is not as easy as in traditional industries. For example, Amazon has used low prices to build an extensive platform economy on which many other companies depend. In an article attracting considerable attention, this approach is considered dynamic predatory pricing (Khan, 2017).

Regardless of whether it is a question of fair competition based on one's own merits or predatory practices restricting competition, the well-established competition policy rules cannot be applied to such activities. This is because the focus in them is on the static benefits received by customers and consumers generated by such factors as low prices. This is a good example of how the competition policy may face new challenges in the digital and platform economy. For this reason, the resources and capacity of the competition authorities to identify and correct competition problems in the digital and platform economy must also be ensured.

The companies in the platform economy, which have grown extremely rapidly, are partially based on information collection and management. For example, the European users of the taxi application Uber must share their data in return for getting cheap rides. Uber intends to increase its value added in the United States with the data resource that it has accumulated. If a substantial part of the business operations or services is tied to American or Chinese platforms or artificial intelligence, it may become difficult to develop European business that is knowledge-intensive and has high value added. According to the principles of ethical information policy, information should be widely available for developing business operations and for competition on one's own merits. At the same time, however, privacy and sensitive data should be secured. For this reason, we need global or OECD-wide rules so that a fair competitive environment can also be ensured in the knowledge economy.

Regulation and business subsidies help to preserve old structures and slow down productivity growth

The competition legislation and policy in Finland and in the EU are probably already in a fairly good shape. It should, however, be considered whether the Finnish Competition and Consumer Authority should be provided with wider powers to investigate corporate arrangements below existing turnover limits so that well-functioning competition could also be ensured in smaller markets.

At the same time, however, there may be features in other areas of regulation that restrict market access, movement of labour to more efficient units, adoption of best international practices or other trends helping to boost productivity. For example, many of the business subsidies protect old structures and for this reason they constitute bottlenecks to productivity growth (Ministry of Economic Affairs and Employment, 2017). The elimination

of inefficient business subsidies would also help to enhance the sustainability of public finances or allocate funds for innovate policy, for example in the manner suggested by Ormala (2019). Tax subsidies granted to companies are examined in more detail in Section 3.2.

Change friction slows down productivity growth

The productivity impact of creative destruction arises when the resources available in the economy (labour force and capital) are allocated in a better manner and higher-productivity companies gain a larger market share. Creative destruction corrects the inefficient allocation of economic resources.

Companies base their investment, production and recruitment decision on incomplete information. Furthermore, new opportunities are created in the market and because of them, good decisions made in the past may also become disadvantageous. Resources may also be allocated inefficiently because of regulation, tax legislation, access to financing, market imperfections or market failures.

For example, Restuccia and Rogerson (2008) use US material to examine a scenario where low-productivity companies are supported and high-productivity companies are heavily taxed. This hypothetical policy had a major impact on total factor productivity. The key message is that hampering the operations of high-productivity companies (through regulation or other means) is detrimental to growth. Similarly, Hsieh and Klenow (2009) examined the allocation of resources in industrial companies in the United States, China and India. If the wrong allocation of resources had been eliminated, total factor productivity in China and India could have doubled, while in the United States it could have increased by more than a third.

The cost of laying off personnel is a widely used example of productivity bottlenecks. Da-Rocha et al., (2012) have examined the dynamic model of overall balance in which the productivity at an operating location also depends on policy variables, especially the cost of laying off staff. The model was calibrated using micro and macro material collected in the United States. Lay-off costs not only lead statically to inefficient allocation of the labour force but they also slow down creative destruction. According to the findings, the compensations paid to laid-off workers lead to wrong allocation of the labour force and lower total factor productivity. From the perspective of productivity growth, the right policy would be to protect individuals, not jobs.

Well-functioning housing markets enhance the mobility of labour force and boost productivity

Especially in the knowledge economy, growth is often created through interaction. In densely built urban environments, encounters between expertise fields create new sources of growth. Removing obstacles to the growth of urban environments and smoother land use planning and construction would also boost productivity growth.

Well-functioning housing markets also help people to move from regions of high unemployment and low-productivity companies to regions with job vacancies and high-productivity work. The labour market cannot allocate resources effectively without well-functioning housing markets. The employment rate will remain unnecessarily low, unemployment will remain high and economic resources will not be fully used. Labour force mobility is examined in more detail in Section 4.2 above.

The demand provides incentives for housing construction, whereas land use planning and building regulations limit the supply of housing. Land use planning is the responsibility of decision-makers who also have the powers to apply it. The decisions on building regulations are made by Parliament and they are supervised by municipal authorities. Well-functioning competition and effective consumer protection guarantee that there are enough developers and construction companies in the market. It also guarantees that the seller and the buyer are in an equal position even though the seller usually knows the site better than the buyer. Neutral tax treatment of different types of housing provides a basis for ensuring that there is an efficient match between supply and demand in the market.

The housing market functions exactly as efficiently as those involved want it to function. If the view is that housing prices are getting out of control and more dwellings are needed in growth centres, more areas for housing construction should be allocated in land use plans. If the land use planning process lasts too long, it should be speeded up. If the building regulations are difficult to understand and apply, they should be simplified. If the building regulations require impractical solutions that lead to unnecessarily high building costs, the regulations should be changed.

Adequate amount of plots allocated to housing construction in the land use plans and neutral tax treatment of different types of housing should guarantee that there is enough rental and owner-occupied housing as well as blocks of flats, row houses and detached homes available and that the housing markets do not become an obstacle to labour force mobility. As the OECD (2018a) states in its country report on Finland, making the real estate tax a more important source of income for municipalities would provide municipalities with additional incentives to allocate more land for housing construction in land use plans and speed up the planning processes.

6 The tax structure should be steered in a more growth-oriented direction

- The main purpose of taxation is to provide funding for public-sector tasks. In order to ensure continuous funding of the welfare society, the taxes should be collected so that the negative effects of taxation on the economy can be minimised. The structures of the tax system should support economic growth and employment.
- This goal is best supported by a neutral, simple and clear tax system.
 A neutral tax system only provides the economic decision-making with a minimum amount of steering, which would allow resources to be allocated with maximum effectiveness. A good tax system is also easy to understand, predictable, stable and administratively efficient.
- The tax structure can be steered in a direction that is more conducive to economic growth and employment by shifting the focus of taxation from labour to consumption.
- Encouraging skills and lifelong learning will become even more important in the future as the population is ageing and working life is changing. Incentives for skills could be enhanced by lowering the high marginal taxation. This would also remove incentives for income shifting.
- Lower taxes on work could be financed by shifting the emphasis
 of taxation to taxation of consumption. This could be made by, for
 example, raising reduced VAT rates. The income distribution effects
 could be compensated through income taxation and the benefit
 system.
- Technological advances are creating new opportunities for making taxation systems more efficient and reliable. At the same time, this may lead to the narrowing of traditional tax bases and lower tax revenue. The key issue is to ensure that the government agencies have access to information and that they are able to supervise the tax

system. Changes in the operating environment require that inputs are made in the supervision of phenomena connected with the digital economy.

- The international competitiveness of corporate taxation must be ensured and the corporate income tax base must be secured. Reforms in dividend taxation should be introduced so that the problems in it can be corrected.
- Environmental taxation should be examined as part of a cost-efficient climate and environmental policy.

6.1 The tax structure supporting growth should be as neutral as possible

The main purpose of taxation is to provide funding for public-sector tasks and obligations. The size of the public sector determines the overall level of taxation. A relatively high level of taxation can also be combined with strong economic growth and employment if the taxation structure is well planned and the tax revenue is used in a manner that supports growth and employment. Basically, taxation distorts economic decision-making and is therefore detrimental to economic growth. However, the structure of the tax system is relevant to economic growth.

The view is that a tax system that is as neutral, clear and predictable as possible can also best support economic growth. A neutral tax system treats similar economic activities in the same manner, which means that it only provides minimum guidance for economic decision-making. In that case, resources can be allocated with maximum efficiency and the welfare losses arising from taxation are minimised. (For more details, see for example Ministry of Finance, 2017).

A clear and simple tax system is easy to understand for the taxpayers, in which case the system does not provide encouragement for intentional or unintentional tax avoidance. It is easier for the public to accept the taxes collected from them when the tax system is clear and easy to understand. A good tax system is stable and predictable because taxation also impacts the choices of citizens and companies in the long term. A good tax system also operates with minimum administrative costs. A good tax system treats citizens and companies equally and fairly.

Taxation may have several objectives some of which can be of conflicting nature

In many cases, taxation also has other objectives than providing funding for public-sector tasks and obligations. These include the narrowing of income differences and the steering of production and consumption in a desired direction. Taxation may also correct market failures and mitigate negative externalities.²³ The instruments for achieving these differing objectives may be of conflicting nature. The manner in which they are prioritised is determined by values and choices in society. In a good tax system, the required tax revenue can be collected and the other taxation-related objectives achieved with minimum negative effects.

Prioritisation of taxation between economic efficiency and objectives concerning income distribution and other areas can be examined using the theoretical framework provided by the optimal tax theory. However, creating a tax system in which each detail is based on research data, would require a great deal of information on the behaviour and valuations of companies and households in the short term and in the long term. In practice, such research data is only available in limited scale. The tax system could also become very complex and difficult to understand. For such practical reasons, neutrality, simplicity, stability and predictability can considered as the basic principles of a good tax system.

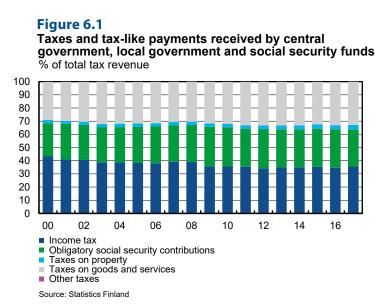
6.2 The emphasis should be shifted from the taxation of work towards taxation of consumption

OECD (2018a) recommends that to support economic growth and employment, Finland should lower the taxation of work, eliminate reduced VAT rates, tighten real estate and environmental taxation and further limit the deductibility of housing loan interest payments. Taxation of work and corporate taxation are considered more detrimental to economic growth than taxation of consumption or real estate taxes (OECD, 2010).

In a situation where the proportion of working-age population is shrinking, structures providing incentives for work and boosting labour productivity assume greater importance in the tax system and in the social security system. For this reason, there are good grounds for further lowering the taxation of work. In international comparisons, the taxation of work remains fairly high in Finland, especially in middle-income and high-income groups (OECD, 2018b). However, the funding of the welfare state can only be ensured if the tax revenue lost because of lower taxation of work can be collected from other sources.

²³ Externalities mean the effects of economic activities that are not directed at the actors themselves. Externalities may be negative (such as pollution caused by manufacturing industries) or positive (such as general growth in research-based information).

The percentages of different tax types of total Finnish tax revenue in the period 2000-2017 are shown in Figure 6.1. The figure shows that during the period in question, the proportion of income taxes of the total tax revenue declined, while the proportion of taxes on property, the taxes paid on goods and services as well as obligatory social security contributions increased.



The emphasis of taxation has been shifted from the taxation of work towards taxation of consumption by raising such taxes as environmental and health-based taxes, such as excise duties on tobacco products, alcohol and energy. However, a broad-based shift in taxation priorities cannot be achieved by raising excise duties alone. A typical feature of many of the excise duties is that their tax base and fiscal importance are reduced in the long term, especially if they prove effective as steering instruments. For this reason, the revenue generated by higher excise duties would not compensate for major cuts in the taxation of work, at least not in the long term.

Eliminating reduced VAT rates would make the tax system more effective

In practice, broad-based lowering of taxation of work could be funded by raising value added taxes. The general VAT rate of 24% is already high, which means that value added taxation should be increased by raising reduced VAT rates,²⁴ which would also make the tax system more effective.

There has been reluctance to increase reduced VAT rates because of the income distribution effects that such increases would have. The rise would affect all consumers and when proportioned to income, it would have greater impact on low-income earners. Reduced VAT rates are, however, an ineffective way of supporting low-income earners as in euro terms, most of the tax subsidies granted through them benefit middle-income and high-income groups. Income taxation or current transfers would be a more effective way to support low-income earners. It has been noted in the studies on the effects of reduced VAT rates that they have failed to achieve the desired demand and employment effects (Harju et al., 2018b; Kosonen, 2016; Kosonen, 2015).

It is pointed out in the Mirrlees Review (Mirrlees et al., 2011), in which the typical features of a good tax system were discussed that the tax system and its effects should be examined from an overall perspective. The social security system should also be taken into account when the income distribution effects are considered. Even though the raising of reduced VAT rates and other consumption taxes would weaken the position of low-income groups, these negative effects can be compensated by lowering income taxation and by increasing social security benefits.

The tax system could also be improved by reducing the number of tax expenditures and by reforming real estate taxation

The aim of the comprehensive tax reform carried out in Finland at the end of 1980s and early 1990s was to achieve a neutral and efficient tax system. As part of the reform, the tax system was streamlined and simplified. However, since the reform, a large number of tax reliefs and exemptions have been added to the tax system. They have made taxation more complex and made the system less clear and less neutral. The tax subsidies contained in the Finnish tax system should be critically reviewed and it should be examined whether there are reasons to retain them (of tax subsidies, see Section 3.2 and Rauhanen, 2017; Kröger et al., 2010). As the economic operating environment is becoming more complex and amid globalisation, digitalisation and changes in working life, the neutrality of the tax system is becoming increasingly important.

²⁴ Finland has two categories of reduced VAT rates: 14% (food, restaurant services and feed) and 10% (passenger transport, pharmaceuticals, accommodation services, physical exercise services, entrance fees to cultural and entertainment events, books, newspaper and magazine subscriptions, certain pieces of art, and royalties).

Real estate taxation is considered effective and, from the perspective of economic growth, one of the least harmful tax types. Especially the real estate tax on plots generates only small welfare losses because the real estate taxation does not impact the amount of land available as plots. Real estate taxation is fairly low in Finland and from the perspective of the effectiveness of the tax system as a whole, raising property taxes could be justified. In general, however, increases in real estate taxes have been met with caution. The real estate tax is levied by municipalities and they can determine the tax rates within the range laid down in the law.

The aim of the real estate tax reform project coordinated by the Ministry of Finance²⁵ is to update the valuation criteria for buildings and plots so that the taxable values would be better in line with changes in costs and prices as well as regional differences. Implementing the reform would make real estate taxation fairer and more transparent.

Environmental taxation should be examined as part of a cost-efficient climate policy

As stated above, in addition to providing central and local government with tax revenue, taxation may also have other objectives, such as reducing activities that are harmful to health and the environment. Environmental taxation can be used to support the achievement of climate targets by raising taxes on activities generating greenhouse gases. In that case, environmental taxation should be considered as part of a cost-efficient climate policy. When new environmental taxes (and other taxes with a steering role) are considered and before any decisions on them are made, the exact goal, the most feasible and cost-efficient steering instruments available to achieve the goal and the effects of the steering instruments should be determined. It may be difficult to direct the taxation precisely at the non-desirable activity, which makes the tax less efficient and practicable. Climate policy is examined in more detail in Section 11.1.

6.3 Taxation must support employment and skills

As the Finnish population is ageing and as the proportion of the working-age population is shrinking, the employment rate must be raised and labour productivity enhanced so that the funding base for the existing welfare state can be secured. At the same time, major changes in working life are in sight: more part-time and short-term work and micro entrepreneurship, replacement of workers with automation, alternation of work and studies,

²⁵ For information about the real estate tax reform project, visit: https://vm.fi/kiinteistoverouudistus (the website is in Finnish)

internationalisation of working life, and the growing use of digital work platforms. These changes are posing new challenges to the clarity of the tax system and to tax collection practices.

Taxation can impact employment in many ways and the effects of taxation on the supply of labour have been extensively studied (see for example Ministry of Finance, 2010; Matikka et al., 2015). Basically, taxation weakens incentives for work. The strength of this effect depends on how sensitively the number of hours worked reacts to changes in taxation (degree of flexibility in the supply of labour). Especially among low-income groups, the incentives for work also depend on social security (For more information, see Incentive trap working group, 2017a and 2017b; Viitamäki, 2015). The effects of taxation and social security on employment are examined in Section 4.

In addition to the amount of work, taxation of earned income may also influence other choices such as education, skills improvements, tax planning and decisions on immigration or emigration. Marginal taxation and the progressivity of taxation are the main factors influencing skills incentives and income shifting. More consideration should be given to these effects as skills are becoming more important and the labour force is become increasingly mobile internationally. According to the Taxation and Skills report of the OECD, Finland levies the third highest taxes on skills in the OECD, when measured on the basis of the average tax rate (OECD, 2017a). In Finland, willingness to emigrate is higher among highly educated groups than among the rest of the population and studies have shown that taxation plays a role when experts choose their places of residence and work (Kauppinen et al., 2018; Akcigit et al., 2016; Kleven et al., 2014).

Finnish taxation is highly progressive

To provide more incentives for work, taxation of work in Finland has been lowered almost on a yearly basis since the mid-1990s, especially in the low-income brackets. In fact, the taxes paid by low-income earners on work income are considerably lower than the taxes paid on daily allowances of similar size. At higher income levels, taxes on work have not been reduced by the same amount, which has led to steeper progression.

Figure 6.2 shows average earned-income tax rates (incl. social security contributions) paid by low-income earners (67% of the average wage²⁶) and by high-income earners (167% of the average wage) in Finland and a number of other OECD countries. The green line describes the difference between the tax rates of low-income and high-income citizens,

²⁶ The internationally comparable average wage (AW) used by the OECD is used as the average pay. In 2017, AW in Finland was EUR 43,986/year. https://doi.org/10.1787/tax_wages-2018-en

which can be considered as one way of examining progression. When examined in this manner, progression in Finland would seem to be quite steep (see also Taxpayers Association of Finland, 2018).

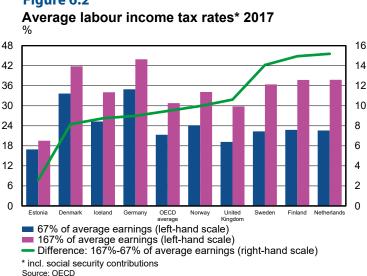


Figure 6.2

Reducing marginal tax rates can support the enhancement of skills and reduce incentives for income shifting

The expert group on business taxation examined the effects of the taxation of work on economic growth, productivity and the incentives for skills enhancement. According to the working group, Finland should provide incentives for enhancing human capital and for the educated labour force to stay in Finland by reducing its high marginal tax rates. Lowering the progression would reduce taxes on education investments, which would increase the return on these investments (Ministry of Finance, 2017). The working group for developing the Finnish tax system also proposed the reducing of the highest marginal tax rates to encourage labour productivity improvements, to attract experts to Finland and to reduce the problem of income shifting (Ministry of Finance, 2010).

Taxpayers may be encouraged to convert earned income into capital income if the taxation of earned income is high in relation to the taxation of capital income. Income shifting is typical of high-income individuals who are able to choose whether to work as wage-earners or entrepreneurs. According to research results, high-income wage-earners and entrepreneurs are fairly sensitive to income taxes, unlike ordinary wage-earners. Flexibility in taxable income is substantially higher among Finnish owner-entrepreneurs than among wage-earners and research results suggest that this is explained by tax planning (Matikka et al., 2015). This is problematic from the perspective of the fairness and neutrality of taxation.

High taxes on work may also create pressures to introduce sectoral or situation-specific tax reliefs that do not treat all employees equally. In the future, attention should also be paid to whether the difference between a wage-earner and an entrepreneur starts to disappear as a result of the new forms of work arising from technological advances. Such a trend would probably make improvements in the tax system necessary. As the forms of work are diversifying, it is becoming increasingly important to ensure that taxation is as neutral, clear and easy to understand as possible.

Lower marginal tax rates and less progressive taxation would make it easier to recruit skilled labour and reduce incentives for income shifting. When incentives for work among low-income earners are improved, consideration should also be given to the benefit system, and incentive traps created by the combined effects of tax and benefit systems should be eliminated.

6.4 Technological advances are transforming the operating environment of taxation

Technological advances and an increasingly globalised world are changing the way in which private individuals and companies operate and how their income is formed. They provide opportunities for developing new ways of work, entrepreneurship and exchange. New types of marketing channels and the spread of electronic services are changing consumption habits.

Technological advances are creating new opportunities for developing tax systems. Finland is well placed to use new technologies in taxation so that with new solutions and applications, information can be collected from different interfaces, a more real-time taxation system can be introduced and taxpayers can carry out their payment obligations easily and in a reliable manner. The incomes register, ²⁷ which was introduced at the start of 2019, is a good example of the use of electronic systems. The register makes it easier for employers to meet their notification obligations and provides a basis for real-time coordination of benefits and other income and for reducing the bureaucracy traps arising from the uncertainty and complexity connected with the combination of different types of income.

At the same time, the danger is that traditional tax bases are narrowed and tax revenue is reduced. This may happen if the payment of taxes cannot be easily combined with new types of production, consumption and work. At the same time, it should also be ensured

²⁷ https://www.vero.fi/en/incomes-register/

that the information on digital platforms is accessible. It is predicted that in the future, an increasing proportion of the exchange of goods and services takes place on a variety of digital platforms. Digital products may be created in global cooperation and the location where the value of these products is created and where they are sold may be difficult to determine. The spreading of the sharing economy also threatens to reduce tax revenue. In the sharing economy, the exchange of goods and services often takes place between two private individuals and the market place is not necessarily a physical location in the home countries of the two parties to the exchange.

The key challenge arising from the digital economy in the next few years is how the legislation and technical solutions can ensure the tax authorities' access to the information that they need. This requires active inputs in Finland and at international level. Uncertainty of what will happen, the extent and timetable of the changes and what will be the significance of these chances is the common feature of the changes arising from technological advances.

Because of this uncertainty, the tax system should be not tailored to specific needs. Instead, our future tax system should be able to flexibly adjust to changes in the economic operating environment, in which case both the tax revenue and favourable conditions for innovations can be ensured. This can best be guaranteed with a clear and neutral tax system. A tax introduced to ensure tax revenue in the short run may in the long run prove detrimental if it slows down the adoption of new inventions and the use of technological advances. At the same time, however, tax subsidies intended to support individual activities are not justified as economic resources can be best allocated if the tax system is as neutral as possible.

6.5 Corporate taxation must remain competitive and reforms in dividend taxation are needed

Corporate taxation is based on a low tax rate and a broad tax base

The need to change Finland's corporate tax system was last assessed by the expert group on business taxation (Ministry of Finance, 2017). The working group examined the existing level and model of the Finnish corporate taxation system from the perspective of competitiveness, economic growth and productivity. The working group was of the view that the best way to ensure progress towards productivity and growth targets through taxation is to use measures that make taxation more neutral. A broad tax base in which a broad range of income is taxable and a broad range of expenses deductible helps to make taxation more neutral.

Tax solutions steering the behaviour of taxpayers should be avoided unless it can be shown that they will substantially strengthen the basis for long-term productivity growth. According to the expert group on business taxation, it is essential to ensure that the Finnish corporate tax rate remains internationally competitive. The working group did not consider it necessary to change the provisions on the tax base or to introduce alternative corporate taxation models, such as ACE or CBIT.²⁸

Tax competition with corporate tax rates may become more intense in the future. Even though the 20% corporate tax rate currently applied in Finland can be considered competitive, there will probably be pressures to change it in the coming years. The corporate tax rate is the most visible and important factor in the tax competition and Finland must ensure the competitiveness of its own rate. At the same time, the corporate tax base must remain broad and up to date, while the requirements arising from the changing operating environment must also be taken into account. Consideration should also be given to the stability and predictability of the system.

International developments are playing an increasingly important role in corporate taxation

Internationalisation of business operations is an increasingly important factor impacting corporate taxation. When the corporate taxation system is developed, consideration must be given to how well-suited it is for cross-border situations and the developments ongoing at international forums.

There is growing international cooperation in the field of corporate taxation. The debate on the tax planning of international business groups and shrinking tax bases has intensified after the financial crisis. For this reason, the OECD established the BEPS project to examine the erosion of the tax base and profit shifting. It produced recommendations for changes in national tax laws and tax treaties, and for regulations on the exchange of information. In addition to the BEPS measures, EU Member States have also been working on the implementation of an anti-tax avoidance directive.²⁹ Proposals for directives on the common corporate tax base and the common consolidated corporate tax base are also under preparation.

²⁸ In ACE, a company can deduct the imputed equity costs in its taxation (ACE=Allowance for Corporate Equity). In CBIT, a company cannot deduct interest expenditure in its taxation (CBIT=Comprehensive Business Income Tax). In both models, the aim is to harmonise the tax treatment of debt and equity.

²⁹ Council Directive (EU) 2016/1164 of 12 July 2016 laying down rules against tax avoidance practices that directly affect the functioning of the internal market. Council Directive (EU) 2017/952 of 29 May 2017 amending Directive (EU) 2016/1164 as regards hybrid mismatches with third countries.

The taxation of global business groups engaged in digital business has aroused particular attention. The European Commission has presented proposals for directives on the taxation of digital companies, intended to provide a temporary and a permanent solution to the matter. There is, however, broad understanding that the permanent solution to the taxation of digital companies must be on a global basis and it must be prepared in the OECD. This work is currently under way and the final report is due to be published in 2020.

Under both directive proposals presented by the Commission, countries would have the right to tax a company's revenues on the basis of the users' location, which differs from the generally accepted principles of international taxation. This thinking is also reflected in the Commission's proposal for the common consolidated corporate tax base in which the sales generated in a Member State would serve as one of the grounds for allocating a group's taxable profit for taxation between the Member States where the group has activities.³⁰ Howthe right to tax is allocated between countries is an important matter of principle. Basing the right to tax on the location of the users is usually not in the interests of a small export-driven economy. Finland must be actively involved in the work carried out in the OECD and the EU and seek a good and a balanced solution that is in the interests of Finland.

Reforms in dividend taxation are needed

The expert group on business taxation (2017) also proposed tightening dividend taxation. The working group would have lowered the eight per cent rate of return used for calculating the dividend for which tax relief is given and raised the taxability level of these dividends. At the same time, the working group would have abolished the EUR 150,000 included in capital income dividend relief granted to entrepreneurs under the existing dividend taxation system. According to the working group, these changes would have eliminated some of the key problems in the existing dividend taxation system, made the dividend taxation of listed and unlisted companies more similar and simplified taxation. The working group for developing the Finnish tax system had proposed a similar reform in 2010.

Finland's existing dividend taxation system is problematic in many respects. It extensively steers the distribution of dividends, generates wrong types of incentives, creates potential obstacles to growth and encourages individuals to collect their income as dividends instead of wages. Finland's dividend taxation system should be reformed in the manner proposed by these two working groups so that the problems could be reduced. The aim of these changes would be to make the system more neutral and remove some of the components that reduce risk-taking.

³⁰ The Commission has submitted separate proposals for directives on the common corporate tax base and the allocation of the taxable profit. So far, only the proposal for the common tax base has been reviewed. Proposal for a Council Directive on a Common Corporate Tax Base (COM(2016) 685 final) and Proposal For A Council Directive On A Common Consolidated Corporate Tax Base (CCCTB) (COM(2016) 683 final).

7 Public administration should be reformed so that the stability and cohesion of Finnish society can be ensured

- Strengthening trust should be the key objective in the work to develop public administration. Trust arises from ethically sustainable activities, openness and the participation of all parties concerned.
 The openness of public administration and the clarity of information should be enhanced so that trust can be strengthened.
- Public-sector services, and its operating practices and competence should be developed so that citizens can have better opportunities for participation. This can be achieved by providing more opportunities for participation in the drafting of decisions, by customer-orientation and network-based approach and by engaging in activities across sectoral boundaries. At the same time, the active engagement of customers in the user-oriented development of public services should be encouraged in different ways.
- At the start of the next government term, the next Government and its ministries should agree on a joint interpretation of the Government Programme and produce clearly-defined decisions on responsibilities, resourcing and operating practices. The Government should use the new model for strategic Government Programme. Inter-administrative cooperation should be strengthened, for example by improving the joint Government steering model.
- Regional and local state administration is increasingly becoming a more closely integrated service network of country-wide and regional agencies and a centralised system of public administration customer services, as a result of which its legislative framework should be comprehensively reviewed.

- Public procurement should be developed so that it supports the
 achievement of societal policy objectives. Procurement practices
 should be developed by establishing a broadly-based public procurement forum, which would agree on a joint public procurement
 strategy for the entire public sector.
- Changes in work are reflected in many areas of competence development. Competence of central government personnel should be developed on a more diverse basis so that the development would cover the employees' entire working careers. Substantial inputs should be made into the development of personnel competence by producing new digital learning contents and by supporting the mobility of the personnel and competence.
- Public-sector management practices should be systematically developed. Advancing towards higher managerial positions should depend on results, determined self-development and a strong commitment to high level civil service ethics. Central government management training programmes should be evaluated and the new system should be based on coaching programmes and peer learning.
- Digitalisation and the use of new technologies should be systematically promoted so that the activities of central government, future county government and municipalities can be reformed. To ensure the efficiency of digital activities and the efficient production of digital services, the quality and interoperability of information should be safeguarded and reliable and secure information systems should be ensured.
- Government agencies should offer citizens and companies accessible and high-quality digital services. Companies should be obligated to use these services whenever dealing with government agencies. Citizens should be steered towards and encouraged to use digital services in order to make them the most attractive and frequently used transaction channel.
- Information-policy instruments, such as services connected with
 the use, interoperability and management of information, and legislation should be applied to support smoother exchange of information, which would provide basis for faster economic growth and
 improved competitiveness. Furthermore, the use of information and
 technology should always be on an ethically sustainable basis.
- Knowledge-based management should be firmly established as an operating practice in public administration and it should allow secondary use of information in services, management and steering.

Finland's public administration has done extremely well in international comparisons. Public administration and its services should, however, be continuously reformed so that they can respond to the requirements of a changing world. Public administration services should be examined and developed as a whole so that the customers can have an opportunity to take part in the development of public services.

Division of labour and service structures in public administration should also be developed from an overall perspective. Division of responsibilities and cooperation between central government, future county government and municipalities must be on an efficient basis so that the quality of the services and the sustainability of public finances can be enhanced. The appropriate division of responsibilities and development of the service structure should be determined by the functioning of services, cost-effectiveness and sustainability of public finances. When reforms are implemented, it should be identified at which level of government can the continuity of vital functions be assured, where productivity benefits can be effectively achieved, and how the availability of well-functioning and effective services can be secured. In addition to this, an open, public debate on the reforms should also be encouraged.

Citizens' trust in public administration and satisfaction with public services has traditionally been strong in Finland. Successful changes should be based on the trust between different societal actors. Trust in government is also fundamental to social stability and it should be enhanced so that public services, the principles governing the use of information collected on citizens and the decisions on reforms are more transparent and easier to understand. At the same time, closer inter-administrative cooperation, promotion of digitalisation and improvements in the capacity for renewal and customer orientation should be focus areas in central government. The opportunities provided by technologies should be used in the development of public administration and in its work.

7.1 Participation and trust of citizens should be strengthened

Strengthening trust should be the key objective in the development of public administration

Trust is the main force keeping society together. It arises from ethically sustainable activities, openness and the engagement of all parties concerned. Trust helps to promote cooperation and provides a basis for responding to unexpected and unforeseen situations and therefore strengthening it should be a key objective in the activities of public administration and in the preparation of reforms. These objectives can be supported by providing citizens with more opportunities for participation in the drafting of decisions and development of services. It becomes easier to find solutions to the problems affecting society

when there is mutual trust between societal actors. Changes can only be implemented if public administration trusts citizens and citizens trust public administration and if societal actors trust each other.

According to the recent surveys published by the OECD, there has been a continuous decline in the trust in public administration among Finns, even though in many of the reference countries the trend has been the opposite (OECD, 2017b). For this reason, in the next parliamentary term, more extensive information on the trust in public administration among Finns and the factors influencing it should be collected. In order to strengthen the knowledge base, Finland should commission an OECD-led trust assessment, and develop trust assessment in agencies and support for carrying out the assessments. The work is supported by the review of the subsectors of central government development from the perspective of trust, which is due to start shortly. Details of the measures already carried out, measures in progress, planned measures and the measures required are collected from each sector. This work is carried out as part of the preparations for Finland's EU Presidency.

In order to ensure genuine customer-orientation in public administration, citizens' opportunities to take part in the preparation of decisions and development of services should be further enhanced. In the next parliamentary term, additional measures should also be taken to ensure that citizens can be confident that the information collected on them is properly used in public administration. This provides a basis for more extensive shared use of the information by government agencies and it will also make the services more effective. It is also essential to promote the digitalisation of public services and to ensure their security.

The openness of public administration and the clarity of information should be enhanced

Promotion of open public administration should a more integral part of the public administration activities and the work to reform it. It is particularly important to ensure that information is easy to understand because otherwise the information would not be genuinely public. To promote the clarity of information and the openness of government agencies, the work is under way to prepare the fourth national Open Government Partnership Programme, and the measures and objectives set out in it will cover the entire parliamentary term. During the next parliamentary term, more support should be provided for organisations to promote openness and the competence of the public officials should be enhanced so that the principles of open government would be more comprehensively implemented in all areas of public administration.

Trust is also essential from the perspective of the data economy and the functioning of the information society. Citizens must have an opportunity to manage the information on themselves and decide on sharing it. Otherwise the acceptability of both public-sector and private-sector activities would be negatively affected. Government agencies and companies must ensure that the information is managed in a responsible and competent manner, that it is extensively available and of high quality, and that the rights concerning the use of the information are observed.

Citizens' trust is based on the openness of the activities of the government agencies and elected officials. When private-sector actors manage public tasks, the provisions on good administration and openness must also apply to them in the same manner as they apply to all other public-sector activities. Projects on ensuring good administration and the combating of corruption should be promoted. The whistleblowing channels for reporting abuses should be considered when legislation is developed. In fact, the EU is preparing legislation on this, such as the directive of the European Parliament and of the Council on the protection of persons reporting on breaches of Union law.

The national options for setting up a lobbyist register should be examined

There has been discussion in Finland on the regulation of lobbying and an international comparison on lobbyist registers has been prepared (Korkea-aho & Tiensuu, 2018). The purpose of the lobbyist registers is to collect and publish information on lobbying activities, parties to it and the resources spent on it. The aim of the lobbyist or openness registers is to make decision-making more transparent. This helps to combat inappropriate influencing efforts and strengthen citizens' trust in public decision-making. The lobbyist register would also support decision-makers, who could check from the register which of the lobbyists have pledged to observe jointly accepted codes of conduct. The need for the register should be assessed during the next parliamentary term.

Customers should be more closely involved in public-sector service reforms

The active involvement of customers in the user-oriented development of public-sector services should be supported in a variety of ways. User-orientation means the development of services on the basis of customer needs and the shifting of the development focus from the service provider to the user. One way of developing user-orientation is to use service design methods. At the same time, user-oriented development of services can help to improve service quality, make the service process more transparent and achieve cost savings. Moreover, when service reforms are introduced, it should be taken into account that the customers of Finland's public administration also include foreign citizens and that in other respects, too, the customers have a broad range of different language needs.

Over the past few years, piloting has also been increasingly used in the development of services. The pilots can help to enhance the knowledge base to support decision-making. Pilots are one way to find higher-quality and more innovative service solutions and to ensure the workability of the solutions before they are extensively introduced. Promoting the piloting activities requires active support. In the future, it is also important to ensure that the pilot results are used more efficiently.

Hearings and customer panels are two of the traditional participation methods in the preparation of decision-making and in the development of public-sector services. They should be more extensively used so that customers can take part in service reforms on a regular basis and that citizens can participate in the preparation of decision-making. The priority in the work should be on giving more say to population groups that are more poorly placed to present their own needs and views.

7.2 Enhancing public administration steering and ensuring a more unified Government

Inter-administrative cooperation should be enhanced

Enhancing the interoperability of central government steering systems plays a key role in ensuring a more effective inter-administrative implementation of the Government's strategic objectives. At the start of the next government term, the next Government and its ministries should agree on a joint interpretation of the Government Programme and produce clearly-defined decisions on responsibilities, resourcing and operating practices. This interpretation should be strengthened and maintained through continuous communications. Regular opportunities for a dialogue between the executive members of the Government and public officials are needed to promote a shared situational assessment and interaction. An action plan for the government term laying out the implementation of the objectives, key reforms and policies set out in the Government Programme should be prepared. In the same connection, the Government should also agree on its management tools and key steering methods.

An advance capacity should be built in public administration allowing it to implement, during the running-in period of the new Government, the Government reforms that are of key importance in terms of their effects. In order to ensure the implementation and benefits of these reforms, decisions should be made on resourcing, including the funding of the required investments, and the appropriate monitoring and management procedures. Adhering to unified funding and its steering is particularly important in inter-administrative reforms, such as structural reform and digitalisation projects. Particular consideration should be given to the prerequisites for the success of the reforms, achievement of the

objectives, and management throughout the government term. The implementation of the Government's strategic policy decisions should be enhanced in the management of ministries' activities by for example updating the operating model of the Meeting of Permanent Secretaries and by developing individual ministries' management systems. The aim is to achieve uniformity and efficient implementation of Government-level strategies and steering.

The Government Administration Department plays a key role in the reforming of the ministries' joint services and operating practices. Through its work, the department can help to ensure that the Government operates on a more unified basis. For this purpose, an evaluation of the activities and role of the department will be prepared and the required reforms will be carried out on the basis of its findings.

Developing a joint performance management model for the Government

The central government performance management system should be efficient and effective and it should encourage cooperation and commitment to joint objectives. For agencies coming under the area of responsibility of more than one ministry, the single-channel nature and continual compatibility of the management should be ensured. The cross-sectoral agency performance management model to be built for the National Licensing and Supervisory Authority (joint steering) will be simulated during 2020. The basic legal principles of the steering model and their conversion into concrete guidance processes and practices will be modelled into a unified Government model as part of the simulation and implementation. The aim is that the model would be comprehensively applied in the future steering of multi-sectoral agencies. The cross-sectoral character of each agency will be assessed on the basis of the number of the ministries steering the agency and the volume of the tasks coming under the legislation of each steering ministry.

A similar joint Government operating model is planned as a support tool for steering counties, and this model is described in more detail in Section 8.2.

Country-wide competence as a basis for structural reform of government agencies

Ensuring the sustainability of public finances, providing well-functioning and efficient services, and the development of location-independent tools have already had an effect on the development of administrative structures. In the central government agency structure, there is a trend towards country-wide and digitally advanced packages providing services in all parts of Finland. At the same time, the division of tasks between municipalities, regions and central government, the cooperation structures between them, and the way in which the services are provided are changing. In fact, regional and local state administration is increasingly becoming a more closely integrated service network of country-wide

and regional agencies and a centralised system of public administration customer services. The legislative framework for regional and local state administration and its development should be completely reassessed and consideration in the work should be given to these changes. The legislation should provide a basis for the development of central government structures in pace with changes taking place in society and encourage them.

Each central government agency should have a clear core task. The overlaps between the tasks of different agencies should be eliminated and in the allocation of the tasks and in the cooperation between the agencies, consideration should also be given to the changing operating environment, development of services, and the expectations set for central government corporate services. The potential for centralising tasks in accordance with their character should be assessed in the development of the agency structure. When the establishment of new central government agencies or the reorganisation of existing agencies is prepared, enhancing customer-orientation and performance should be the basis for the work. Achieving these goals is facilitated by such factors as country-wide competence, full use of digitalisation and robotisation, flexible and clear structures, economies of scale, and opportunities for cooperation across administrative sectors and organisational boundaries and for network-based operations.

The reforms and development measures identified in the *Virasto 2020-luvulla* (Government agencies in the 2020s) report should be implemented so that the operational flexibility of central government agencies can be enhanced and their operational capacity improved. The development measures should result in a system of public administration characterised by clear structures, steering and management systems, which is capable of change and risk management and which provides customer-oriented services that are mostly in electronic form. A set of guidelines concerning the reform potential in the existing agency model should be prepared as the final report of the review. The guidelines should be adopted in all parts of central government.

The location of the agencies is relevant to the citizens and organisations in terms of the accessibility of the services. At the same time, country-internal migration and electronic services should also be considered in the service needs for the 2020s. The service network of the agencies should be made more compact and public administration customer services should be made more centralised. This helps to ensure a practicable and cost-effective service network that provides a basis for personal services meeting the customers' needs.

Central government corporate services should be built to provide effective support for the agencies' work, also considering small agencies, by providing tailored service packages, user-friendly and cost-effective shared information systems and support and operating models for the agencies' digitalisation and robotisation projects, for shared data management, for procurement and for personnel competence development. Further measures

will be taken in corporate services to enhance customer services and cost-effectiveness and to ensure more transparent pricing.

Central government tasks are, in addition to central government agencies, also carried out by organisations of other types: unincorporated state enterprises, limited liability companies, institutions governed by public law, funds and foundations. The aim is that in each case, the State is organised in the most appropriate manner and that the purposes of use, benefits and limitations of different organisational forms are clear. As a result of the structural reforms, overall state interest should be strengthened. This should be verified on the basis of better performance, improvements in service quality and service structures, clearer management practices or the application of new service models. The structural reforms should be steered within the framework of the targets set by the ministries, and the recommendations on the corporatisation of state activities, the adoption of other organisational forms (central government agencies, unincorporated state enterprises, limited liability companies, funds, foundations and independent institutions governed by public law) and grounds for them issued by the Ministry of Finance.

New types of public-private partnership

Cross-sectoral cooperation based on trust and involving all key stakeholders (public, private, third sector and citizens) provides Finland with a competitive edge internationally. Cooperation across sectoral boundaries provides a basis for joint commitment to difficult changes and reforms. In the future, the cooperation with the private and third sectors as well as with citizens should be based on new types of models steered by life and business events.

The efficiency and effectiveness of public administration can be measured with the well-being of citizens and competitiveness of business operators. The effects of the platform economy and the changes arising from development of work and technological advances on service structures have an impact on public administration tasks and on how they should be carried out in the most appropriate manner by for example prioritising public-sector investments.

Public procurement should serve the achievement of societal policy objectives

The volume of public contracts in Finland is about EUR 35 billion each year. This expenditure item, which is funded from tax revenue, should have an effect that goes beyond the meeting of procurement needs. The objectives set for the purchases are important from the perspective of economic growth and the vitality of business operations. Key strategic objectives in the work to enhance the effectiveness of public contracts include greater consideration of innovations and sustainability (such as environmental objectives),

promotion of social responsibility (such as the employment of difficult-to-employ individuals) and the consideration of other societal objectives as well as supporting the growth of SMEs by providing them with better access to the business opportunities offered by public procurement.

Public procurement should be jointly developed by all public administration actors in Finland by establishing a broadly-based public procurement forum, which would agree on the joint public procurement strategy for the entire public sector. Observing the strategy would be voluntary and be based on a joint view on its goals.

Changes in working life requires new skills

In addition to changing work cultures and supply of labour, changes in working life are a question of what kind of working life we would like to have in the future. Technological advances, digitalisation, robotics and artificial intelligence are some of the factors that will also eliminate some of the administrative work now carried out by humans. At the same time, we also have the chance to create new work creating added value in a new manner. Succeeding in this requires that central government and the rest of the public sector have systemic understanding, possess the ability to perceive wider, interconnected entities and is prepared to cooperate with other parties. In practice, this means that we should introduce new experimental and network-based operating practices that combine preparatory resources, produce quicker results and which incorporate the experience and skills coming from different directions and cooperation producing new solutions.

The changes in working life are also reflected in many areas of competence development because a single basic degree no longer covers the entire working career as one needs more on-the-job learning, development of capabilities and new ways of retraining in the middle of one's working career.

In central government, active development of competences is based on the principle of continuous learning. New forms of learning, such as digital learning, are key to the process. The central government digital learning platform eOppiva will become a permanent activity in 2019. Shared and free-of-charge competence development training contents produced through a variety of means support central government competences and enhance the use of new forms of work and sharing of work in the development of competences and management practices in ministries and government agencies. A great deal of emphasis will be placed on personnel development by producing new digital learning contents and by supporting the mobility of personnel and know-how. This requires that the criteria for the appropriation allocated for the development of professional competences in government agencies are reassessed so that the impractical funding for

educational compensation process will be reallocated so that it can primarily be used for enhancing new types of personnel mobility and competence.

Mobility - mobility of humans, mobility of competence and mobility of information - is the key instrument in the process of enhancing competences. The aim is that central government personnel would feel that, in addition to working in a specific agency, they are also working for the state. The focus of work and management should shift from the performance of individuals to joint network-based work and its management. It should become possible to use personnel competence in a flexible manner, in accordance with core needs and allowing continuing change and renewal. Learning and professional development should be an important part of the job description of each public official. Learning is increasingly achieved by working: as a collaborative effort and across organisational boundaries, using job rotation and actively combining different types of competence and knowledge. Central government actors should also introduce new ways of work and learning crossing administrative boundaries. These include a quick and agile task force-type work model in which the lessons learned from the situation room concept are used. In this model, the most competent individuals are brought together for a specific period to examine a jointly identified phenomenon. This operating approach serves as an instrument refining the competence of public officials and as an environment for the processing of joint experiments and projects.

Public-sector management practices should be developed on a systematic basis

Public-sector management is more strongly built on a joint value base in which the emphasis is on the principles of good administration and the requirements of professional management. The paradigm of public-sector management is undergoing significant change and the emphasis in it is on comprehensive operational management based on the Government's societal objectives and the needs of citizens and customers. In management, the emphasis should be on inter-administrative objectives and cooperation between individual sectors, administrative branches and agencies. Rapid changes in the operating environment are bringing in new priorities to management practices. The most important of these are the emphasis on knowledge-based management, digitalisation and artificial intelligence, and the role of adequately uniform and dynamic operating culture and trust between individual actors as key resources.

Individuals holding senior managerial positions in central government play a key role in the implementation of the objectives set by the Government. In the future, an increasing proportion of the people in senior managerial positions are professional managers who are selected to their posts on the basis of professional recruitment, inter-administrative mobility and systematic development. Growing into a managerial position is based on the willingness to bear responsibility as a member of the state community and the

determination to develop one's competence in different public administration tasks. In the future, increasing mobility means that there will be more emphasis on the systematic development of managerial competence and career management. At the same time, performance management will be made into a more unified and professional concept. This includes the clear personal goals set by the managers for themselves, assessment of performance and leadership, training and rewards. The aim is that advancing towards higher managerial positions should depend on results, determined self-development and a strong commitment to high level civil service ethics.

The Ministry of Finance also supports public administration reforms and the development of management practices by providing senior management members with interaction networks and coaching programmes. Central government management training programmes should be evaluated and the new system should be based on coaching programmes and peer learning, comprising programmes providing leadership coaching, training supporting the renewal of the public-sector management paradigm, development teams and programmes enhancing internationalism. These are developed in such programmes as Uudistaja (Reformer), which was launched by Sitra and which is now the responsibility of the Ministry and HAUS, and in other training programmes, which also have other public-sector managers and organisations as customers.

Development of state-owned properties should continue

Systematic concentration of the properties belonging to the state and state-owned companies should continue also over the coming years. In the ownership and maintenance of the state-owned properties, measures should be taken to ensure adequate preparation and security expertise for all central government actors on a centralised basis. The expertise and responsibilities of Senate Properties in these areas should be substantially enhanced. At the start of 2019, a number of state-owned properties (especially those located in state-owned railway areas) were transferred to a subsidiary of the unincorporated state enterprise Senate Properties established for the purpose. The purpose of this measure is to ensure coordinated development of state-owned properties and that different actors have clear roles. Additional prerequisites for building activities in railway areas in cities and towns should be provided through ownership transfers over the next few years by preparing and implementing arrangements concerning railway properties that are released for non-operational use and owned by the Posti Group, VR Group, the Finnish Transport Infrastructure Agency and Senate Properties.

7.3 Information policy and digitalisation provide a basis for reforming services

Changing needs of public administration customers, new forms of information use and increasingly networked operating practices set new requirements for interaction between actors. For example, the commitment to requesting customer-related information only once requires a networked public service provision approach founded on the service chains of a large number of actors. This requires better knowledge of the customer's needs, better management of the customer information and providing the actors involved with clear responsibilities. Customers expect more and better services on a 24/7 basis and the activities are becoming increasingly networked. The use of shared information systems and the provision of shared services increase the need for better-quality information, uniform information-management procedures in different government agencies and information interoperability. Secondary use of information in private-sector and public-sector services, in management and steering must be made possible. This requires uniform information-disclosure principles and practices and criteria for the chargeability of the information. When these are formulated, consideration should be given to the new mechanisms of the data and platform economies.

Effective information management in conjunction with the carrying out of public administration tasks and the provision of public services enhances the performance of the government agencies, one of the fundamental principles of good administration, and strengthens citizens' trust. In accordance with the service principle, government agencies must work to ensure smooth operations by ensuring the quality, availability and usability of the official data resources and to respond to the information requests received by government agencies. The information in the possession of different actors and the solutions supporting its use could be utilised in a broad range of different services and in the planning and implementation of reforms much more extensively than at present. Advances in technologies for using information, such as artificial intelligence, are also making issues concerning the management and quality of information more important.

Sustainable reforms in operating practices and the new opportunities created by artificial intelligence require internationally agreed ethical rules and legal principles. At national level, we can speed up the change by reforming the general legislation and core legislation.

Information policy shows the way for using information value

The information policy comprises a set of measures for promoting and steering good management and effective use of information on a long-term basis. On 5 December 2018, the Government submitted a report to Parliament on information policy and artificial intelligence (VNS 7/2018 vp).

Public administration information can serve as a basis for large-scale business operations. There should be clear legal provisions on the prerequisites for using the information and the rights of the individuals must be safeguarded. When building its national information policy, Finland is also formulating its views on topical information-policy issues. By building a consistent information policy, in which consideration is given to the roles, responsibilities and rights of the different parties in the information chains, Finland can act as a pioneer in information use and enhance its competitiveness in Europe and in the global economy. Finland is playing an active role in the EU in the domestic preparation and implementation of legislative initiatives and programmes concerning data and information policy.

Public administration is expected to produce legislation providing a basis for information use, properly justified decisions, and cost-effective and high-quality services based on information. Succeeding in this requires inputs in the capacity to anticipate future developments, assessment of the effects of decisions, correctly targeted resource steering, flow of information across administrative boundaries and the engagement of citizens. For all this, broadly based and properly analysed information, knowledge management, knowledge-based management, good information practices, information responsibilities and an advanced information culture are required, backed up by a consistent information policy.

The objective of the information policy is that information-based public services and activities can be provided in a more high-quality, high-performance and effective manner. Policy measures help to improve the disclosure and use of information between public administration customers, government agencies and service providers. Information should only be requested once and measures should be taken to make maximum use of the information already in the possession of government agencies and to reduce unnecessary exchange of information in service processes.

Most of the public administration activities are information-intensive and they are increasingly performed in real time. Quality and up-to-date nature of the information are emphasised in the carrying out of government agencies' activities and the provision of the services. Increasing use of information in decision-making and services also highlights this requirement. The absolute requirement is that the information used and produced by government agencies is as accurate and up to date as possible, and that the measures promoting this objective are in place.

Information policy measures, such as providing open access to information, facilitating its use or improving its quality, may maintain or accelerate the value cycle of information and thus increase the economic and societal value of information for individuals and society. Information can be analysed and examined, extending from machine language data to information that can be understood and interpreted by humans, and the knowledge,

understanding and wisdom based on it. In information-policy measures, consideration should be given to the different forms of information.

Public administration information management should be on a more unified basis

High-quality information management and the openness of information management constitute the basis for the implementation of the citizens' information-related rights. The purpose of information management is to promote the openness principle so that the public documents produced by government agencies are easily accessible. Interoperable information infrastructure, which is based on interfaces, and a jointly managed information definition, disclosing information from the data resources held by government agencies and the information-disclosure methods connected with them serve as the prerequisite for effective use of information in public services, business operations and third-sector activities. The purpose of government agencies' obligations is to ensure openness and good information management practices. Both of them require proper access to, usability of and protection of data resources. The updated general information management legislation should be implemented in a comprehensive and effective manner throughout the public administration so that adequately uniform procedures, smooth exchange of information between service processes, uniform data security level, and the capacity of the information management to use artificial intelligence can be ensured. On 5 December 2018, the Government submitted a proposal to Parliament for an Act on Public Administration Information Management (HE 284/2018). The roles of the actors promoting the management and use of information should also be clarified.

The current situation in which public administration information management is incoherent and steers information management, multi-perspective, fragmented and partially incoherent regulation has led to multiple information-management structures and overlapping management procedures. Furthermore, the variety of different obligations have led to more problems in such areas as information access and interfered with the interoperability of information systems. Changes in the operating environment require uniform information security requirements and procedures. Risks should be assessed on a continuous basis so that that the correct dimensioning of the information-security measures and the effectiveness of the measures can be verified.

Use of artificial intelligence is based on a well-functioning information infrastructure and for this reason, the quality and accessibility of the data available to the systems using artificial intelligence must be ensured. The information format should be sufficiently structured and described with metadata to enable the identification, selection and combination of information with digital data flows and data flows using artificial intelligence. There should be a uniform understanding of the information and the meaning of the information should also remain unchanged when it is transferred. Linked data and semantic

technologies are EU-supported methods for creating interoperability and for ensuring more effective data use. Extensive introduction of joint instruments and procedures for information definition can ensure the quality, interoperability and availability of data. Finland is well placed to become a pioneer in the use of the semantic interoperability potential as part of effective public services, use of information and digitalisation of public administration processes.

More effectiveness and higher productivity through digitalisation and artificial intelligence

Basically, the development of public administration activities always involves the use of technology. Fully digital operating processes and tools provide opportunities for increasing administrative effectiveness. Incorporating more digitalisation into specific functions and tasks usually leads to more extensive productivity improvements within the sphere of the developed functions, in other government agencies or in society at large.

Achieving this requires a shift in focus from the monitoring of costs to the monitoring of the service effects and to the examination of the development funding and the benefits arising from it as investments boosting the effectiveness of the activities. Development promoting joint objectives should be supported with projects crossing the boundaries of administrative branches. This operating approach should be strengthened with a steering model for digitalisation investments, through which the preparation of the funding decisions for major digitalisation development projects funded from the Budget should be channelled. Adopting of a more investment-oriented thinking requires the formation of a comprehensive and shared information base on the areas for investments and comparisons between their productivity potential so that the renewal process can be steered in a strategic manner.

In order to support and ensure the digitalisation of central government activities and to achieve genuine improvements in productivity, an analysis of productivity and digitalisation potential covering all administrative branches, their tasks and their organisations will be conducted by the start of 2021. The implementation of the development priorities identified in the analyses should be supported by allocating resources, on a centralised basis, to projects improving digitalisation and productivity (centralised investment funding). The implementation of the one-billion spending-reduction programme laid out in the General Government Fiscal Plan should be continued by determining the achieved savings and by adding one million euros to a joint development project investment item for each realised savings of six million euros.

Additional productivity benefits can be achieved in many public administration services by seeking synergies in the joint service offerings of central government, counties and

municipalities. This would concern the service network, the proximity of services and investments in service systems. The work to promote digitalisation in municipalities and the development of joint services based on the partnership between local and central government should also continue in the next government term. Central government development and digitalisation measures directed at municipalities should be managed in an inter-administrative manner and in a more coordinated and function-oriented fashion. Legislation and development projects concerning digitalisation in municipalities should form a uniform entity that supports the development of local government activities and finances as a whole. Updating of provisions and financial support granted to municipalities should always go hand in hand with adequate development work supporting their implementation.

Digitalisation also provides a basis for public administration to give up some of its administrative tasks and increasingly assume the role of an enabler. Amid the changes in the activities and the operating environment, the role of service users in the development of the activities and the operating environment is highlighted: service users are becoming active actors with individual service paths.

Making digital services the most attractive service channel

Public digital services provided in Finland have constantly ranked at top of international comparisons. Suomi.fi brings together the services provided by all authorities, combining them with the different life situations of citizens and the different stages of companies' operations. Joint Suomi.fi support services allow communications, authorisations and identification required in the services. Finland has created a country-wide operating model for digital support to help all those requiring support in the use of digital services. Participation of citizens and their equal opportunities to be active users of digital services can be enhanced by strengthening regulation and operating models, and by creating new services for the management of one's own information.

Digital services allow citizens and companies to access public services and to manage official matters anywhere and at any time. Cost-effectiveness of government agencies can be enhanced through digitalisation and by keeping the services up to date. To ensure the implementation of the benefits, government agencies are obliged to provide citizens and companies with accessible and high-quality digital services as the first option. The digital service channel should be available to the customers at all times. In the future, business operators will be obliged to use digital services. Citizens will not be obliged to do the same but they will be provided with guidance and support in the use of digital services so that they will become a secure and the most widely used service channel, which enhances equality between citizens.

The development of digital services and e-services is closely connected to the issue of ensuring more efficient information management and information interoperability. Fewer but better services should the aim. More can be done to encourage users to give priority to digital service channels and operating practices by providing information and especially by offering high-quality and easy-to-use services. The new quality criteria for digital and e-services will encourage service providers to consider the factors playing a role in good customer service experiences. The operating practices of different authorities in connection with the use of digital services should also be harmonised so that the services would be easier to use. It is important to develop the shared functioning of the e-services support services and the digital and e-services provided by government agencies. The definition of the targeted uniform operating practices also serves the more extensive legislative reform concerning the digital and e-services, which will be launched in the coming years.

Central government should provide citizens and companies with a secure digital identity for digital and e-services. Managing the identity requires secure and up-to-date shared solutions for relaying and identifying information. Central government should provide everybody with a digital identity and as part of the services concerning the management of the identity, the roles of the government and business operators should be determined. The unique identifiers, such as the personal identity code, should be updated in accordance with these requirements. The identity management model should provide a basis for individual's informational self-determination. The digital identity management model can also provide a basis for new business opportunities. Electronic identification methods should be available to everyone. A requirement in identity management and identification is that the way in which individuals manage their identity is updated and national identification solutions are developed by taking into account the European operating environment.

New technologies should be introduced in an ethically sustainable manner

New technologies are considered change drivers that lead to new operating practices, tasks, processes and business models and that are often used to achieve productivity improvements. Promotion of digitalisation should be supported by policies and expertise concerning the technologies applied in different subsectors. New technologies, such as artificial intelligence, should be used to produce services in a seamless and human-oriented manner.

The aim of the artificial intelligence is to achieve a new revolution in information processing. When decisions are made on the use of software robotics and artificial intelligence in government processes, it should be assessed which of the processes should be automated and how. This is because artificial intelligence is not a single technology. In addition to taking into account the desired benefits, openness, risks and validation of the technology

and enhancing of skills are also increasingly important considerations in the development of artificial intelligence. Support should be given to the use of a variety of expertise areas, such as engineering sciences, computer science, cognitive and neurological sciences, linguistics, physics, mathematics and philosophy in the development of artificial intelligence. It should be ensured that Finland will take part in international processes in which ethical frameworks are sought for the use of artificial intelligence. Use of artificial intelligence often requires that particular consideration to it is given in legislation. Transparency, responsibility and extensive benefits to society at large should be the values of a good artificial intelligence society.

In the information policy, consideration should be given to the ethical issues concerning artificial intelligence and robotics and their use. Finland takes part in the international cooperation on these issues and plays a role in the preparation of the ethical frameworks. Finland also promotes international solutions supporting trust and cyber security.

Secure digital services

Centralisation of service provision in which the emphasis is on cost-effectiveness, and increasing use of new service production models, such as cloud services, also pose challenges to how the continuity and security of the services can be best managed. There is a need for clear legislation-based policies on the use of increasingly diverse services and service models in functions critical to the functioning of society. There is room for improvement in the ability of the responsible authorities to identify the security risks connected with different types of solutions and the challenges to operational continuity. In an increasingly networked society, everybody should better understand the effects of their own choices on other parties in the same operating environment. In public administration, there is a need for strategic-level management and policies that steer the development of the information, information networks and information systems critical to the functioning of society. (For more details of this topic, see Section 11.4)

7.4 Knowledge-based management as part of the development of public administration

Knowledge-based management is part of the concept of knowledge management and the focus in it is on knowledge-based decision-making and on providing prerequisites for it. Knowledge-based management should be strengthened in central government, which requires a consensus between ministries on the development of the activities and closer cooperation between key group actors. Promoting knowledge-based management also requires the allocation of adequate resources for the purpose.

In the targeted state, knowledge-based management is a well-established management and operating practice, which is extensively applied in public administration. In the next government term, strengthening of knowledge-management should be primarily aimed at generating value added for the enhancing of productivity in agencies and service processes and for business operations. This requires that consideration in the management is given to the use of information and information analysis as part of the preparatory processes and that skills and capabilities in systematic information analysis are enhanced. Promoting knowledge-based management also requires that public administration corporate data sources are opened and the data is made accessible for public administration use and, in applicable parts, to others.

The capacity of central government, local government and future county government to use large and extensive data resources in steering and management should be strengthened so that the data resources in the possession of different parties are made available for shared use and the information is converted into usable form with the help of effective processing methods, such as artificial intelligence. This will strengthen the steering and management of public administration and its finances.

8 Municipalities and counties should ensure equal access to basic services and enhance their efficiency

- Growing gaps are arising between Finnish municipalities in population trends, provision of services and vitality. The regional government, health and social services reform will also mean major changes in the roles, tasks and finances of municipalities. These changes raise questions concerning the equality of access to services for citizens and their financing as well as the effective use of public resources. The problems faced by municipalities of different sizes and in different situations cannot be solved using the same approaches. There are good grounds for producing a comprehensive situational assessment of the future prospects of municipalities and it would be logical to use this assessment as a basis for policy decisions based on parliamentary preparation and extending over several government terms.
- Cities play a key role as engines of economic growth, employment and wellbeing. The long-term nature of the urban policy and the partnership between the Government and cities should be expanded through a broad-based and a more coordinated urban policy programme.
- Implementation and continuation of the regional government,
 health and social services reform should be ensured in the next
 government term so that the responsibility for providing health
 and social services can be transferred to bodies that are stronger
 than municipalities and the objectives concerning the enhancing of
 the sustainability of public finances and ensuring equal health and
 social services are achieved. The reform should facilitate the development of horizontal and phenomenon-based services. In order for

- the reform to be successfully implemented, preparations already made at the regional level should be fully exploited.
- In the future, special attention should be given to interfaces between local and county government and suitable approaches to providing services should be assessed, such as whether a certain task could be shared by a county and larger municipalities.
- Public finances will not be able to cope with a situation where municipalities and counties are provided with additional tasks or their existing tasks are expanded. No substantial additions to the existing tasks and obligations should be made during the next government term. If, however, the introduction of new tasks is considered appropriate, the Government should allocate sufficient funding for the new or more extensive tasks or reduce the other tasks of municipalities or counties in the same proportion.
- Municipalities have substantial real estate assets and changes in these assets are an important factor in local government finances.
 Most of the buildings owned by municipalities have reached the age where they are in need of renovation. Enhancing the building stock requires more determined and systematic decision-making in municipalities. Central government can support these efforts by improving the usability of the knowledge base for municipal building stock and the conditions for knowledge-based management.

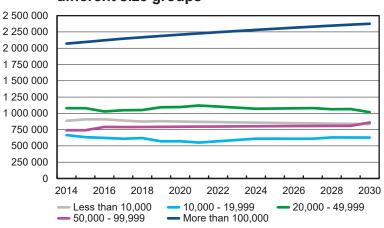
8.1 Growing gaps between municipalities require attention

The rapid ageing of the Finnish population and migration are creating growing gaps between municipalities

There are substantial differences between Finnish municipalities in terms of their size, conditions and financial capacity. At the moment, population mainly grows in the regional centres and in the municipalities neighbouring them. At the same time, however, population is ageing and shrinking in northern and eastern Finland and in inland municipalities in the western parts of Finland. Between 2013 and 2017, population decreased in more than 150 municipalities each year. This phenomenon is highlighted by the fact that nearly 70% of Finland is sparsely populated. This trend, combined with the tightness of public finances in recent years, has increased the risks concerning equality in the access and quality of services.

Demographic differences between municipalities have also grown. Urban areas and large cities (population of more than 100,000) account for an increasing proportion of the Finnish population growth and young age groups. At the same time, population outside urban areas and in small municipalities is basically expected to decline or remain at current levels (See Figure 8.1). It should be noted, however, that there are also substantial differences in population projections between municipalities of similar size.

Figure 8.1
Population projections for municipalities of different size groups



Source: 2015 population projection of Statistics Finland

There is already a large number of municipalities outside urban areas where the average age of the population is very high and where the dependency ratio is thus weak. Most of these municipalities have a population of less than 5,000. As recently as the early years of the 2000s, there were no municipalities in Finland where more than one third of the residents were aged over 65. At the moment, there are already more than 50 such municipalities and the figure is expected to grow in the coming decades. Demographic differences between municipalities are also reflected in birth rates. Finland has a growing number of municipalities where the size of each new age class remains fairly small (See Figure 8.2).

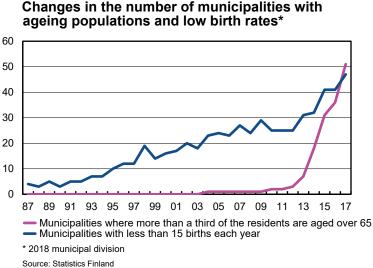


Figure 8.2 Changes in the number of municipalities with

Especially the municipalities with shrinking populations are in trouble

Especially in the municipalities with a shrinking working-age population, the tax revenue base is continuously weakening. Sooner or later, this trend will necessitate cuts in the service networks in these municipalities and their risk-bearing capacity will also decline (for example, in connection with unexpected investment needs). At the same time, transferring the responsibility for health and social services from municipalities to counties will increase the predictability of local government finances and provide municipalities with better opportunities to keep costs under control. However, in many of the municipalities with shrinking populations, the dismantling of services and service networks has already reached the stage where there are no longer any costs to cut. Moreover, in many of these municipalities, the municipal tax rate is already so high that any further increases will soon seriously threaten the equality between citizens. Low birth rates and shrinking age classes will, however, continue to create pressures to cut the early-childhood, pre-primary and basic education networks, especially in municipalities with declining populations.

Finland still has a large number of small municipalities with a low risk-bearing capacity even though the municipal mergers carried out in the 2000s have reduced the number of the smallest municipalities. There have been few changes in Finland's municipal structure during the drafting of the regional government, health and social services reform. Two municipal mergers took place at the start of 2017 but there have been no mergers since then. At the moment, there are only three merger reviews in progress or in preparation.

The vitality of small municipalities in particular threatens to decline further as their populations and tax revenues shrink, and in many municipalities, the financial capacity may also be too weak to support the health and social service obligations remaining after the transfer of these services, or the investments required by them.

There are regions where not even municipal mergers can provide a solution to shrinking vitality and problems in local government finances because the same problems apply to all municipalities in the region. In some areas, mergers might improve the situation but a major obstacle to voluntary mergers between municipalities is that the mergers could involve municipalities in a particularly weak financial position or municipalities where economic indicators are approaching the Figures of a crisis municipality. At least in such situations, the Government should support the merger plans by providing merger grants. In some cases, the long geographic distances between municipalities make mergers less practicable.

As the revenue bases and services are shrinking in municipalities with declining populations, cost pressures are growing in the large cities and municipalities in urban sub-regions where the population is concentrating.

An extensive situation assessment is needed for the management of municipal differentiation

The regional government, health and social services reform as well as the municipal differentiation, which is mainly the result of demographic trends, have a significant impact on the roles of municipalities and their financial capacity. The regional government, health and social services reform will reduce the tasks of municipalities, ease cost pressures and alter the financing structure. However, even after the reform, demographic trends will impact the vitality of municipalities and their capacity to provide services.

Changes in the operating environment raise questions concerning the equality of statutory services for citizens and their financing as well as the effective use of public resources. As the challenges facing the municipal sector are very diverse, a comprehensive situation assessment based on the latest population projections and separate reports and studies should be produced. Only on the basis of such an assessment, policy choices based on parliamentary preparations and extending over several government terms should be made to determine how the various problems facing municipalities with growing populations and those with shrinking populations can be managed.

It is clear that the problems facing municipalities of different sizes and municipalities finding themselves in different situations cannot be solved using the same approaches. Instead, a set of complementary measures would be needed. It should be examined how funding for municipalities and the narrowing of the gaps between them could be developed in accordance with a variety of needs and what could be achieved by strengthening municipal structures.

It should also be assessed as to what the constitutional preconditions are for providing statutory basic services by different means in different municipalities and whether municipalities could have different tasks in the future. Especially municipalities with small populations have until now tried to ensure the provision of statutory tasks through cooperation with other municipalities. More extensive cooperation has, however, led to a situation where municipalities have less power and their residents fewer democratic means to influence the manner in which the services are provided and how the economic resources of the municipalities are allocated. If there is further significant differentiation of local government tasks, the effects of the differentiation from the perspective of democracy and the participation and equality of municipal residents should be assessed. It should also be assessed how the differentiation of tasks affects local government finances and funding.

More consideration should be given to the effects of urbanisation

Cities play a key role as engines of economic growth, employment and wellbeing. The 11 largest urban areas in Finland account for about 70% of the country's economic activities. The Government's urban policy has been characterised by a silo mentality and short-term and fixed-term development measures. In order to strengthen the urban perspective, Finland needs an inter-administrative and a long-term approach, development measures extending over several government terms and a better assessment of the policy measures. This would help to produce a comprehensive overview of the Government's urban policy and its measures concerning cities, and to implement them in a more consistent manner. At the same time, urban research should be used more extensively in support of decision-making.

The Government Programme of the next Government should include a comprehensive urban policy programme. A comprehensive urban policy would mean a policy covering different administrative branches, which sets out objectives for the national urban policy and measures for different city categories: Helsinki region, large urban areas, regional centres and regional urban hubs. The programme should be based on more active inter-administrative cooperation within the Government covering a broad range of different sectors and a common view with cities on concrete development needs in urban areas. At the same time, the existing cooperation structures should be evaluated and new ways of conducting a dialogue with cities established. The measures laid out in the urban policy programme should also be taken into account when the municipal policy as a whole is examined.

As part of a comprehensive urban policy, central government should continue to conclude agreements with urban areas. Central government currently has both MAL agreements (agreements on land use, housing and transport) and growth agreements with municipalities in urban areas. MAL agreements cover the four largest urban areas in Finland (Helsinki,

Tampere, Turku and Oulu). In these areas, rapid growth, a large commuting area and the provision of reasonably-priced housing require joint measures by the state and the municipalities located in the urban area.

The purpose of the growth agreements is to boost the growth and international competitiveness of business operators. Growth and competitiveness themes as well as the MAL themes are closely connected. Growth agreements have been concluded with cities, growth zones and theme-specific city networks. The agreement policy is a well-established part of the cooperation between municipalities in the urban areas and between urban areas and the state. The agreement policy should be updated by for example, setting out clearer and more ambitious goals for the measures taken by the urban areas and the state.

8.2 The continuity of regional government, health and social services reform should be ensured

The need for the regional government, health and social services reform is clear and implementing the reform requires continuing legislative work

There are good reasons for transferring the responsibility for the increase in demand for services and costs arising from the weakening age structure to service providers that are stronger than municipalities. This is a basic prerequisite for ensuring that the key objectives of the regional government, health and social services reform (enhancing the equal provision of services and slowing down of cost increases by three billion euros) can be simultaneously achieved.

The efforts to reform Finland's health and social services structures have been continuing for more than ten years. The solution has been sought by reforming the municipal structure, by expanding cooperation between municipalities and now, in the latest attempt, by transferring tasks to multi-sectoral counties, a new self-governing level. From the perspective of improving the overall efficiency of public administration, it has also been considered necessary to transfer other tasks to counties from ELY Centres, TE Offices, Regional State Administrative Agencies, regional councils, and other joint municipal authorities and municipalities.

The solution for the problems concerning the provision of health and social services has been based on the integration of basic and specialised healthcare and social services, in which the aim has been to coordinate services, ensure correctly-timed and seamless treatment and to achieve cost benefits. In addition to the centralisation of the responsibility for service provision, the integration also requires the integration of information, which should be supported through ICT solutions.

Transferring the responsibility for providing health and social services from municipalities to a new administrative level and combining this with the transfer of other tasks has required a substantial amount of legislative drafting work and amendments to existing laws. The establishment of the counties has required the drafting of provisions on structures, administration, financial management and funding for the new administrative level. Moreover, as part of the legislative work, measures have been taken to ensure the transfer of the personnel and assets to the counties, while at the same time, the financial position of municipalities has been safeguarded as part of the reform. Even after the approval of the legislative package, which is currently under consideration in Parliament, the implementation of the reform will also require changes to special legislation in the next parliamentary term.

Finland cannot afford to stop the reform

With the start of the new government term, it should be ensured that the regional government, health and social services reform will continue and that ministries and counties are provided with adequate resources to implement it so that the entry into force of the reform is not unnecessarily delayed. From the perspective of cost-effective use of public funds and for the reform to be successfully implemented, the preparations already made at the regional level should be fully exploited. When the content of the reform is developed, there should be particular attention to the integration of services, conditions for knowledge-based management, opportunities for digitalisation, support services generating value added, and the functionality of partnership-based and interaction-based steering.

Ministries and counties are jointly responsible for implementing the reform and for ensuring that its objectives are met. Achieving the objectives set for the reform requires that the change management process is successful, both at Government level and in the counties. There must be clear responsibilities and reporting relations at both levels.

The gradual transition of the regional government, health and social services reform to the implementation stage is already considered in the organisational structure of the reform. All ministries supporting the implementation of the regional government, health and social services reform are involved in the joint Government implementation process and they take part in the work of the project management team and the situation centre under the coordination of the Government-appointed project manager. The preparations are taking place in close cooperation with counties in a large number of different networks, change programmes and service centres. Future commitment of the ministries to the implementation management model should also be ensured.³¹

³¹ The management model includes the project management team, work of the situation centre and a joint appropriation item.

At the same time, preparations of a multi-sectoral interaction-based steering process between the Government and the counties are also continuing. This will serve as a novel operating model linking the Government and the counties. The aim is to build a process linking county activities and finances that is on a long-term basis, is based on the partner-ship between counties and the state and spans the boundaries of administrative branches. Ministries must be able to engage in genuine cooperation in the steering of the activities and finances of the counties. The key issue regarding the success of the reform is to seamlessly link the steering based on close cooperation between ministries with the preparation of the General Government Fiscal Plan and the Budget.

The division of tasks between central government, county government and local government should be critically reviewed

Municipalities and counties will have joint tasks and there will be a number of interfaces between them. However, the proposed legislation will only allow limited transfers of tasks between municipalities and counties because no optional functions for the counties are planned. This means that municipalities can only transfer tasks to a county if all municipalities in the area agree on the transfer with the county, the task is connected with the statutory tasks of a county government and the municipalities have allocated sufficient funding to the county for carrying out the task. At the same time, under the proposed legislation, county government tasks could not be transferred to municipalities but special legislation to permit such transfers would be possible.

The proper way of managing the statutory tasks and services should be critically reviewed. It should be determined which administrative level is best placed to manage each task or could the management of a task be shared between a county and large municipalities. After the county government has become operational, it should be monitored how the service provision and cooperation with municipalities will function and what types of cooperation structures will arise. Possible inadequacies and overlaps in the functions and the way in which the residents' basic rights are implemented should be assessed by conducting a follow-up survey. The legislation should be developed on the basis of the assessments.

8.3 Municipalities and counties should not be provided with any additional tasks or obligations

Public finances and local government and county government finances as part of them would not be able to cope with a situation where municipalities and counties are provided with additional tasks or their existing tasks are expanded. During the next government term, there should only be additions to the existing tasks and obligations in exceptional cases. If, however, additions are considered appropriate, there should be a reduction in the other tasks of local and county government in the same proportion. Before policy decisions on any new services or other tasks are made, their effects on local and county government finances and on the sustainability of public finances should be realistically assessed. The impact assessment carried out in connection with law-drafting should also be improved.

With the regional government, health and social services reform, one half of the about 600 tasks of municipalities will remain a local government responsibility and most of the remaining tasks will become the responsibility of the county government. The willingness to ensure the availability, quality and equality of services has been the main motivation behind the measures to increase the number of statutory tasks and the obligations steering them.

There are no painless ways to reduce the number of local government tasks and obligations and it has proved impracticable to list the services that should be abolished. It is often difficult to implement legislative changes that would abolish tasks or services that have once been introduced on a statutory basis. Moreover, because of local self-government, making a task non-statutory does not always mean that all municipalities would abolish it. Making a task or obligation non-statutory would also quickly raise the question of equality of citizens in different parts of the country.

In practice, it is impossible to set euro targets that could be achieved if a specific legal provision were repealed. The situation becomes even more difficult if at the same time, new laws are introduced, especially if their concern the same set of tasks. In that case, the changes might even lead to cost increases in overall terms.

8.4 There is room for improvement in local government financing system and financial regulations

Substantial changes will be needed in the system of central government transfers to local government

The main aim of the system of central government transfers to local government is to ensure that the public-sector basic services provided by municipalities are available in all parts of Finland irrespective of one's municipality of residence and as laid down in the law. This is done by reducing the differences in costs arising from the provision of the services and the differences in the revenue bases between municipalities. The cost-difference equalisation calculations are based on the number residents, the age structure and a variety of circumstantial factors. Gaps in the revenue bases between municipalities are reduced on the basis of tax revenue.

Central government funding to municipalities is channelled into the system through the equalisation of cost differences. A tax-revenue based equalisation of the central government transfers, which can be characterised as a revenue transfer between municipalities, is added to this. The system is supplemented with a discretionary increase in central government transfers granted to municipalities in temporary financial difficulties. The appropriations allocated for this in the Budget have varied over the years.

The existing system of central government transfers for municipal basic services is based on the central government transfer reform, which entered into force at the start of 1997. This reform introduced the calculation-based system used today. In 2010, this system was replaced with the system of single-pipe central government transfers. Under this reform, all central government transfers for basic services were placed under the administrative branch of the Ministry of Finance. Major changes to the central government transfer criteria for municipal basic services were also introduced at the start of 2015.

As part of the regional government, health and social services reform, there will be substantial changes to local government tasks but under the proposed reform, only the essential changes are made to the system of central government transfers. It is proposed that with the regional government, health and social services reform, a total of 70% of the imputed central government transfers to municipalities should be transferred to county government. Early childhood education, basic education, library and cultural services as well as the promotion of wellbeing and health will be the future priority areas in municipal basic services. This marks a major change to the current system and for this reason, the calculation criteria for the central government transfer system applying after the entry into force of the regional government, health and social services reform should be updated more extensively so that they would be in accordance with the new situation. The change

will have a wider effect on local government financing, and for this reason, in addition to the system of central government transfers, other local government revenue, especially the tax revenue, should also be examined.

On the other hand, gaps between municipalities will continue to grow regardless of the regional government, health and social services reform, especially as a result of demographic trends, and for this reason, the overall assessment of the financing system is also part of a wider debate on the roles and tasks of municipalities in the future. In fact, the overall incentives for cost-effectiveness and for enhancing vitality provided by the financing system should also be considered as the system is developed. Tax revenue accounts for a large proportion of local government revenue, especially in cities, and for this reason, when the system of central government transfers is developed, it should also be examined what needs and could be done to improve the tax system.

The ratio between the equalisation of costs and revenue should be assessed

In the 2015 central government transfer reform, the focus of the system was shifted from the equalisation of costs to equalisation of revenue. After the entry into force of the regional government, health and social services reform, there would be substantial changes in the ratio between cost and revenue equalisation, unless separate decisions on the matter are made. This is because a large proportion (70%) of the imputed cost-based central government transfers, which are now paid to municipalities, would in the future be appropriated to counties. At the same time, the euro amounts of the central government transfer equalisation based on tax revenue would remain more or less unchanged. Central government transfers based on tax revenue (revenue equalisation) now account for about nine per cent of all central government transfers. After the entry into force of the reform, the tax-revenue based equalisation of central government transfers would account for about one third of the total transfers.

When the system of central government transfers is developed, more consideration should be given to the issue of differences in costs and needs and revenue equalisation. Permanent chances in demographic and business structures also have an effect on the relative position of municipalities in the equalisation. For example, the revenue-based equalisation deduction now benefits a decreasing number of municipalities, a result of changes in income tax bases and corporate tax revenue. However, the individual parts of the system of central government transfers cannot be assessed separately and for this reason, the causes and effects of the changes should be assessed from different perspectives. International experiences can also be used in the assessments. For example, the financing model used in Sweden is mainly based on revenue equalisation and the equalisation of costs between municipalities supplementing it.

When the ratio between cost and revenue equalisation is examined, it should also be assessed whether the existing gaps in financial resources between municipalities are too wide from the perspective of ensuring equal access to services when consideration is given to such matters as the range of tax rates. After the entry into force of the regional government, health and social services reform, the differences between municipal tax rates will remain unchanged even though the tax rates will be reduced by more than half from their current levels. This means that the relative range of tax rates will increase substantially, compared with the current situation.

The incentiveness and coverage of the system of central government transfers should be reviewed

The basic structure of the system of central government transfers encourages municipalities to provide services in a cost-effective manner. If a municipality is able to provide the tasks for which central government transfers are granted at a lower than imputed cost, it can keep the difference. In a reverse situation, a municipality is responsible for the costs exceeding the imputed costs.

Occasionally, other incentive elements have been proposed to the system of central government transfers and some of them have also been implemented. It is clear that municipalities also have strong incentives to increase their tax revenue. As the economic situation in municipalities is changing, incentives that might be usable in the new situation should be considered. At the same time, the effectiveness of the existing incentives should also be examined.

When the system of central government transfers is developed, consideration should be given to the overall functioning of the system and the way in which the changes in tasks arising from the regional government, health and social services reform impact municipalities' financial capacity and their prerequisites for managing their statutory tasks (financing principle³²). As the tasks of municipalities are changing after the entry into force of the regional government, health and social services reform, such matters as municipal vitality factors will become even more important. When the system of central government transfers is assessed, it should also be examined whether these tasks should be incorporated into the system.

³² The financing principle means that when allocating tasks to municipalities, the state must ensure that municipalities have adequate resources to carry out their tasks. The financing principle was recognised as a valid principle in Finland as part of the fundamental rights reform in the early 1990s and it has been approved by the Constitutional Law Committee as part of its established interpretation practice. The financing principle is considered part of local self-government and it ensures that municipalities can genuinely decide on their budgets. The financing principle has also been incorporated into the European Charter of Local Self-Government in a manner that is binding on Finland.

The introduction of a wellbeing and health promotion coefficient has been considered as part of the regional government, health and social services reform. The content of the criterion has been developed but its knowledge base remains incomplete and complex. Promoting wellbeing and health is important but if added as a criterion to the system of central government transfers, it should be as transparent as possible and be based on established statistical data.

The compensation for tax losses has reached substantial proportions

After 2010, the compensations for tax losses paid as part of central government transfers for municipal basic services have grown to more than EUR 1.7 billion. This accounts for one fifth of central government transfers for basic services at 2018 levels. The compensations are based on Government decisions that have impacted local government tax revenue, such as increases in earned-income deductions. In 2019, the compensations will already amount to about two billion euros. The compensations distort the picture of how central government transfers are used to support the provision of municipal basic services. This means that one fifth of all central government transfers is funding that does not strengthen the local government funding base but is compensation for other revenue losses.

When the system of central government transfers is developed, it should be examined whether the compensations could be transferred to a separate item in the Budget from which they would be separately paid to municipalities. This would make the funding of municipal basic services more transparent.

Local government tasks and financing should be examined from an overall perspective

In a continuously changing operating environment, consideration should be given to a large number of different change factors connected with local government activities and financing. They should be made into an overall view for use as a basis for the development of financing systems of the 2020s and beyond. Changes in local government tasks also raises the question whether in the future, all municipalities will have the same tasks or whether a minimum population base should be set for a task. Task-based differentiation between municipalities would also have a substantial impact on local government financing.

The existing system of central government transfers is primarily municipality-based and most of the central government transfers are paid directly to municipalities. This system also includes a maintainer system so that especially in pre-primary education and basic education, funding is also granted to other actors if the service is provided by a party other than the basic municipality (home municipality compensation system). In its current form, the maintainer system is applied to funding that is in accordance with the Act on

Funding for Educational and Cultural Services. In future reforms, consideration should also be given to the relation between the municipality-based and the maintainer system and their steering effects.

Crisis municipality procedure and accounting provisions should be updated

Until now, only small municipalities had had their situation examined in the assessment procedure for municipalities in a particularly difficult economic situation (crisis municipality procedure). If the economic gaps between municipalities continue to grow, there may also be larger municipalities meeting the criteria for crisis municipalities in the future. In fact, the assessment procedure should be developed so that it will also provide alternatives for further measures and for ensuring basic services in situations where the economic situation of a large city may substantially weaken.

During the current government term, preparations have been made to ensure that the financial provisions laid down in the Local Government Act would be in accordance with model of automated financial information reporting. The model would provide instruments for a more real-time use of financial information and would therefore make it possible to notice changes in a municipality's economic situation more quickly. In fact, as part of the introduction of the model, it should be examined whether the assessment procedure for municipalities in a particularly difficult economic situation should be developed so that it would provide a basis for reacting more quickly to a substantial weakening of a municipality's economic situation.

The provisions on local government accounting and financial statements have been based on the applicable parts of the Accounting Act since the end of the 1990s. Even though the normative base of accounting and financial statements remains workable, the different ways of organising municipal activities, increasing use of outsourcing and new financing models make it more difficult to make comparisons between municipalities' financial statements. For this reason, it should be considered whether improvements would be needed in such areas as consolidated information and notes. In the provisions and guidelines on accounting and financial statements, it should be ensured that they will continue to provide a correct and adequate picture of local government finances as part of public finances.

8.5 Consideration should be given to the state of municipal building stock and construction investments

The building stock owned by municipalities is substantial

At the moment, there are nearly 47,000 different buildings in the ownership of municipalities and municipal enterprises, and they have a combined balance sheet value of more than EUR 13 billion. When municipal groups are also considered, the number of municipality-owned buildings exceeds 60,000 and this total has a balance sheet value of more than EUR 32 billion. Building assets account for about 24% of the balance sheet total of municipalities and about 40% of the balance sheet total of municipal groups. Thus, the building stock and its balance sheet value are of extremely high importance for local government finances.

Even though as a result of the regional government, health and social services reform, the building assets of healthcare districts and special care districts as well as their liabilities will be transferred from municipalities to counties, a building stock, which is substantial in terms of its volume and value, will remain in local-government ownership after the reform. The building stock to be transferred to counties is estimated to account for only about 15% of the total building stock of municipal groups. However, in economic terms, this is a significant change. Health care districts are planning or in the process of implementing hospital investments totalling about five billion euros. As a result of the reform, the liabilities connected with these investments will be transferred from local government to county government.

Most of the buildings owned by municipalities have reached the age where they are in need of renovation

The age and condition are the main problems concerning the buildings owned by municipalities. For example, most of the comprehensive schools, general upper secondary schools and daycare centres were built before the early 1990s and this building stock has already reached its imputed renovation age. As buildings are reaching renovation age, the likelihood of moisture and mould damage as well as indoor air problems also increases. Despite this, renovation of buildings has been postponed in many municipalities. Instead, the useful life of the buildings has been extended by carrying out only the essential repairs or minor annual repairs. This approach has made the problem worse. Indoor air problems have become more common, the maintenance backlog has grown and the repair costs of buildings requiring renovation have increased. Korhonen et al. (2018) have estimated that the actual maintenance backlog of the municipal building stock that needs to be covered is about EUR 2.5 billion and that of the municipal groups about EUR 4 billion.

Most of the reasons for postponing the renovations and for the weakening of the condition of the buildings have been economic but political choices and demographic changes also play a role. In economically difficult times, it has been easier for municipalities to cut spending on building stock than on services. In municipalities with shrinking populations, the challenge has been (and will also be in the coming years) the adjustment of the service network in accordance with decreasing service needs and the giving up of the buildings that are no longer needed. At the same time, in large urban areas and in growing municipalities, the challenge is to carry out the investments required by growing populations in an economically and operationally sustainable manner.

Reorganising the building stock requires a systematic approach by the municipalities

Reorganising the building stock and reducing the maintenance backlog would require more goal-oriented, systematic decisions and work from municipalities. Municipalities should be prepared to critically review their existing service networks and the need to develop it on the basis of future service needs and demographic trends.

In practice, this would mean that more municipalities should adopt a service network plan and draw up a premises or property programme based on the plan. In service network planning, more consideration should be given to cooperation between municipalities. Especially in municipalities with shrinking populations, renovating the existing building stock in its entirety and maintaining the current service network is not necessarily economically or operationally feasible or even possible. In such situations, access to services can best be ensured through cooperation between municipalities and by examining the service network on a regional basis across municipal boundaries.

Knowledge base on municipal building stock should be improved

Identifying the problems affecting municipal building stock and finding solutions to them would also require a better knowledge base and knowledge-based management. There are inadequacies in the databases, registers and statistics on municipal building stock that make it more difficult to create a situation picture or produce comparisons between municipalities. The knowledge base is fragmented and much of the information is outdated.

Basically, municipalities are always themselves responsible for the maintenance and development of their assets. Decision-making on assets, investments and such matters as access to services, and service networks is an integral part of local self-government. This means that the state has only limited chances of influencing the development and maintenance of municipal building stock or on reducing its maintenance backlog. The state can, however, support municipalities, for example, by ensuring the usability of the

knowledge base concerning population trends, service needs and building stock in municipalities and the prerequisites for knowledge-based management in municipalities.

In addition to the challenges concerning the building stock, it should also be remembered that, especially at group level, municipalities are also facing a sizeable maintenance backlog in their urban infrastructure (roads, streets, water pipes, sewers, etc.). Not all building-stock development measures are of use in the reduction of this backlog as it requires partially different solutions.

9 Fiscal policy rules support the planning and implementation of economic policy

9.1 Fiscal policy rules have worked satisfactorily during the current parliamentary term

- The set of fiscal policy rules applied during the current government term has been extensive and some of the rules have remained largely irrelevant.
- Central government spending limits have been the key rule steering fiscal policy over the past four years and the Government has adhered to this rule.

The number of objectives, targets and rules has increased during the current parliamentary term

During the current parliamentary term, fiscal policy has been steered by the objectives, targets and rules set out in the Government Programme, and the targets laid out in the General Government Fiscal Plan. In its Government Programme, the Government of Prime Minister Sipilä set out the following objectives: the GDP-to-debt ratio will level off by the end of the parliamentary term and living on debt will be brought to an end in 2021. Ensuring that the total tax rate should not rise during the parliamentary term was also laid out as an objective in the document. In its Government Programme, the Government also pledged to comply with the central government spending limits procedure.

During the current parliamentary term, fiscal policy steering and target-setting have been more strongly guided by EU provisions than in the past. In autumn 2015, at the start of its term, the Government prepared, for the first time, a General Government Fiscal Plan for

the entire government term.³³ In its first General Government Fiscal Plan, the Government set out budgetary position targets for all general government subsectors for the first time. The targets were set for the four-year period ending in 2019 and they have remained unchanged for the duration of the parliamentary term. The targets are as follows:

- central government deficit should not exceed 0.5% of the GDP,
- local government deficit should not exceed 0.5% of the GDP,
- the surplus of earnings-related pension funds should be about 1 % of the GDP.
- the budgetary position of other social security funds should be about 0% of the GDP.

In the General Government Fiscal Plan presented in autumn 2015, a limit for local government expenditure was also set for the first time (For more details, see Section 9.4).

In its General Government Fiscal Plan presented in spring 2016, the Government set the medium-term objective (MTO) for general government structural budgetary balance, laid down in the EU legislation, at -0.5% of the GDP for the year 2019.

The requirements concerning the target-setting for public finances also became more detailed during the parliamentary term. In spring 2017, the Government set, for the first time, nominal annual targets for general government budgetary position, general government expenditure, and general government debt so that they would allow Finland to meet the MTO in 2019. This was in accordance with the updated decree on the General Government Fiscal Plan.

The Government has also been bound by the limits to general government deficit and debt laid down in the Treaty on the Functioning of the European Union. The deficit should not exceed three per cent and the debt 60% of the GDP.

Some parts of the extensive set of rules have remained irrelevant

The fiscal policy targets set at the start of the current parliamentary term could have functioned better even though most of the targets will probably be met. At the start of the parliamentary term, it seemed that the targets set by the Government would only be partially achieved. However, according to the latest forecasts, it seems that most of the targets

³³ The Decree on the General Government Fiscal Plan entered into force in 2014. Under the decree, the Government must prepare a General Government Fiscal Plan for the parliamentary term and review it annually for the following four years by the end of April. The first General Government Fiscal Plan was adopted in spring 2014 and covered the period 2015-2018. The General Government Fiscal Plan brings together the decisions on public finances in a single document. In this plan, the Government examines public finances as a whole, formulating policies and making choices that lay a solid foundation for the later preparation of legislation and the Budget.

set out in the Government Programme and the General Government Fiscal Plan will be achieved. An economic upswing and the measures consolidating public finances introduced by the Government have both contributed to the achievement of the targets.

The set of rules applied during the current government term has been extensive and some of the targets have remained largely irrelevant. Central government spending limits have been the key rule steering fiscal policy over the past four years. The Government has been more strongly committed to the objectives, targets and rules set out in the Government Programme than to the nominal budgetary position targets laid out in the General Government Fiscal Plan even though they also have a statutory basis. This has been partially because the targets laid down in the Decree on the General Government Fiscal Plan have been new and some of them have taken effect in the middle of the government term.

There is also room for interpretation concerning the definition of some of the rules. For example, the objective under which living on debt will be brought to an end in 2021 was not clearly defined in the Government Programme and for this reason, the target has been interpreted in different ways over the years. According to one interpretation, the objective means that the amount of the debt will not increase. According to another interpretation, it means that Finland's public finances will be in balance in 2021. Even though the latest forecasts suggest that Finland's public finances will be in balance in 2021, general government debt will continue to increase at an annual rate of EUR 4 billion. This is because the general government budgetary position is strengthened by the surplus of the social security funds, which cannot be used to cover the deficits accumulated by other sectors. Occasionally, there has also been some uncertainty of whether bringing the living on debt to an end only refers to central government finances or public finances as a whole.

General government debt-to-GDP ratio will constitute an important long-term criterion for target setting in public finances because a stable and manageable debt ratio guarantees the sustainability of public finances in the long term. The objective set out in the Government Programme under which the debt-to-GDP ratio will level off by the end of the government term has in this respect been well grounded and concrete but the problem is that the levelling off of the debt ratio is difficult to manage in the short term.

The economic situation may have a substantial effect on the debt ratio. As the value of GDP increases more rapidly, the debt ratio shrinks, while in a situation with slower GDP growth, the debt ratio will grow even though the financed deficit (debt in euros) remained unchanged. The debt ratio also shrinks if central government reduce its cash reserves or state assets are sold to cover expenditure. Moreover, investments in Finnish Government bonds by employment-pension institutions also reduce the general government debt in financial markets because the institutions are part of the public sector. When employment-pension institutions sell Finnish Government bonds contained in their investment portfolios, the amount of the public debt in the financial market grows.

9.2 In the next parliamentary term, consideration should be given to the functioning of fiscal policy rules

- In the next parliamentary term, a budgetary target of 0.5% surplus in relation to GDP for 2023 should be set as the basis for fiscal policy.
- The budgetary targets for central government, future county government, municipalities and social security funds as well as central government spending limits and the tax policies set out in the Government Programme would be based on the general government budgetary target.
- All the preconditions set in EU and Finnish legislation should also be taken into consideration when these targets are set.

A simple and consistent set of rules should be the aim

The fiscal policy targets set out in the next government term should be as simple and consistent as possible. The fiscal policy targets and rules set out in the Government Programme and used together with statutory targets, should be in line with the statutory targets laid out in the General Government Fiscal Plan and thus also support the achievement of these targets. Consideration should also be given to the clear definition of the targets.

International commitments and the EU legislation as well as the domestic legislation incorporating them, lay out a broad range of different conditions that should be taken into account in the target-setting (See Box 9.2). The Decree on the General Government Fiscal Plan specifies which of the budgetary position targets must at least apply: medium-term objective for structural budget position (MTO) and at least the nominal budget position target leading to MTO for general government finances as a whole and each general government subsector.³⁴ In addition to these targets, the General Government Fiscal Plan must also set nominal multi-year targets that constitute the adjustment path towards MTO.

Central government spending limits, tax policies set out in the Government Programme and other fiscal policy rules should be measured so that the nominal budgetary position target for public finances will be achieved. The central government spending limits and tax policies based on the budgetary position target thus constitute a solid basis for the Government's fiscal policy.

³⁴ Nominal budgetary position targets must be set separately for central government, local government, employment-pension institutions and other social security funds. With the regional government, health and social services reform, budgetary position targets must also be set for the future county government.

BOX 9.1 A GOOD SET OF FISCAL POLICY RULES AND WHY IT IS REQUIRED

The aim of the fiscal policy rules is to ensure the sustainability of public finances and to keep the public sector within the limits set out in the stability and growth targets for the economy. The purpose of the rules is to provide a strong framework for sustainable management of public finances and the planning and implementation of fiscal policy. The set of rules may comprise a variety of different targets, such as debt and deficit targets, which should be mutually consistent. Targets can be set for general government as a whole and for its individual subsectors.

Roughly speaking, fiscal policy rules can be divided into two categories: rules concerning balance and debt, and rules concerning revenue and expenditure. In practice, many countries use combinations of different types of rules. Many countries have expenditure rules, while only a small number of countries have rules concerning revenue (European Commission, 2017a; IMF 2012; IMF, 2018). An EU-wide rules framework has been extensively developed over the past few years. The EU framework of rules is described in more detail in Box 9.2.

In the research on fiscal policy rules, the aim has been to identify features typical of good rules. The set of rules should be as simple and transparent as possible, properly justified and easy to monitor. If policy-makers are of the view that the rules are not justified, efforts will be made to circumvent them or they will remain irrelevant. Political commitment to the rules ultimately determines their effectiveness.

The effectiveness of the rules refers to how well they contribute to the achievement of different fiscal policy targets. These targets include macroeconomic stabilisation, enhancing fiscal policy discipline or ensuring the sustainability of public finances. Generally speaking, countries with the most comprehensive fiscal policy rules have also been able to observe a more disciplined fiscal policy (For example, Hallerberg et al. 2009; Hallerberg and Yläoutinen, 2010; Harden and von Hagen, 1994; Fabrizio and Mody, 2006). There are, however, no rules generally applicable to all countries as the incentives generated by the rules and thus also their effectiveness greatly depend on the political and other factors in each country.

The introduction of rules steering general government expenditure, revenue and budgetary position is beneficial in many ways. The set out a government's fiscal policy, which creates a predictable operating environment for citizens and companies. Safeguarding the sustainability of fiscal policy and the consistency based on adherence to its core rules are prerequisites for ensuring that fiscal policy can enhance economic stability and boost growth and employment. Fiscal policy rules also provide a stable framework for the tax and expenditure policy.

BOX 9.2 THE RULES JOINTLY AGREED IN THE EU PROVIDE CONDITIONS FOR THE MANAGEMENT OF PUBLIC FINANCES

When the targets for public finances are examined, consideration should be given to EU fiscal policy rules. The most important of them are the reference values for deficit and debt laid down in the Treaty on the Functioning of the European Union and the requirement for setting a medium-term objective and to adhere to it.

Under the Treaty on the Functioning of the European Union:

- General government deficit should not exceed three per cent of the GDP.
- General government debt should not exceed 60% of the GDP or it should make sufficient progress towards the reference value.

When these reference values are breached, the European Commission will assess the meeting of the deficit and/or debt criterion. If a Member State fails to meet one or both of these criteria, an excessive deficit procedure against it will be initiated.

The medium-term objective (MTO) is set as the structural deficit-to-GDP ratio and it is reviewed every three years. It was last set in spring 2016, which means that it is up for revision in spring 2019. In practice, the MTO is set in the first stability programme of the parliamentary term, which is prepared as part of the General Government Fiscal Plan in autumn 2019.

The setting of the MTO is restricted by the calculations concerning the minimum level of the MTO produced by the European Commission and the Fiscal Compact under which Finland has pledged to set its minimum MTO at -0.5% of the GDP. The European Commission will update its calculations on the minimum MTO in early 2019 when the minimum MTO level determined by the Commission may be stricter than the above limit.

Progress towards the MTO is assessed with two indicators:

- compliance with MTO or progress towards it at a yearly rate of structural balance change required under the country-specific recommendations approved by the Council. This requirement is stricter for countries whose debt-to-GDP ratio exceeds 60%, while at the same time, it is stricter in economically good times and more relaxed in times of slow growth.
- the expenditure rule under which
 - the yearly expenditure growth in countries that have achieved the MTO may not exceed the medium-term potential GDP growth.
 - The yearly expenditure growth in countries that are on the adjustment path towards the MTO must remain under the medium-term potential GDP growth.

The yearly adjustment requirement may be lowered in the following cases:

- A Member State incurs expenditure as a result of events beyond its government's control. Traditionally, natural catastrophes have been considered as such events but in recent years, they have also included the additional expenditure arising from refugee flows and terrorism.
- When a Member State is introducing major structural reforms, it may, on application, be granted allowances on the basis of the structural reform and/or investment clause.

According to the assessments produced by the European Commission in 2018, Finland complied with the Stability and Growth Pact in 2017 and will also be in compliance with it in 2018 and 2019, considering the allowances granted to it. The most important of these allowances is the allowance granted for the period 2017-2019 on the basis of the structural reform clause. The allowances will expire in 2019 and it is also possible that the minimum MTO limit for Finland will become stricter. This means that in the 2020s, it may be more difficult to comply with the EU fiscal policy rules than in the past.

9.3 The system of central government spending limits ensures sustainable central government finances

- The system of spending limits has already been in use for four parliamentary terms.
- The system of spending limits provides a useful practical tool for the Government when it plans and implements its fiscal policy.
- There should sufficient leeway in the spending limits for unexpected spending needs.

The system of spending limits has already been in use for 15 years

A revised system of central government spending limits was introduced in spring 2003 and it has already been in use for four parliamentary terms. Main characteristics of the spending limits system in its current form are a binding expenditure ceiling for the whole parliamentary term, and a division between expenditure coming under the limits and outside them. The expenditure coming under the spending limits must remain below this expenditure ceiling (parliamentary term spending limits) for whole duration of the parliamentary term.

During the parliamentary term, only price and structural corrections are made to the spending limits, and the limits may also be lowered to ensure the implementation of new expenditure reductions or other measures. In this respect, the link between central government revenue and expenditure has been broken, which means that higher revenue estimates will not lead to higher expenditure. The spending limits do not, however, limit all expenditure as certain expenditure items have been left outside the spending limits. The largest such item comprises cyclical expenditure (most of which is unemployment expenditure). This procedure is justified because cyclical expenditure should be allowed to vary so that they help to balance cyclical fluctuations, instead of sharpening them.

The spending limits system has worked well in most respects

There have been substantial cyclical fluctuations in the Finnish economy during the existing spending limits system. Despite this, central government expenditure has always remained within the spending limits. The increase in revenue generated by the faster-than-expected economic growth during the 2003-2007 parliamentary term did no lead to spending increases. In fact, Finland was able to reduce its central government debt and augment the State Pension Fund.

During the 2007-2011 parliamentary term Finland plunged into a deep downturn as a result of the financial crisis. However, the spending limits system allowed an automatic growth in unemployment expenditure, which helped to mitigate the effects of the

downturn. Fiscal investments were also used to stimulate the economy. Fiscal investments is expenditure outside the spending limits and they are often loans or acquisition of state assets that are expected to retain their value. The 2011-2015 parliamentary term was characterised by slow economic growth which made it more difficult to achieve the targets set for central government finances. In order to achieve the targets set for central government finances, the spending limits were also lowered several times during the parliamentary term as a result of decisions to reduce expenditure.

The spending limits system has mostly worked well. The advantage of the spending limits system is that it is easy to verify, and thus it provides the Government with guidance in practical policy-making. This means that the spending limits system makes it easier to achieve the other fiscal policy targets set by the Government. For this reason, the spending limits system has become the key fiscal policy tool in the efforts to enhance the sustainability of public finances by slowing down central government expenditure.

Despite challenges, Government also adhered to its spending limits during the current parliamentary term

The Government has also adhered to the spending limits during the current parliamentary term even though the large influx of asylum seekers in 2015 caused a sharp increase in immigration expenditure. The Government has also faced strong pressures during the current government term to increase expenditure because of the faster economic growth and to mitigate the effects of the spending cuts made in recent years. The unallocated reserve (the leeway between the spending limits for the parliamentary term and the on-budget expenditure) has been fully used during each round but the expenditure ceiling has not been exceeded.

During the current parliamentary term, there have also been pressures to increase expenditure outside the spending limits. For example, when introducing appropriation increases, the Government has made use of fiscal investments outside the spending limits even if they had not been the best way to allocate funding. The Government has also presented expenditure as fiscal investments even though they have not met the criteria of such investments. Furthermore, during the current parliamentary term, companies and foundations coming under general government have been increasingly provided with capital injections through share transfers so that they would not appear as on-budget expenditure.

During the current parliamentary term, the Government also intentionally deviated from the spending limits laid out in the Government Programme when the transfer to the State Television and Radio Fund was made outside the spending limits, in accordance with the opinion submitted by a parliamentary working group. However, there are no grounds for such transfer in the spending limits thinking.

Increasing leeway should be left in the spending limits

Even though the Government has adhered to the spending limits during the current parliamentary term, there have been pressures towards it, as described above. From the perspective of the credibility of the spending limits procedure, it is important that the Government is committed to the letter and the spirit of the procedure. In fact, adhering to the spending limits should be seen as a useful instrument in the sustainable management of central government finances and in the steering of the Government's own policies. For this reason, the spending limits procedure should be protected and there should not be attempts to neutralise it. Furthermore, any loopholes in the system should not be used to circumvent the spending limits.

Under the spending limits system, only the spending limits for the parliamentary term (overall expenditure ceiling) is binding. Reallocations of expenditure are permitted within the spending limits and in fact, this should be done when unexpected spending needs arise. Moreover, as a result of price adjustments, there is leeway under the binding expenditure ceiling each year. It would be advisable if already in the negotiations on the Government Programme, it would be decided to leave in the spending limits a certain amount of leeway (unallocated reserve) that would grow towards the end of the government term. Unanticipated spending needs will probably appear at an increasing rate during the parliamentary term, in addition to which there will also be growing political pressures for new openings. During the next parliamentary term, the spending limits expenditure will substantially increase, a result of the regional government, health and social services reform. This is an additional argument in favour of allowing more leeway within the spending limits.

Even though, the spending limits system has, as a whole, worked well during the current parliamentary term, the rules laid out in it should be reviewed and any inadequacies corrected at the start of the new parliamentary term. For example, it may be necessary to provide a more precise definition for fiscal investments outside the spending limits. However, in order to keep the spending limits system clear and transparent, its rules should not be made too complex.

9.4 Central government has only limited chances of steering local government finances

Steering of local government finances has been developed over the past few years

The steering framework for local government finances was updated during the 2011-2015 parliamentary term. The number of local government tasks and obligations was reviewed and efforts were made to reduce them as part of the Government's structural policy programme. As part of this work, measures were also taken to develop the assessment of the

economic effects on municipalities arising from legislative proposals. Under a legislative amendment adopted during the current parliamentary term, central government transfers will cover 100% of new or expanding municipal basic services. Under the overall reform of the Local Government Act, the provisions on municipalities' obligation to cover their deficits were tightened and the obligation was extended to cover joint municipal authorities. In the same connection, the basic public services budget and programme were expanded and renamed the local government finances programme.

During the current parliamentary term, an operating model that is in accordance with the General Government Fiscal Plan was fully introduced as an instrument steering local government finances. Under the new operating model, local government, as all other general government subsectors, was provided with a budgetary position target. Furthermore, an expenditure limit was set for discretionary central government measures directed at local government finances. The Government Programme of Prime Minister Juha Sipilä's Government contains a number of measures and policies concerning local government finances that support the achievement of the budgetary position target. Under the measures set out in the Government Programme, local government finances were to be strengthened by EUR 0.7 billion by the year 2019. The measures included regional concentration of specialised healthcare, development of informal and family care, restrictions on subjective right to early childhood education and care, and adjustments to the staff-to-client ratio in services for the elderly and early childhood education and care.

As a whole, the updated steering model for local government finances would seem to be working even though it is too early to make any far-reaching conclusions on the basis of a single parliamentary term. The process of increasing and expanding local government tasks and obligations has slowed down and the Government has given more consideration to their effects on local government finances in its decision-making. According to a Ministry of Finance forecast, in 2019, local government will probably meet the budgetary position target set for it. There are, however, a number of factors behind the strengthening of local government finances and the Government measures are only a part of them. When the steering of local government finances is assessed, it should also be remembered that because of the extensive local self-government, central government has only limited chances of steering local government finances. This has been demonstrated during the current parliamentary term in such issues as the implementation of the measures concerning early childhood education and specialised healthcare.

The need for an expenditure limit in local government finances should be assessed

An expenditure limit has been introduced as a new steering instrument. It sets a euro limit for central government measures that have an effect on local government operating expenditure. The aim of the expenditure limit is to reduce the expenditure pressures

directed at local government finances arising from additional or expanding tasks and obligations. The expenditure limit applies to the central government measures contained in the General Government Fiscal Plan and the Budget that have an effect on local government finances. The expenditure limit is reviewed in connection with the updating of the General Government Fiscal Plan.

The expenditure limit concerning central government measures directed at local government finances has not been a particularly effective steering instrument. The realisation of the measures also depends on the municipalities' own decisions concerning the extent and the timetable of the implementation. Thus, the expenditure limit can be considered as a target-setting instrument: it shows the amount of savings that could potentially be achieved in local government operating expenditure through central government measures. The effectiveness of the expenditure limit should be assessed when health and social services are no longer a local government responsibility and the expenditure pressures on local government finances are reduced. One important question is whether there is actually any need for steering instruments such as the expenditure limit after the reform.

The expenditure limit does not apply to investments and the chances of central government to steer local government investments are small. Hospital investments by health-care districts have increased considerably in recent years. This is partially due to an ageing hospital building stock but there may also be competition for patients and personnel between healthcare districts. Hospital investment starts may also have been increased because under the regional government, health and social services reform, the responsibility for funding hospital investments is transferred from municipalities to county government and ultimately to central government. An act on limiting local government health and social services outsourcing and investments, which entered into force in 2016, has failed to slow down the pace of local government investments.

Assessment of the effects of measures directed at local government finances should be developed

Partially due to inadequacies in the knowledge base, it is difficult to make any ex-ante or ex-post assessments of the effects of central government measures on local government finances. Based on the statistics on local government activities and finances, it is impossible to say which of the changes in expenditure have resulted from central government measures and which of them are the result of municipalities' own decisions. Costs are also affected by other factors, such as wage agreements, supply of labour and technological advances. The regional government, health and social services reform now under preparation will also substantially impact (and has already substantially impacted) local government finances. The transfer of costs and funding from municipalities to county government will have a neutral impact on the relationship between central and local

government. The changes in the system of central government transfers included in the reform have already encouraged municipalities to slow down the increases in health and social services costs before the tasks are transferred to counties.

The assessments of the effects of legislative proposals on local government finances and the prerequisites for high-quality assessments should be developed despite the challenges listed above. It has been noted during the current parliamentary term that the quality of the impact assessments has been slightly weakened by political pressures and a tendency to adhere to the preliminary impact assessments contained in the Government Programme.

BOX 9.3 FREQUENT CHANGES IN UNEMPLOYMENT INSURANCE CONTRIBUTIONS MAY SHARPEN BUSINESS CYCLES

It has proved impossible to keep unemployment insurance contributions stable over the economic cycle and the changes in them have even sharpened cyclical fluctuations in recent years.

In order to ensure that the changes in the contributions can be minimised, a substantial increase in the business cycle buffer of the Employment Fund should be considered. If necessary other measures should also be considered to minimise the changes.

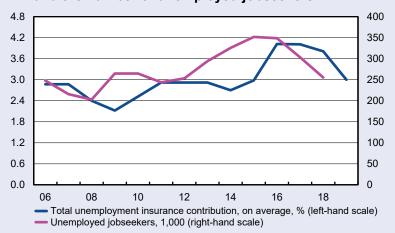
In an ideal situation, the public sector should be able to counter cyclical fluctuations by economic policy means or at least try not to sharpen them. However, in practice this is often difficult because preparing expenditure and tax decisions takes time and it is difficult, or even impossible, to predict the turning points of economic cycles. For this reason, the automatic stabilisers should be allowed to function freely because, as their name suggests, they balance demand in the economy at different stages of the cycle without any separate decisions. Automatic stabilisers mean such factors as the unemployment security system, in which expenditure declines automatically during an economic upturn and increases during a downturn. Similarly, when taxation remains unchanged, tax revenue increases during an economic upswing and declines in a downturn.

Unemployment security expenditure has been intentionally left outside the central government spending limits procedure (except for discretionary measures). This allows unemployment expenditure to fluctuate freely in accordance with the cyclical situation. It has, however, proved impossible to keep unemployment insurance contributions stable over an economic cycle and the changes in them have even sharpened cyclical fluctuations in recent years. The unemployment insurance contribution was raised by one percentage point at the start of 2016 when the economic situation was still weak. The contribution was then lowered at the start of 2019 by 0.8 percentage points when the economy was still growing steadily (See Figure 9.1). Moreover, these changes have also been substantial, considering the fact that in 2019, the contribution amounts to three per cent of the wage bill.

To ensure that the changes in the unemployment insurance contribution can be minimised over the economic cycle, the new Employment Fund (formerly Unemployment Insurance Fund) has a business cycle buffer in which assets of up to approximately EUR 2 billion can be collected during a period of strong economic growth. Symmetrically, a maximum of approximately EUR 2 billion in debt can be accumulated in the business cycle buffer during a downturn. In practice, however, using the entire range is not possible because a safety margin must be maintained. The decisions on the following year's contribution levels must always be made on the basis of forecasts containing inherent uncertainty.

Thus, it would seem that the business cycle buffer is too small to keep the contribution levels stable over an economic cycle. For this reason, it should be considered whether the buffer could be substantially increased. In 2016, in connection with the Competitiveness Pact, labour market organisations agreed that in spring 2019 they would prepare a proposal to the Government for an appropriate increase in the size of the business cycle buffer. If this is not considered adequate, it should also be considered whether there are any other ways of keeping the contribution levels stable in the future.

Figure 9.1
Changes in the unemployment insurance contributions and the number of unemployed jobseekers



Sources: Employment service statistics of the Ministry of Economic Affairs and Employment, Ministry of Finance

10 Finland as part of European economic integration

- The Economic and Monetary Union (EMU) should be developed so that other Member States would not have to bear the cost of the economic policy mistakes made by one Member State.
- Economic policy co-ordination plays an important role in the EU, but it should respect the sovereignty of national economic policy and democratic chains of responsibility.
- The crisis resolution framework of the euro area should be based on a well-functioning investor responsibility and market discipline.
- The spreading of risk in the private sector should be developed through the European Banking and Capital Markets Union.
- The EU and its budget should strive to generate value added for Europe.

Fundamental decisions on European economic integration are required

The past decade of the Economic and Monetary Union (EMU) has been characterised by serious crises. Financial and euro crises resulted in substantial economic costs and caused many people to question the continuity of euro. Despite the crises, the membership in the euro area has not weakened the stability of Finland's economic operating environment. Market interest rates have supported growth and the supply of funding for Finnish companies has remained at least satisfactory, even during the most difficult periods. The exchange rate has also remained competitive and, when compared with the fluctuations during the independent monetary policy, it has also remained fairly stable. The setbacks suffered by the Finnish economy over the past ten years have not been caused by the EMU membership and they could not have been substantially mitigated even if Finland had been able to use independent monetary policy instruments.

The financial and euro crises have, however, demonstrated the fragility of the system and it is clear that strengthening the structures of the Economic and Monetary Union is also in Finland's interests. In many respects, the system has already been strengthened since the financial crisis but the events during 2018 have shown that the attempts to eliminate the root causes of the fragility and the risk of a new crisis have failed.

The work to strengthen the euro area will continue in the next few years, which means that Finland will have to take a stand on a number of issues that are important in terms of the stability of EMU and the future course of the European Union as a whole. One key theme, which mostly concerns euro area member countries, will be the division of the

economic policy power between the European Union and its Member States. To what extent and by what instruments should the EU be able to steer the economic policy choices of its Member States? How will the economic-policy decision-making in the EU be reconciled with the requirements of democratic decision-making?

The second important issue where Finland needs to take a stand are the arrangements concerning crisis resolution in the EMU and the risk-sharing arrangements between the Member States. To what extent and on what conditions can the Member States provide each other with financial support? What other arrangements can be introduced to lower the risk of euro area countries becoming dependent on external financial support? And to what extent and on what conditions should the risk-sharing taking place through the Banking Union be increased?

Finland will also have to take a stand on the EU budget and, as part of it, on the division of tasks between the Union and its Member States. The development needs under each theme are assessed below.

Member States' responsibility for their economic policy should be strengthened

The range of instruments available to the EU for steering the Member States' economic policies has increased considerably over the years. Especially the steering of the euro area countries is now more extensive than in the past. The Stability and Growth Pact on public finances has been frequently revised and during the crises, the steering system was extended to cover nearly every aspect of the economic and structural policy. The European Semester, which provides the framework for economic-policy planning in the Member States at every stage of the budget-drafting process, lies at the core of the steering system. The European Union is also making more effective use of its spending as an instrument for steering Member States' economic policies. In terms of its comprehensiveness and detailedness, the economic-policy steering system of the EU is unique in the world, both among countries with a federal system and other state structures.

The purpose of the economic-policy steering of euro area member countries is to ensure that their economic policies do not weaken the stability of the EMU. Experience has shown, however, that the actual capacity of the EU to steer the economic policies of its Member States is low. Member States' public finances are now more balanced than in the past but the improvements are mainly of cyclical nature and a natural result of a long period of economic growth. When the situation is examined over economic cycles, the gap between the actual general government debt of the Member States and the 60%-limit laid down in the Treaty on the Functioning of the European Union has continued to widen. The regulatory framework and the responsibilities concerning its implementation have been changed over the years but these changes have not brought any noticeable improvements in its effectiveness.

Finland should support the efforts to simplify the regulatory framework of the European Union. However, there is every reason to take a realistic view on what can be achieved with the changes in the framework. The key obstacles to the functioning of the regulatory framework and the effective steering of the Member States' economic policies are not connected to the technical contents of the rules or the selection of sanctions. The obstacles are of fundamental nature and concern the acceptability of the economic-policy powers used by the EU vis-à-vis its Member States.

Economic-policy decisions are fundamental to national-level policy-making and election programmes of political parties and programmes of national governments are built around them. For this reason, EU-level steering of Member States' economic policies inevitably leaves less room for democratic decision-making at national level. This is particularly clear in situations where the programme of a government elected by a country's voters is in conflict with European-wide rules. The attempts of the EU to intervene when such breaches occur have repeatedly led to strong political disagreements with the Member States in question. When faced with such situations, the Union has repeatedly retreated and interpreted the rules in such a way that the escalation of the situation is avoided. There is every reason to assume that the situation will remain more or less the same.

The weak state of public finances in one euro area country is a problem for the entire euro area and for this reason, there will also be grounds for the EU to support responsible fiscal policies in its Member States in the future. In an optimum situation, European-wide coordination can provide a useful contribution to the economic-policy debate in the Member States and guide the reactions of the financial markets in a manner that supports incentives for the right measures. However, the development of the euro area should be based on a realistic assumption on to what extent the EU is able to steer the economic policies of its Member States. The stability of the euro area should not be based on the assumption that the EU can prevent its Member States from making wrong economic-policy decisions.

The extent to which the EU uses its economic-policy steering power on its Member States also steers the expectations concerning the division of responsibility in problematic situations. When the EU assumes a stronger role as a provider of steering or approval for its Member States' economic policies, it will become increasingly difficult for the Union to reject responsibility for the consequences of the choices. The traditional thinking in Finland has been that in the EMU, too, each member country is responsible for its own obligations and its own economic-policy mistakes. In line with this policy, the elected state bodies of each member country should remain responsible for the economic policy of their country. The EU should provide advice and support but ultimately, the power and responsibility for economic-policy choices should be left to national-level decision-makers. This principle shapes Finland's views in the development of economic-policy coordination, in crisis-resolution arrangements and the development of the EU budget.

The need for financial aid programmes should be minimised

Attempts have been made to correct the structural problems of the euro area during and after the economic crisis affecting the euro area. The European Union and the euro area established financial aid mechanisms through which Member States facing difficulties can be granted financial aid loans. A total of EUR 475 billion in financial aid was paid from these mechanisms through different channels during the euro crisis. Since its establishment, the European Stability Mechanism (ESM) has been the key stability instrument in the euro area.

In the development of the ESM, Finland has consistently underlined the principle of strong investor responsibility, market discipline and responsibility of each Member State for its own debts. Furthermore, in Finland's view, the Union's support instruments should not be used to finance unsustainable indebtedness. Since the establishment of the ESM, Finland has supported the efforts to achieve a system in which financial aid can only be granted after any excessive indebtedness has been corrected by means of investor responsibility.

The establishment of the ESM and the aid loans that it granted were the central part of the euro area response to the crisis and they helped to stabilise the situation. At the same time, however, the experiences during the crisis years demonstrated the problems resulting from European rescue packages. The risks were huge and managing them required that debtor countries accepted extensive and long-term restrictions on their economic-policy self-determination. The loss of economic-policy self-determination put pressures on the functioning of these countries' democratic systems, led to a deep sense of injustice, and contributed to the split of the political field and to the rise of populism.

The sense of injustice also grew in the creditor countries. The decisions made during the most difficult years of the crisis boosted anti-EU movements in the creditor countries, which was also reflected in election results. The rescue packages divided the EMU into the southern and northern half. Even though the situation has gradually normalised, the division has not disappeared. Thus, the euro crisis has left a long shadow in the politics of many EU Member States.

The ESM will continue to play a crucial role in ensuring the stability of the euro area. It is, however, important to build a framework to support the ESM that would minimise the need and duration of the aid funding. This framework should have two key parts: debt restructuring procedure for individual Member States and a comprehensive banking union. The debt restructuring procedure would ensure that the creditors of the problem countries will contribute to the costs arising from the crisis. At the same time, a banking union would provide a basis for continuing funding for the problem countries' private sectors even if the solvency of these countries was threatened. These two components of the framework would make the problem countries less dependent on aid funding, allow them

to become eligible for market-based funding more quickly and minimise the damage to their economy. At the same time, there would be less need to limit the countries' economic self-determination, which would reduce the pressure on their democratic systems.

Spreading of risks through the Banking and Capital Markets Union would support stability and make the debt-restructuring framework more credible

A workable banking union is essential for creating a credible monetary union based on investor responsibility and market discipline. If the restructuring of a country's debts also led to the collapse of its banking sector, the resulting economic damage would be so substantial that in practice, the debt restructuring would be impossible. The purpose of the banking union would be to break the link between banks and their home countries and thus provide a basis for restructuring a country's debts at reasonable economic cost. The long-term aim should be to have a European-wide banking system that is geographically highly decentralised.

When the banking union is finalised, the Finnish Government should at least take a stand on the regulation of state risks and the single deposit guarantee scheme. Under the existing banking regulation, the bonds issued by the home country are risk-free, which means that they are not subject to capital requirement. This has led to a situation where banks in a number of euro area member countries have invested a large proportion of their balance sheets in the bonds of their home countries. In such a situation, the restructuring of the home country's debts would also drive the country's banking system into difficulties. This means that the regulation favouring state risks helps to maintain the link between banks and their home countries. As part of the finalisation of the banking union, agreement should be reached on the managed correction of this distortion.

The discussions on supplementing the banking union with a single deposit guarantee scheme have made little progress. Finland has supported the idea of a single deposit guarantee scheme and views it as a logical part of the banking union. At the same time, Finland has also emphasised that it should not serve as an instrument through which the costs of the past mistakes are made a joint responsibility. For this reason, Finland has required that progress should be achieved in the reduction of the banking-sector risks before the single deposit guarantee scheme is introduced. A fully symmetric sharing of risks will never become a reality. For this reason, Finland will have to weigh the costs and benefits of the single deposit guarantee scheme, should the discussions make any progress. The costs would depend on the size of the risk asymmetry, while the stabilising impact of the single deposit guarantee scheme on the euro area as a whole would be the benefit of the system.

In the development of the banking union, there will be a repeated need to take a stand on to what extent and in what manner aid arrangements based on public funds should be established to support the banking sector. Finland has been of the view that direct and indirect public-sector support to the banking system should be minimised, and this has also been envisaged in the banking union. Finland has reservations concerning the creation of new public-sector preparatory arrangements. If, however, such arrangements are considered necessary, they should be made an integral part of the Union's crisis-resolution framework. They should also be financed from Union's funds, and the ESM or other external funding arrangements should not be linked to them.

Promoting the capital markets union is also in Finland's interests. The aim of the capital markets union is to facilitate access to funding in the EU, remove obstacles to cross-border investments and in this manner create more unified and efficient capital markets in the EU. If realised, the capital markets union would not only support economic growth in the EU, but it would also improve the sharing of risks through the private sector, which in turn would help to stabilise economic cycles.

The provisions on investor responsibility laid down in the banking union, which would minimise indirect public financial aid to banks, also underline the importance of the capital markets union. This would increase the price for bank financing and make it less attractive. The capital markets union would provide European companies with better access to market-based financing, which would make them less dependent on banks. The changes in financial services resulting from new technologies is also likely to reduce the role of banks.

The European-wide capital markets infrastructure plays a key role in the development of the capital markets union. For small companies, listing costs are high and for this reason, there is a need for more lightly regulated market places. As central counterparties³⁵ have assumed a more important role, they are also becoming more important for financial market stability. This highlights the need for creating a comprehensive regulatory framework covering them.

The fiscal policy rules of the European Union should be simplified

Following several reforms and clarifications, the EU framework for fiscal policy has become complicated. For many years, Finland has been of the view that the Stability and Growth Pact should be simplified and this is also stated in the joint EU Presidency Programme of Romania, Finland and Croatia. The issue has also been frequently raised in the discussions on the development of the EMU.

³⁵ In securities trading, central counterparty (CCP) is the buyer from the perspective of the seller and the seller from the perspective of the buyer. In that case, the central counterparty assumes the counterparty risks arising from the transaction. The counterparty risk arises between the central counterparties on the basis of their interoperability arrangements. From the perspective of financial market stability, it is essential that all risk management arrangements of the central counterparties are in place.

The European Commission is already preparing an assessment on the functioning of the Stability and Growth Pact, which will be published in 2019. It is important that the assessment is comprehensive and honest and that the Member States are also consulted during the preparatory process. On the basis of this assessment, it will probably be possible to determine whether there are any parts in the Stability and Growth Pact that have not been used, that are not essential or that have been impossible to implement. Following this, it will probably be possible to assess which parts of the economic policy coordination are in need of a reform.

The EU budget should generate value added

In the negotiations on the EU's budget and financial framework, Finland's aim has been to promote spending discipline in the Union and to safeguard Finland's national interests. Finland has also worked to promote efficient, cost-effective and proper use of EU funds. These objectives will also remain important in the future. At the same time, however, Finland should also pay more attention to ensuring that the EU budget is spent in a manner that generates European value added.

The EU budget accounts for about one per cent of the Union's GDP. At the moment, the two largest expenditure items, the common agricultural policy and the cohesion policy, account for about three quarters of the budget. Both items are income transfer systems. They do not involve any particular European value added in the sense that the public funds spent on them could be used more efficiently or cost-effectively at European level. In the discussions on the Union budget, the focus is usually on the net contribution status of the Member States, whereas common European goals play a secondary role.

Only a small proportion of the Union's budget directly generates European value added. Support for research and development can provide a basis for cross-border cooperation in a manner that would not be possible at national level. Likewise, linking national transport, energy and information networks into a European-wide network may require cooperation at European level. Cooperation in environmental policy, management of migration, security and defence involves clear potential for European value added. Furthermore, channelling development and neighbouring area cooperation through the European Union can make the activities more cohesive and administratively efficient. At the same time, the investment programme of the European Union may, when correctly implemented, correct market failures, narrow the long-term structural investment deficit and thus boost European competitiveness. The investment programme makes use of EU budget funding so that it can attract private capital. By so doing, it aims to achieve more with scarce public funds than with traditional grant-based support provided by the EU.

Regarding the revenue side of the EU budget, Finland has emphasised that the Union's system of own resources should be simple, transparent and cost-effective. The revenue side may also provide opportunities for creating European value added. About 70% of the Union's budget is funded with fees based on the Member States' GDP, and the rest is in the form of VAT-proportioned fees and traditional funding (own resources), most of which are customs duties. The first two of these funding sources are purely a way of collecting funds and only the customs duties can be deemed to have a connection with the promotion of the common EU goals.

A report by Etla and VATT has identified three new potential own resources that can generate European value added (Kari et al., 2018). According to the report, the new own resource, based on the common corporate tax base, could reduce harmful tax competition within the Union and provide a buffer against the effects of cyclical fluctuations in the Member States. An own resource directed at the value added of financing activities might serve as a disincentive for excessive risk-taking in the financial markets. Furthermore, according to Etla's and VATT's researchers, a common European carbon tax could support the Union in its efforts to achieve its climate targets. Implementing these proposals would require the harmonisation of tax bases and they involve substantial technical issues and matters of principle. Finland should only formulate its view on them when it is known how these proposals will be implemented and their fiscal effects can be assessed. However, in the longer term, it should be assessed whether the EU could in its budget funding rely more on revenue sources that better support its policy goals.

Channelling public funds through the EU does not in itself generate value added. However, there can be net savings in public finances if Union funds are allocated to purposes that can be provided or funded more efficiently through the EU than through national-level channels. More consideration should be given to these aspects in the future.

During 2019, the Member States will conduct negotiations on creating a budget that only covers the euro area. Like the Union-level budget, the euro area budget should be assessed from the perspective of generating value added. It should also be implemented in a manner that ensures democratic accountability in the use of public funds and in economic-policy decision-making.

11 Finland should be better prepared for risks and threats

11.1 The mitigation of climate change requires cost-efficient action

- Climate change poses a serious threat to the wellbeing of future generations. Finland should therefore lead the way in demanding international action to combat climate change. Society will be forced to adapt to climate change and the private sector will bear most of the costs incurred to adjust to this new reality.
- Cost-efficiency should be made the central principle in the climate policy so that the cost of combating climate change would not become unreasonably high. Setting clear targets for the climate policy helps to ensure cost-efficiency.
- In order to enhance the effectiveness and cost-efficiency of the climate policy, climate policy coordination should be improved and there should be a common research-based view on the principles and steering instruments central to the climate policy as a whole.
- Energy and transport taxation should be examined as part of the
 cost-efficient climate policy. When new taxes with a steering role
 are considered and before any decisions are made, the exact goal,
 the most feasible and cost-efficient steering methods available for
 achieving the goal, and the effects of the steering methods should
 be determined.
- Furthermore, the financing system should contain incentives for effective pricing of the credit, market and operational risks caused by climate change. This would also require better information on risks and their impacts.

Global warming poses a serious threat to the wellbeing of future generations

Warming of the Earth's atmosphere is the most serious environmental problem that humankind has ever faced. The climate change that we are now experiencing is the result of human activities, especially the burning of the carbon tied to soil into carbon dioxide. Like other greenhouse gases, carbon dioxide contained in the atmosphere slows down the process in which heat escapes from the Earth. As this process slows down, the Earth is becoming warmer. According to the Intergovernmental Panel on Climate Change (IPCC), if no measures are taken to slow down the warming, the global average temperature at the end of this century would be between 2.0 and 5.4 degrees above the average pre-industrial levels (IPCC, 2014; Peters, 2018).

Warming of the Earth's atmosphere as a result of greenhouse gas emissions is an example of a global market failure. The energy generated by carbon-burning benefits those burning the substance but everybody suffers from the negative effects of the process, as a result which too much carbon is burned. The combating of climate change must therefore be based on global cooperation. In the 2015 Paris Agreement, the UN member states agreed that the long-term aim is to limit Earth's warming to less than two degrees, compared with the pre-industrial levels.

Finland is probably not among the countries that are hardest hit by the direct economic impacts of climate change. Some of the direct economic effects may also be positive to Finland. For example, as a result of the warming, agricultural productivity may increase and heating costs decrease. At the same time, however, an increase in extreme weather phenomena may generate substantial costs. The indirect economic effects of climate change constitute a major challenge to the wellbeing of the coming generations and the sustainability of Finland's public finances. Climate change may weaken the ability of the world economy to generate wellbeing and it may cause changes in global division of labour, land use and value chains. These changes will be reflected in the Finnish economy through world markets. Higher frequency of extreme weather phenomena may mean that Finland will have to spend more on humanitarian assistance.

Society will be forced to adapt to climate change and the private sector will have to bear most of the costs incurred to adjust to this new reality. On the other hand, climate change also creates opportunities, with those at the forefront of technology reaping the greatest benefits. The combating of global warming will generate economic costs that may have an impact on the sustainability of public finances and the ability of Finland's economy to generate wellbeing for its citizens.

The EU is at the forefront of climate change mitigation

The aim of the EU is to reduce the greenhouse gas emissions generated in its area by 20% by the year 2020, by 40% by the year 2030, and between 80% and 95% by the year 2050, compared with 1990 levels.

In order to achieve these targets, the EU is regulating emissions in three sectors:

- In the emissions trading sector, which comprises large energy-production plants and industrial facilities as well as EU-internal air traffic.
- 2. In the effort-sharing sector, which comprises transport, agriculture, fuels for non-road mobile machinery, separate heating of buildings, use of refrigerants, small energy-production plants and industrial facilities as well as waste management.
- 3. In the land use, land-use change and forestry sector (LULUCF).

At the moment, the emissions trading sector covers about 45% of all emissions generated in the EU. The idea behind emissions trading is to achieve the emissions reductions in the sectors where they can be generated at the lowest cost. In the emissions trading sector, the generation of greenhouse gases is regulated through the amount of emissions allowances. The amount of new emissions allowances is reduced each year so that the emissions coming under the EU emissions trading sector would be reduced by 21% by the year 2020 and by 43% by the year 2030, compared with 2005 levels. Achieving the emissions reduction targets laid out in the emissions trading sector does not require emissions reduction measures from individual Member States.

In the effort-sharing sector, the aim of the EU is to reduce emissions by 10% by the year 2020 and by 30% by the year 2030, compared with 2005 levels. The effort-sharing regulation of the EU lays down binding targets for emissions reductions for each Member State in the effort-sharing sector. The target for Finland is 16% by the year 2020 and 39% by the year 2030.

In addition to the emissions reduction obligations set for the effort-sharing sector, the new LULUCF regulation of the EU obligates the Member States to ensure that the imputed emissions in the sector do not exceed the imputed sinks in the periods 2021-2015 and 2026-2030.

Cost-efficient implementation of the EU's emissions reduction obligations will contribute to the sustainability of public finances

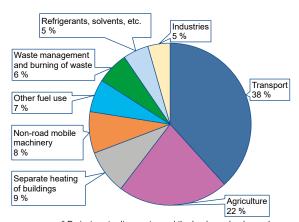
The binding emissions reduction targets laid down for Finland's effort-sharing sector (such as transport, non-road mobile machinery, agriculture, separate heating of buildings and waste management) extending to the year 2030 are so substantial that they can probably only be achieved if there is more government steering. From the perspective of the

sustainability of public finances and economic efficiency, the emissions reductions should be carried out with maximum cost-efficient. However, unlike in emissions trading, there is no common price mechanism for the emissions in the effort-sharing sector, which means that emissions may be reduced by other than the most cost-efficient methods.

It should be accepted that assessing the costs of reducing emissions involves a great deal of uncertainty. Furthermore, the public sector rarely, if ever, knows best where and how the emissions reductions can be carried out with minimum economic cost. For this reason, priority should be given to technology-neutral steering methods that set a price for the emissions.

However, pricing the emissions is not always possible. For example, it may be difficult to direct taxation specifically at emissions. In fact, there are good grounds for using other steering methods, such as regulation and subsidies, when pricing emissions is not possible. Thus, in the absence of common pricing, the implementation of the sectoral emissions reduction targets and measures in the effort-sharing sector should be based on a careful analysis of where and how greenhouse gas emissions can be reduced in the most cost-efficient manner.

Figure 11.1 Imputed emissions in Finland's effort-sharing sector 2017*



* Emissions trading sector and the land-use, land-use change and forestry sector are the other sectors Source: Statistics Finland

Setting clear targets for the climate policy helps to ensure cost-efficiency

The obligations imposed by the EU set the minimum level for Finland's climate policy in the effort-sharing and land-use sector. However, national-level climate-policy targets may be more ambitious that these obligations set by the EU. However, in that case, the goals for the policy measures should be clear so that the practicality and cost-efficiency of the measures can be assessed. There may be more efficient ways of slowing down global warming than by taking measures that directly impact calculatory emissions at national level. For example, replacing fossil fuels with imported biofuels will reduce calculatory emissions at national level but it may not necessarily generate the same effects in global scale.

In addition to the reduction of greenhouse gas emissions, indirect targets, such as targets concerning the share of renewable energy, promotion of biofuels or energy-efficiency improvements, are often linked to climate-policy targets. Climate-policy measures should, however, be justified from the perspective of the main climate-policy goals (reduction of emissions). Justification for policy measures serving other goals should primarily be based on other than climate effects. However, this does not mean that the costs and benefits of emissions-reductions measures should not be assessed in the same manner as the costs and benefits of other policy measures (considering their effects on all policy objectives that are deemed important). It may often be possible to promote other policy objectives more effectively by other means.

A common research-based view on the key climate policy principles, measures and steering instruments is needed

Climate policy issues are continuously examined and prepared in central government. However, it seems that, at least in some respects, the preparation of the climate policy is fragmented. This impression arises even though the key energy-policy and climate-policy strategies guide the preparatory process across the boundaries of administrative branches and the preparation is coordinated in working groups at political and government-agency level.³⁶

The key reason for the fragmented nature of the preparatory process would seem to be the absence of a common view among administrative branches on the content and effectiveness of many of the energy and climate-policy measures and steering instruments. Each administrative branch is ultimately responsible for its own measures and examines

³⁶ Political coordination of the energy and climate policy has been the responsibility of the ministerial working group on bioeconomy and clean solutions, which comprises the sectoral ministers playing a key role in the preparation of the energy and climate policy. Coordination at government-agency level under the ministerial working group has been the responsibility of a contact network comprising ministries' sectoral public officials.

them from its own perspective. This may lead to sector-specific optimisation and a situation where the key cross-cutting climate-policy principles (such as the cost-efficiency of the measures) is put at risk.

In order to enhance the effectiveness and cost-efficiency of the climate policy, a common research-based view on the principles, measures and steering instruments central to the climate policy as a whole should be established. Climate-policy coordination should be enhanced by strengthening the role of the government-agency level contact network in the preparation of the climate policy and in practical action. Interaction between climate policy and economic policy would also be enhanced if the Minister of Finance joined the ministerial working group responsible for climate policy.

Energy and transport taxation should be examined as part of a cost-efficient climate policy

In addition to the collection of tax revenue, energy and transport taxes should also be examined as part of the cost-efficient achievement of the climate targets. If from the perspective of the cost-efficiency implementation of the climate policy, there are grounds for steering transport emissions more extensively, higher fuel taxes would the most efficient way of reducing greenhouse-gas emissions generated by traffic. This is because the fuel tax is directed at the actual amounts of the fuels consumed. At the same time, locally applied congestion charges tied to time and place might be an efficient way of reducing congestion.

Car tax would enhance the economic efficiency of the steering of traffic emissions if economic actors do not give sufficient consideration to fuel costs at time of the vehicle purchase. However, the emissions-based differentiation of the car tax rate is already very steep and at small emission levels, the tax is quite low. This means that reducing car taxes for low-emission vehicles is of limited use as an emissions-steering instrument. It would seem that changes in car tax only have a limited effect on the rate of car stock renewal (see Harju et al., 2018a). However, at the moment, the rate of car stock renewal also has a fairly limited impact on greenhouse gas emissions from transport because the fuel consumption of new cars in road traffic does not seem to have declined at the same rate as the figures given by car manufacturers (see Tietge et al., 2019).

An annual car tax is a fiscally effective tax but as an instrument steering greenhouse gas emissions, it is less justified than other taxes. A time-based vehicle tax is not connected with the actual fuel consumption and it is not directed at the moment of the car purchase, which means that it cannot compensate for the short-sightedness of economic actors at the time of the car purchase.

From the perspective of climate-policy and other targets, it should be critically assessed whether all existing energy tax subsidies are appropriate and cost-efficient. Changes in energy production and its regulatory environment, such as emissions trading, may also require new types of energy taxation.

When new taxes with a steering role are considered and before any decisions are made, the exact goal, the most feasible and cost-efficient steering methods available for achieving the goal, and the effects of the steering methods should be determined.

The private sector will have to bear most of the cost of climate change

The private sector also plays an important role in climate change mitigation and adaptation. According to the European Commission, investments of about EUR 180 billion are needed every year so that the EU can achieve its climate and energy targets. It is clear that most of these investments and the costs arising them will be the responsibility of the private sector.

Climate change is not only a matter of funding needs as it also creates risks in the financial markets. Global warming and its consequences, such as extreme weather and rising sea levels, will cause costs to companies and increase the risks faced by the parties providing them with funding and insurance cover. For example, factories built in areas prone to flooding and storms should not be granted funding unless the environmental risks referred to above are considered in the risk premiums. When environmental risks are realised, the compensations paid by insurance companies also increase, especially if the environmental risks are not priced when the insurance cover is provided. Such pricing distortions are a risk to financial stability. For this reason, any credit, market and operational risks caused by climate change should be effectively priced in the financial system. In the financial system, better consideration for the risks arising from climate change can only be given, if there is more extensive information available on the targets for investments.

From the perspective of financial stability and in addition to the material risks caused by climate change, shift risks have also arisen in the financial market. Capital has already started to flee environmentally harmful sectors as investors have become more aware of climate change and the principles of sustainable development. Such market changes also have an impact on the value of general government investments.

Combating climate change and adapting to it require that capital is better channelled to sectors supporting these goals. This also helps to prevent the realisation of environmental risks. If these risks are realised, they will probably also cause substantial costs to general government. For this reason, it should be ensured that enough funding is channelled to climate change mitigation and adaptation. This can help to prevent the realisation of environmental risks and it may also generate savings in the long term.

International financial institutions can also contribute to the combating and management of climate change

Achieving progress in the combating and management of climate change requires international solutions and cooperation. Finland has played an active role in international climate matters in the EU and international financial institutions. World Bank, European Investment Bank (EIB), European Bank for Reconstruction and Development (EBRD), and the Nordic Investment Bank (NIB) are the most important of the international financial institutions providing funding for projects aimed at combating and managing climate change. They are also promoting the channelling of private investments to these projects. Finland should actively work to ensure that these financial institutions are increasingly used in the work aimed at combating and managing climate change.

In climate matters, financial institutions also operate through global cooperation networks. It was decided in the last year's annual meeting of the International Monetary Fund (IMF) and the World Bank that a global climate alliance of finance ministers would be established. The aim of the alliance is to combat climate change by means of economic and funding-based steering instruments, identify best practices and agree on international policy measures. Finland and Chile will preside over the alliance and an agreement on the procedures, objectives and work programme of the alliance is expected to be concluded during spring 2019. International advocacy work in the combating of climate change and in the work of the alliance requires an active and long-term approach over government terms.

11.2 It should be possible to limit the growth of household debt

- The indebtedness of Finnish households has increased at a rapid rate. If this trend continues, it will constitute a risk when the next downturn occurs. In that case, households might be forced to cut consumption in order to manage their debts.
- At the moment, there are no macro-prudential instruments available in Finland that would effectively limit excessive household debt.
 Thus, new instruments of this kind should be introduced so that they could be implemented, if necessary.
- The restrictions should comprehensively apply to all loans taken from banks and other lenders as well as to indirect debt (such as housing company loans). The regulatory provisions should also more clearly encourage all creditors to properly assess the real debt sustainability of their customers.

Household indebtedness has reached record levels

In recent years, there has been discussion in Finland on household indebtedness from the perspective of macro-prudential stability and foreign observers have also drawn attention to the matter. At the end of 2016, the European Systemic Risk Board (ESRB) warned Sweden, Finland, Denmark and five other EU Member States of household indebtedness and other medium-term vulnerabilities in the housing market. The International Monetary Fund also drew attention to the growing debts of Finnish households in its latest country report on Finland (IMF 2017).

Household indebtedness, in relation to disposable income, has reached record levels as a result of extremely low interest rates and easy availability of funding. At the end of June 2018, Finnish households had loan debts totalling about EUR 151.4 billion, or 128.7% of their disposable annual income (after taxes).

Figure 11.2
Household indebtedness rate
%

140
120
100
80
60
40
20
0
00
02
04
06
08
10
12
14
16

Source: Statistics Finland

Housing loans accounted for EUR 96.3 billion and housing company loans for about EUR 19.3 billion of this total. Consumer loans provided by banks are included in the total debt and they amounted to EUR 15.6 billion. Consumer loans provided by parties other than banks are not included in the figures because these lenders are not usually obliged to report on their activities to government agencies on a regular basis. According to separate studies, consumer loans provided by parties other than banks totalled between EUR 2.5 and 3.5 billion at the end of 2017. There are problems concerning consumer loan statistics, which makes it more difficult to produce an up-to-date picture of the situation. In particular, this applies to unsecured loans provided by other than credit institutions.

The household housing loan stock has been growing at an annual rate of about two per cent over the past few years. However, housing company loans and consumer loans have been the main factor boosting household indebtedness in the 2010s. Housing company loans have been growing at an annual rate of about ten per cent over the past two years but the rate was even faster between 2010 and 2015. For many years, the volume of consumer loans granted by banks has grown substantially faster than the housing loan stock (at an annual rate of about five per cent).

High level of indebtedness may start a self-sustaining negative spiral in the economy

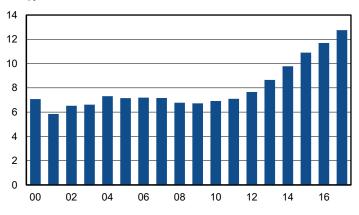
A sudden shock affecting the Finnish economy might lead to a downturn, weaken employment, slow down household income growth, cause a sharp fall in the value of real estate and dwellings used as loan collateral, or cause interest rates to rise steeply. This could start a negative self-sustaining spiral. Households would cut spending in order to manage their debts, which would lead to a more difficult business operating environment and bankruptcies. This in turn would cause banks higher credit losses, decrease their equity and slow down lending.

This was the chain of events witnessed in Spain and Ireland in the first decade of the 2000s. In the light of the events experienced during the financial crisis, correcting the balance sheets would take many years in all economic sectors. In Spain and Ireland, household consumption spending returned to pre-crisis levels in 7-8 years. Rapid accumulation of debts is also often connected with excessive indebtedness among private individuals and an increase in payment defaults, which cause social problems. Such phenomena have also been observed in Finland in recent years.

There have been new and undesirable features in indebtedness in recent years

There are new features in the indebtedness of Finnish households that are difficult to tackle with existing macro-prudential instruments. The loan ceiling currently in use only applies to housing loans and their collateral. It does not apply to housing company loans in which the loan is taken out by a housing company but in which the debt is ultimately the joint liability of all shareholders in the company. Traditionally, housing companies have borrowed money to finance building renovations but in recent years, housing company loans have also been increasingly used to fund investments in homes and home purchases in new buildings. It is estimated that about one half of all housing company loans are taken out to fund renovations and the remainder to fund new construction. The end of instalment-free years in housing company loans and the possible rise in interest rates at the same time are a problematic combination, especially if the loan amount (including the company loan proportion) is high.

Figure 11.3
Percentage of housing company loans of total household debt



Source: Statistics Finland

Most of the consumer loans taken out by households are still granted by banks. However, as digitalisation is advancing, the proportion of funding sources outside traditional banks has been on the increase and new actors are actively offering unsecured high-interest consumer loans to households. There also European examples of how non-banking actors have gained a market share in housing financing. Existing macro-prudential instruments are ineffective against growing indebtedness in these areas. Such non-banking actors may not even be supervised by the Financial Supervisory Authority. In the registers of the Regional State Administrative Agency for Southern Finland, there are a total of 62 actors providing consumer loans that are not credit institutions (situation in summer 2018).

The purpose of macro-prudential stability policy is to prevent serious crises

The purpose of the macro-prudential stability policy and macro-prudential stability supervision is to prevent crises that threaten the stability of the financial system as a whole. Banking crises and other serious shocks affecting the financial system have caused substantial costs to society and especially to public finances. Europe has also experienced such crises in recent years. In many cases, the crises have arisen because banks have expanded lending too quickly, which has led to valuation bubbles in the housing or securities markets, there is too much construction activities and households are living on borrowed money. The crises have led to a deep economic downturn and substantial general government deficits.

The Board of Directors of the Financial Supervisory Authority serves as Finland's macro-prudential stability authority and it reviews the macro-prudential stability and outlook of the Finnish financial system four times each year. Based on the review, it decides on possible macro-prudential measures on the basis of preparatory work carried out by experts. The decision is submitted to the European Central Bank for its assessment.

The currently used macro-prudential instruments are mainly directed at banks

The purpose of the macro-prudential instruments is to deal with the cyclical and structural risks facing the financial system. They are intended to have a direct effect on the estimated or identified risk already before the crisis comes to a head. In addition to the macro-prudential instruments, discretionary capital adequacy requirements for banks can also be used. Macro-prudential measures are directed at all banks or at specific banks.

Countercyclical capital buffer, binding maximum loan-to-value ratio (loan ceiling) for housing loans and higher risk weights for loans with real property collateral in capital adequacy calculations for banks are used as cyclical macro-prudential instruments. Additional capital requirements for banks (especially for the large ones) are the instruments used to prepare for structural risks in the financing system.

Short-term costs and benefits that are difficult to measure are the challenges in macroprudential policy

Incorporating macro-prudential instruments into the legislation and their use on a needs-basis is problematic. The instruments usually increase costs incurred by credit institutions in the short term but the long-term macro-prudential benefits are uncertain and difficult to measure. The time between the drafting of the legislation and the introduction of the instruments is usually long, which makes correctly-timed use of the instruments difficult. In order for the instruments to become quickly available, the legislation on them should be passed as early as possible. It should also be noted that the macro-prudential policy can be eased for example when there is a threat of a credit recession.

When the range of macro-prudential instruments is supplemented, the aim should be to ensure effectiveness and that the gaps in the macro-prudential policy can be closed. It should be possible to solve the problems concerning the establishment of a macroeconomic situation picture by improving the comprehensiveness and comparability of debt statistics. There should be legislative instruments that can be flexibly introduced if experts propose measures as part of their macro-prudential stability assessments.

No experience-based assessments of the adequacy of the measures can be produced at this stage

In Finland, macro-prudential decisions have only been made for less than four years. The range of instruments has also become gradually more comprehensive and there is variation between the impact delays of individual instruments. For this reason, no reliable experience-based assessment of the adequacy of the existing macro-prudential instruments can be produced at this stage. Based on the above discussion, it is, however, safe to say that the instruments do not adequately cover the sources of household indebtedness.

How could the existing range of macro-prudential instruments be supplemented?

The macro-prudential stability policy should be supported by a comprehensive, reliable and up-to-date overall picture of indebtedness and debt servicing levels in Finnish households and the breakdown between the two by assets and income. There should also be tools that can more comprehensively impact overall consumer indebtedness and debt servicing in advance before they reach unmanageable levels. Regulatory provisions should also more clearly encourage all creditors to properly assess the real debt sustainability of their customers.

A positive credit register could significantly reduce the risk of excessive household indebtedness, especially because the creditors would have to check the applicant's details from the register and to enter their credit decision details into the register. The intention is to combine this register, containing all credit and debt servicing details, with the incomes register maintained by the Finnish Tax Administration, in which case the creditors would have access to comprehensive information on the applicant. The register could also improve the ability of households to manage their own finances. The problem is the slow introduction of the credit data register; according to current estimates, it would only be operational in 2023.

Non-banking companies providing consumer loans should be obliged to report on the credits that they grant and their terms. It could also be considered whether these companies should be supervised in the same manner as banks or whether the macro-prudential measures should apply to them in other ways.

Of the macro-prudential instruments currently used in Finland, only the loan ceiling is directed at credit applicants and it only applies to housing loans. Other instruments directed at credit applicants that are already used internationally could include income-linked maximum levels of total debt and debt servicing expenses, instalment-payment obligations or restrictions on repayment periods.

In Finland, consideration could also be given to higher risk weights of housing company loans in new buildings in the banks' capital adequacy calculations, restrictions on instalment-free periods of housing company loans or limiting the maximum size of housing company loans in relation to the debt-free price of the apartment. Renovation loans are not a problem in this respect because basically, the value of the property rises as a result of the renovation.

The banks' own assessment of the credit applicant's payment capacity is naturally the key risk-management tool at household level. The Financial Supervisory Authority should ensure that, as laid out in the recommendations, the calculation of the payment capacity covers all debt servicing expenses of the household, including those arising from the housing company loan. All creditors should adhere to the principle of carefully verifying the customers' debt-servicing capacity in different situations.

11.3 Improvements are needed in the risk management of government guarantees and collateral

- There has been a rapid increase in government guarantees and collateral in Finland, and they have reached substantial levels when compared to other EU countries.
- The concentration of the government guarantees and collateral highlights the risks arising from them.
- There are no limitations on the growth in government guarantees and collateral in the existing national fiscal policy rules or EU rules.
- Improvements are needed in the risk management of government guarantees and collateral. There should be particular attention on the appropriateness and uniformity of the methods for granting guarantees and collateral across the boundaries of administrative branches. Furthermore, consideration should be given to procedures for limiting the risks connected with government guarantees and collateral.
- Guarantee fees should also be used more extensively.

There has been a substantial increase in government guarantees and collateral

There has been a substantial increase in government guarantees and collateral over the past few years. As recently as 2010, the guarantees and collateral totalled EUR 23.1 billion, whereas by the end of 2017, they had risen to EUR 52.1 billion. The largest government guarantee and collateral liabilities³⁷ are connected with Finnvera's export guarantees, management of international financial crises and housing funding (See Figure 11.4).38

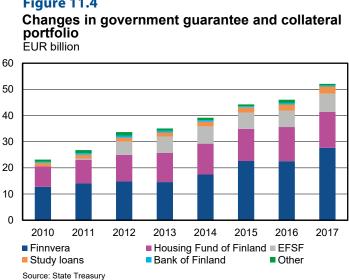


Figure 11.4

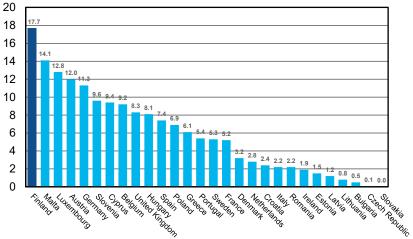
In EU comparisons, Finland is at the top in the volume and growth of government quarantees

The volume of government guarantees in relation to the size of the national economy is high in Finland, compared to other European countries (See Figure 11.5). According to the information collected by Eurostat, the nominal value of Finnish government guarantees in relation to GDP stood at 17.7% in 2016, which is the highest figure in the EU. The gap between Finland and the reference countries was substantial. For example, the figure for Germany is 11.3%, for Sweden 5.3% and for Denmark 3.2%.

³⁷ Government guarantee means a legal commitment by the state to assume liability for the debt of another party. Government collateral is a legal commitment undertaken by the state to compensate for the losses arising from certain activities.

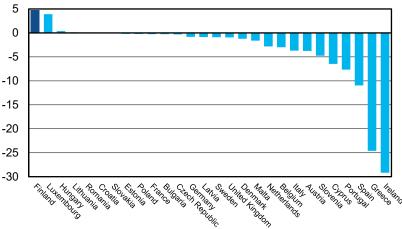
³⁸ The liabilities shown in the Figure are of different types. For example, Finland and other euro area member countries took joint measures through the European Financial Stability Facility (EFSF) to combat the euro crisis. The liabilities connected with the EFSF do no longer grow because it has not been possible to grant any new financial aid through the facility after 30 June 2013. At the same time, export financing can be seen as an instrument more closely connected with national decision-making and there has been a continuous growth in the liabilities arising from it.

Figure 11.5 Government guarantees 2016 relative to GDP, %



Does not include the liabilities of the European Financial Stability Facility Source: Eurostat

Figure 11.6
Changes in government guarantee-to-GDP-ratio 2013-2016
percentage points



Does not include the liabilities of the European Financial Stability Facility Source: Eurostat

The government guarantee portfolio in Finland has also risen more rapidly than elsewhere in the EU in recent years (See Figure 11.6). During the period 2013-2016, the government guarantee-to-GDP ratio in Finland grew by 4.7 percentage points, while in Luxembourg (the second-placed country in the table), the guarantee portfolio grew by 3.9 percentage points. In other EU countries the guarantee portfolio-to-GDP ratio decreased or remained roughly the same during the period in review.

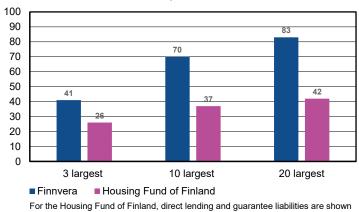
Capital liabilities have pushed contingent government liabilities even higher

In reality, the contingent government liabilities in effect are substantially higher that the liabilities arising from the guarantees and collateral described above because the State of Finland also has capital and other liabilities. Capital liabilities refer to callable capital to international financial institutions in the event that capital is required to cover losses or to prevent their insolvency. There has been a sharp increase in these liabilities in recent years, especially as a result of the establishment of the European Stability Mechanism. Including the capital liabilities in the total increases Finland's contingent liabilities by about EUR 18 billion. However, capital liabilities should be treated separately from government guarantees and collateral because in capital liabilities, national decision-making has a weaker presence than in government guarantees and collateral.

The risks are increased by the concentration of the contingent liabilities and overall government indebtedness

The risks to central government finances are heightened by the fact that government guarantees and collateral are strongly concentrated to specific customers and sectors (See Figure 11.7). For example, in Finnvera's case, the three largest customers granted buyer financing accounted for 41% of the company's export guarantees and special guarantees in effect at the end of 2017. At the same time, the three largest customers of the Housing Fund of Finland accounted for 26% of the fund's liabilities.

Figure 11.7 Customer concentration of Finnvera's and Housing Fund of Finland's liabilities situation at the end of 2017, %



as a combined total

Sources: State Treasury and Finnvera

In 2017, an international evaluation group published its report in which the purpose was to assess the functioning, effectiveness and risks of Finland's export financing system (ATRx et al., 2017). It was stated in the report that growing export financing liabilities and their concentration make the system vulnerable.

When the risks arising from contingent liabilities are assessed, consideration should also be given to the state of Finland's public finances as a whole. As Finland's contingent liabilities have been growing at a rapid rate, government debt has almost doubled in euro terms at the same time. The debt has also increased significantly in relation to the size of the Finnish economy. The mutual dependency between overall economic situation, government debt and contingent liabilities increases the risks arising from contingent liabilities. A serious macroeconomic shock could lead to a situation where contingent liabilities are realised simultaneously as the ability of the state to carry the realised risks has weakened.

Finland's contingent liabilities and the risks arising from them have attracted attention

A number of actors have drawn attention to the high level of Finland's contingent liabilities and the rapid growth in them in recent years. Trends in contingent liabilities and the risks arising from them have been reviewed since 2015 in the annual risk report published by the Ministry of Finance. In February 2018, the National Audit Office of Finland assessed the prerequisites for the management of Finland's contingent liabilities (National Audit Office, 2018). The key question in the audit was whether the management of the contingent liabilities has been adequately considered in the drafting and steering of fiscal policy. It was noted in the audit that there are inadequacies in this respect. There are no comprehensive assessments of the expenditure effects of the realisation of contingent liabilities. Risk assessment is agency-specific and no minimum information requirements for the risk analyses have been set.

The European Commission has drawn attention to the contingent liabilities when assessing the state of the Finnish economy and compliance with fiscal policy rules (European Commission, 2017b). In its report in May 2017, the Commission highlighted the high GDP ratio of general government guarantees in Finland compared to other EU Member States.

Credit rating agencies have also made observations about Finland's contingent liabilities when assessing the Finnish economy and the sustainability of Finland's public finances. For example, in its report in August 2018, Fitch mentioned the high level of contingent liabilities as one of the weaknesses of Finland's public finances (Fitch Ratings, 2018).

There are no limitations on the growth in contingent liabilities in national fiscal policy rules or EU rules

Finland's existing fiscal policy rules in which the aim is to limit the growth in public spending, do not impose any limitations on the growth in contingent liabilities. Moreover, the costs associated with contingent liabilities are not fully considered in the preparation of the Budget.

The same applies to the EU rules. There are requirements concerning the reporting on contingent liabilities in the Stability and Growth Pact and the Budgetary Frameworks Directive but they do not set any limits on the volume or growth of the liabilities. Furthermore, the EU legislation does not contain any obligation to produce comprehensive information on the risks of contingent liabilities or on their effects on the state's ability to manage the costs arising from realised liabilities.

Uncontrolled growth in government guarantees and collateral is a risk to stable economic growth and public finances

In economic terms, government guarantees and collateral are comparable with debt. It has been noted in studies that a high level of central government indebtedness slows down economic growth in the long term.

Similarly, the risks and negative effects of contingent liabilities on public finances and economic growth increase as the liabilities increase. As described above, there has been a rapid growth in contingent liabilities in Finland in recent years and they are at high level, when compared to other countries. In fact, the realisation of the contingent liabilities might, in the current situation, substantially weaken the state of central government finances and their operational foundations. For this reason, the risks and expected costs and revenue contained in these liabilities should be assessed more systematically from the perspective of the sustainability of central government finances.

The process of assessing and reviewing government guarantees and collateral should be improved

In the reviews produced by international organisations (for example, Cebotari, 2008), it is emphasised that the risks arising from contingent liabilities can be reduced with a thorough and careful assessment and review process. Decision-making should be supported by comprehensive assessments of the risks and costs associated with contingent liabilities. Furthermore, guarantee applicants should be able to demonstrate the market failure that can serve as a justification for granting the guarantee. The assessment system should also be systematic in the sense that all projects should be treated in the same manner and with the same criteria in the assessment process.

The current Finnish practice concerning the assessment and review of government guarantees is not in accordance with the good practices described above. There is variation in the comprehensiveness of the risk and cost estimates of contingent liabilities. They are assessed for each agency separately and the overall picture of the risks associated with contingent liabilities and their management is inadequate. The review processes of contingent liabilities and the risk-management measures associated with them should therefore be comprehensively examined. On this basis, Finland should introduce measures that help to improve risk management at the level of central government finances as a whole. To support decision-making, there should be definitions for minimum information requirements for risks contained in contingent liabilities that are significant from the perspective of the sustainability of public finances.

At the moment, the total costs arising from the use of guarantee and collateral authorisations are not fully considered in the Budget. The same applies to the spending limits procedure. This creates incentives for using contingent liabilities instead of on-budget expenditure even though from an economic perspective, such an approach would not necessarily be desirable in the long term. As part of the development of the process of assessing and reviewing government guarantees and collateral, consideration should therefore be given to measures and alternatives for limiting the risks associated with the guarantees and collateral.

Further improvements should be made in the reporting and monitoring of government guarantees and collateral

In addition to the development of the risk management procedures concerning the granting of the guarantees, the work to improve the reporting and monitoring practices concerning the government guarantee and collateral portfolio should be continued. The collection and management of the quarterly guarantee data has already been made the responsibility of the State Treasury over the past few years. After these functions have become well-established, the development work should continue so that the risks associated

with government guarantees and collateral could be examined in more detail *in their entirety*. This would also serve the information needs arising when government guarantees are assessed and reviewed.

There should be stricter criteria for not collecting the guarantee fee

Under the existing legislation, a fee is charged for the government guarantees authorised by Parliament. However, the Government may, for special reasons, decide that no guarantee fee is charged. These special reasons are not specified but reducing financing costs by means of guarantees cannot be considered a such a special reason. Despite this, the view has been that nearly every case coming under the scope of application of the guarantee legislation has involved special reasons. However, the fee can serve as an incentive for the guarantee recipients to take risks and costs associated with the guarantee into account in their own decision-making. For this reason, there should be stricter criteria for not collecting the guarantee fee.

Guarantee fees should be collected more extensively

Guarantee fees should be collected more extensively in connection with guarantee decisions and there should also be more special laws with provisions on collecting guarantee fees. Subsidised loans with deficiency guarantees granted for the construction of rental and right-of-occupancy housing are the largest sector based on special legislation containing no provisions on guarantee fees.³⁹ The new subsidised loans granted for the construction of rental and right-of-occupancy housing have averaged about EUR 1.1 billion each year over the past few years. Most of the loans granted to new construction goes to growth centres. Despite this, the state can be considered to carry a credit risk in the funding as a guarantor when consideration is given to the high loan-to-value ratios, long loan periods and tail-end repayment programmes.⁴⁰

In social housing financing, the view has been that there is basically no reason to assess the state-subsidy aspect and for this reason, guarantee fees have not been considered necessary. In this case, too, the guarantee fee would, however, provide actors with an incentive to examine more thoroughly the option of market-based financing. Financing for housing intended for special groups could be an exception to this because support for them can, in most cases, be justified with existing market failures.

³⁹ At the moment, guarantee fees are payable in housing financing for limited deficiency guarantees on housing loans taken out by private households (one-off fee of 2.5%), on community loans taken out as non-subsidised loans against personal guarantees (one-off fee 0.5%) and conversion guarantee loans (one-off fee 0.5%).

⁴⁰ The loans granted for the construction of rental buildings amount to a maximum 95% of the building and plot costs. For right-of-occupancy buildings, the ratio is 85%. The maximum loan periods are 45 years.

11.4 Continuity of society's vital functions in a digitalised society must be ensured

- Societies are becoming increasingly dependent on digital services and the functioning of information networks and information systems. The threats endangering the continuity of activities dependent on the digital environment are increasing and becoming more complex.
- In a digitalised society, trust can be maintained through secure services functioning in all situations and a secure infrastructure as well as by ensuring data protection and information security.
- Ensuring the flow of critical information and the functioning of the information networks and information systems critical to the functioning of society requires continuous and coordinated development. Balanced development of shared services and infrastructure can best be ensured through centralised funding.
- National policy guidelines should be prepared on the organisation of services and service provision connected with vital functions of society. Cooperation and business models aimed at ensuring the continuity of society's functions should be developed as a joint effort between public administration and companies.

Digitalisation can serve as an enabler for the renewal of society if we can manage the risks associated with it

Digitalisation, interdependency, artificial intelligence, internet of things, robotisation and new service provision models, which are assuming new dimensions and spreading to new sectors as a result of technological advances, are changing society, ways of living and ways of work. As a result, the services needed by public administration, companies and individual citizens and their operating processes are becoming increasingly dependent on the functioning of the digital environment.

With the changes taking place in its society, Finland is in a good position to become a leader in information use and find new ways of reducing the sustainability gap in public finances and enhancing the competitiveness of Finnish companies. In addition to the trust-based Finnish society, good administration, high skill levels and the use of existing registers and other data resources, the safeguarding of the operating prerequisites of companies and research and development activities provides a basis for ensuring progress in these areas.

Trust in other people, society and its institutions is the key force keeping society together and it also serves as the basis for the Finnish model. Building and maintaining trust are becoming increasingly important as enablers for interaction and cooperation between citizens, government agencies, business operators and organisations. The trust-based society has enabled high-quality public services, which are based on the right of government agencies to obtain comprehensive information on individual citizens. However, rapid technological, social and cultural change poses a challenge to the Finnish trust based on shared values and predictability. In a complex, dynamic and closely-interconnected operating environment, building trust is an arduous process. Trust can be lost overnight if the functioning of the digital operating environment and digital services is not secured at adequate level in all situations.

The role of trust is also highlighted in the international and data-intensive network economy, which is based on effective information networks and technology-mediated communications and makes extensive use of electronic services and the opportunities provided by artificial intelligence. Ensuring the security of information networks and digital services, the expertise and safety culture associated with them, and the speed of legislative development and implementation helps to ensure that the trust in Finland as an investment destination and a partner can be maintained.

Trust can be built and maintained when digital society is built in accordance with the concept for comprehensive security in which the vital functions of society are ensured through cooperation between government agencies, business operators, organisations and citizens.

Ensuring the continuity of operations requires strategic policy decisions and centrally steered development

Technical problems, disruptions, natural phenomena and different types of influencing work impacting the activities require continuous and (in critical functions) centrally steered work to enhance operational reliability. The currently used sector-specific development approach has not led to a desired outcome. The development of data resources, information networks and services critical to the functioning of society has not been steered or provided with resources on a centralised basis and the objectives for the development work have not been clearly set.

The focus in the public debate on the security of the digital operating environment and the combating of the threats occurring in it has been on operational-level development so that the threats and disruptions that have already been identified can be managed. The emphasis has been on the development of the ability to identify and manage disruptions and on data protection and information security issues. The focus of the debate and

research should be shifted towards identifying the functions of an increasingly digitalised and networked society that are dependent on a digital operating environment and in which ensuring continuity and national control is vital. Based on these needs and interests, the policies guiding the development of the use of new service solutions, cooperation between public administration and companies, and international cooperation should be prepared. The policies should provide firmer guidance when decisions are made on to what extent the services should be provided and the infrastructure built through national measures and resources, to what extent the work should be based on EU-wide or other international cooperation and (especially in public administration) on to what extent new service models and technological opportunities could and should be used in the provision of digital public services. Existing practices have shown that not all digital services provided by public administration can or should be based on the same quality requirements and service promises. False expectations arising from unrealistic service promises may also endanger trust.

In the absence of joint strategies steering the development of the functions critical to the security of society and other digital services and data resources used in public administration tasks, there is a risk that mutually networked systems are not developed in a balanced manner as actors part-optimise the development work in their own areas of responsibility on a cost-oriented basis. In a digital operating environment, interconnected and interdependent functions cannot be made reliable unless the enterprise architecture is considered and understood. Without better coordinated development activities, there is a danger that well-managed reliable entities cannot be built in a digital society and that the entity becomes corrupt and not even significant inputs into operational reliability and security will produce desired results.

In order to ensure the operational reliability of society in a digital operating environment, responsibilities and strategic management should be clarified, if necessary, by introducing structural changes. Policies providing the basis for the development of operational continuity in a digital society and public administration should be prepared. The policies should lay out the level on which national excellence is built and what is included in the critical digital services, information and infrastructure that is connected with special requirements for national control and safeguarding. A knowledge base on the long-term development needs of the information systems, data resources and information networks critical to society should be compiled and policies for the launching of a development programme carried out with centralised funding should be prepared.

Preparations should be made for disruptions in the digital operating environment and the capability to manage the disruptions should be enhanced

Functions of society, public administration, individuals, companies, information, property, infrastructure and reputation are increasingly targeted by different types of cyber and information operations. Securing the reliability of data and other communications and information systems is critical to the disruption-free functioning and security of society, and the livelihood of citizens. For this reason, the preparations for ensuring the functioning of information-technology systems and structures critical to society during disruptions affecting the digital operating environment and services should already be enhanced in normal conditions.

Enhancing technical security and reliability, improving the crisis resilience of society and its capability to cope with disruptions, and increasing the awareness of citizens are playing an increasingly important in the ensuring of the operational capacity. The capacity to identify and analyse threats and intentional influencing in critical information systems and data communications networks should be improved. The aim is that the security risks targeting the digital operating environment can be detected and identified and the required measures can be started so that the critical functions can continue in all situations. In a networked society, this also requires better exchange of information and cooperation between different actors.

Public administration ICT services and data resources connected with the functions critical to the security of society should be identified and their reliability ensured

Identifying and classifying the data resources, digital services and infrastructure critical to the vital functions of society is essential to ensure that the resources used to safeguard continuity and security can be allocated in the correct manner. The key challenge in identification is the absence of unified classification criteria, which could be used to classify and prioritise critical services. The diversity of the classification instruments is reflected in the broad range of different practices, as a result of which everyday operations in particular (and not the need to safeguard vital functions and continuity of operations) becomes a key criterion in the classification of critical systems.

To ensure that further measures can be taken to develop the safeguarding of continuity, it is essential to review the current situation so that a common knowledge base can be established and the development measures can be correctly targeted. This requires that a system for classifying the criticality of services and information systems is prepared and introduced and that the current state of compliance of critical services, information systems and data communications solutions is assessed. There is also a need for a long-term development plan to improve the compliance of critical services, information systems and data communications solutions and to deal with the existing maintenance backlog.

In a digitalising society, the functions critical to the security of society are increasingly relying on the same data communications networks and other infrastructure as other functions of society. This is a cost-effective and practicable solution but it requires that when disruptions occur, government agencies and other actors supporting them are able to use the vital functions of society. A project led by the Ministry of Finance has been launched to ensure the operating prerequisites of government agencies and the actors supporting them in time-critical communications and activities when commercial data communications networks are affected by disruptions. The aim of the project is to replace the existing radio network used by government agencies (VIRVE) with a new service by the year 2025.

The legislative changes required by the new service were approved by Parliament on 17 December 2018. The legislative changes will allow the establishment of a prioritised broad-band communications service for government agencies safeguarding official communications in accidents, disruptions and other emergencies even if the data communications become congested or are otherwise disrupted. The new solution combines central government and private-sector telecommunications resources in a cost-effective manner. As part of the construction of the service, the geographic coverage of the mobile communications network will be enhanced so that citizens, companies and corporations would be better placed to use public digital services and so that equal operating prerequisites for using other opportunities offered by digital society can be ensured in regions where this is not fully possible under existing communications networks.

Coordination between the security, security culture and security expertise of the digital environment on the one hand, and the development of national digital business operations on the other should be improved

Development work based on existing strategies to enhance cyber security of society and public administration, digital security of public administration, and information security in Finland are in progress. The development work has been launched in accordance with sectoral responsibilities but the work has not progressed in all areas in the desired manner.

Improvements in cyber security help to secure vital functions of society

Finland's first national cyber security strategy was published as a Government resolution on 24 January 2013. It laid out the objectives and policies for responding to the challenges in the cyber operating environment and ensuring its functioning. The strategy described Finland's cyber security vision and policies and it was also stated in the document that an implementation programme would be prepared so that the policies can be put into effect and the targeted state described in the vision achieved.

The implementation programme was updated in 2017 and it is divided into three target areas:⁴¹

- 1. Leadership will ensure that the Cyber Security Vision is achieved;
- 2. Society's vital digitalised functions will be assured;
- 3. The cyber competence of citizens, the business community and the public sector will contribute security to digitalisation.

The objectives laid out in the first implementation programme were not fully achieved because not all actors were equally committed to them and it was not possible to influence this on a centralised basis. The new implementation programme only contained measures to which competent authorities and other actors have pledged to carry out. The degree of commitment and the resources available for the work depend on each other. Efforts have been made to improve the monitoring the programme so that Finland's state leadership would have a better picture of the cyber security situation.⁴²

'The differences in the development of cyber protection are partially due to the differences in the amount of development resources the organisations have at their disposal. Regardless of the size of the state and the organisation, certain basic cyber security issues must be in order. Lack of information critical to cyber protection and lack of cyber protection expertise hamper the protection from cyber security violations whose effects are severe and extensive.' 43

The purpose of the public administration digital security programme is to enhance the management's capacity to identify the risks in the digital environment and the competence of the personnel

The work to improve digital security in public administration was launched in 2018 as part of the public administration digital security development programme (JUDO) coordinated by the Ministry of Finance. The aim of the development programme is to ensure that the digital services used in public administration function properly and that they are trusted. To ensure the achievement of this objective, the following three priority areas have been selected for the programme: 1) developing digital security management and risk

⁴¹ Implementation Programme for Finland's Cyber Security Strategy for 2017-2020

⁴² Cyber protection arrangements, NAOF audit report

⁴³ The National Audit Office of Finland carried out an audit on cyber protection arrangements in Finland's central government in 2017. The purpose of the audit was to determine whether cyber protection in central government is arranged effectively and in a cost-effective manner. Cyber protection means the protection of services and systems against hostile action carried out by information technology means. The focus in the audit was on how cyber protection in central government is steered, managed and directed. In its audit, NAOF used interviews and documents connected with the steering and protection measures to analyse the effectiveness of the steering.

management; 2) competent personnel; and 3) using new technologies in the implementation of services and security.

The objectives laid out for the programme also support the architectural work carried out as part of information security. The programme will help to develop the digital security culture and the understanding of its effects and it will provide a basis for public administration services using new technologies. 44

The Information Security Strategy for Finland will provide a basis for making Finland the world's most trusted digital business environment

The focus in the national information security strategy, which comes under the responsibility of the Ministry of Transport and Communications, is on ensuring competitiveness and suitable conditions for exports, developing the EU's digital single market and promoting and protecting privacy and other fundamental rights. The strategy aims to bring about change whereby information security will be built into different systems, terminal devices and services by design. The strategy also deals with matters that damage trust, such as digital security incidents and large-scale invasions of privacy in communication networks.⁴⁵

The vision laid out in the national information security strategy is that the world's most trusted digital business environment is in Finland. The objectives of the strategy are as follows: 1) Finnish legislation will incorporate both competitive and forward-looking provisions from the perspective of digital business; 2) the EU's digital single market will operate in a more dependable manner than at present; 3) Finnish companies will benefit from international standards and there will be digital goods and services available on the market which are safe and secure by design; 4) information security and related know-how will be researched, measured, monitored and developed; 5) the authorities will help businesses and citizens to improve their information security. 46

⁴⁴ Programme to develop digital security in public administration

⁴⁵ Information Security Strategy for Finland

⁴⁶ Information Security Strategy for Finland, page 6

11.5 The continuity of vital financial market services should be secured at the national level

- Changes in Finland's security environment are also reflected in the threats facing the financial system. At the moment, Finland lacks national operating capacity for extremely serious disruptions.
- The legislation on preparations in the financial sector should be made more detailed so that the continuity of the financial market services vital to society can also be ensured in serious disruptions and emergencies using national backup arrangements.

Ensuring the vital functions of society requires a functioning financial system

Stable and disruption-free functioning of the financial markets is a prerequisite for the functioning of society. Disruptions to the financial markets endanger the availability of funding essential to the operations of private and public organisations and the lives of citizens. Disruptions to financial market services resulting from such factors as the unavailability of critical systems may endanger the continuity of vital functions of society. Continuation of economic activities, ensuring minimum income for the population and the carrying out of security tasks require continuous access to and correctness of asset information and smooth payment and securities transactions.

Financial markets are international and their operations are based on the services and systems owned, maintained and operated by financial-sector companies. Central government works to ensure their stability through central bank operations, regulation and supervision and by providing a broad range of economic safety networks. The Finnish legislation contains provisions under which companies providing essential financial market services must have preparatory arrangements in place.

The Finnish infrastructure used for payment traffic, card payments and securities trading has undergone substantial changes in the 2000s. Many of the important service production systems and data resources of financial institutions have been moved outside Finland, which makes the infrastructure more dependent on data communications between Finland and other countries. At the same time, the infrastructure has become dependent on factors that are beyond the control of the financial-sector companies operating in Finland or the Finnish authorities. Obstacles to the use of international systems or data resources may also stop payment traffic, card payments and securities trading in Finland.

Changes in Finland's security environment are reflected in the threats facing the financial system

Over the past few years, changes in the foreign and security policy environment have continued in Finland's neighbouring areas and in global scale. The escalation of the security situation in Europe and the Baltic region has also had direct effects on Finland. Tensions and military activities in the Baltic region have increased. The change has given rise to new threats and instability.

The changes in the operating environment have been rapid and unforeseen. The threats to internal and external security are increasingly overlapping. Key factors impacting internal security include the security of supply, digitalisation, cyber security, basic infrastructure and their strong interdependency. Finland and Finland's critical financial services may also be hit by influencing that is targeting other countries or their infrastructure. Influencing targeting Finland may also be based on the intention to influence the Western community of nations to which Finland belongs.

Use of military force or the threat of military force against Finland is also a possibility. In addition to military means, political or economic pressure, different forms of information and cyber warfare, and their combinations are also used to achieve political objectives. The aim is to put pressure on the targeted parties and cause damage, uncertainty and instability in them. Influencing may also start quickly in normal conditions. Cyber and information influencing has been directed at Finland's neighbouring areas and at Finland's critical financial market infrastructure, industrial facilities, political decision-making system and citizens. Banks and many other companies operating in Finland have been targeted for denial of service attacks.

Changes in the security environment also involve activities called hybrid influencing. Hybrid influencing can be defined as systematic action in which a governmental or a non-governmental actor is simultaneously using a range of different military means or economic or technological means of pressure, information operations and social media to exploit vulnerabilities in the targeted state. The operations may be directed at the targeted countries' political, economic or military infrastructures. Hybrid influencing does not usually include preparations of a military attack but it is based on effective means of pressure that make military attacks unnecessary.

Level of preparations in the financial markets is not adequate

There are no detailed provisions in the existing legislation on the content of the preparedness obligations required of financial market actors. Under the provisions, the parties to which the preparedness obligation applies must ensure disruption-free functioning of their operations in emergencies by taking part in financial markets preparedness planning

and by preparing in advance how to operate during emergencies and by taking other measures. According to the preparatory work of the legislation, preparedness includes the maintenance of backup facilities, backup systems, provisions for remote operations and preparedness for manual operations.

According to the original wording of the preparedness obligation provisions, the Financial Inspection Authority planned to issue more detailed instructions on how the provisions would be applied. The provisions on the competence of the Financial Inspection Authority were based on the principles applied before the existing Constitution of Finland. The provisions on the competence of the Financial Inspection Authority (now Financial Supervisory Authority) to issue such instructions have since been repealed in connection with the revision of the special acts on bodies with preparedness obligations. Unlike in the legislation applying to telecommunications companies, the provisions on preparedness obligations were not supplemented with provisions on the power of government agencies to issue regulations. Since then, the preparedness obligation in the financial markets has been steered by government agencies on a non-binding basis and through cooperation between government agencies and the parties with a preparedness obligation.

The operating environment of the financial markets and the operating practices of the parties with a preparedness obligation have changed substantially. The general nature of the provisions on the preparedness obligation has given rise to unclarity concerning their application. It has also become clear that the non-binding steering, which is mainly based on the recommendations issued by government agencies and cooperation between government agencies and the parties with the preparedness obligation, is not an adequately effective and workable steering instrument to implement the objectives laid down in the legislation. The current level of preparedness in the financial markets is not in accordance with the Security Strategy for Society or the preparedness targets set by the Government on the basis of the Security of Supply Act. Inadequacies in the financial market preparedness constitute a risk to the safeguarding of the vital functions of society, also considering the changes in Finland's security environment.

The EU has also recognised that reliable financial and payment systems are vital to the functioning of society and that measures should be taken to ensure their continuity. The focus in the EU measures to enhance the capacity to cope with disruptions is on the exchange of information on threats and on removing obstacles to the exchange of information. In their own financial-market preparedness measures, individual Member States have given priority to threats other than economic disruptions. Local or more extensive disruptions affecting infrastructures critical to the financial markets cannot be neutralised by official orders or by applying special powers. Instead, there must be access to adequate backup systems, which was also what was originally intended in the existing preparedness legislation.

SOURCES

Ahn, S. (2002), "Competition, Innovation and Productivity Growth: A Review of Theory and Evidence", OECD Economics Department Working Papers, No. 317.

Aho, S. and Tuomala, J. and Hämäläinen, K. and Mäkiaho, A. (2018), "Työvoimapalvelujen kohdistuminen ja niihin osallistuvien työllistyminen", Publication series of the Government's analysis, assessment and research activities 19/2018.

Akcigit, U. and Baslandze, S. and Stantcheva, S. (2016), "Taxation and the International Mobility of Inventors." *American Economic Review*, 106 (10):2930-81. https://www.aeaweb.org/articles?id=10.1257/aer.20150237

Alho, E. and Härmälä, V. and Oikarinen, E. and Kekäläinen, A. and Noro, K. and Tähtinen, T. and Vuori, L. (2018), "Vuokra-asuntosijoitusalan kannattavuus, kilpailutilanne ja kehittämistarpeet", Publication series of the Government's analysis, assessment and research activities 9/2018. http://tietokayttoon.fi/julkaisut/raportti?pubid=URN:ISBN:978-952-287-512-9

ATRx and IFCL and Northumbria University (2017), "Assessment of the operation, impact and risks of the officially supported export financing system and state guarantee granted for the fund acquisition of export credits", Report Submitted to the Ministry of Economic Affairs and Employment.

Botev, J. and Égert, B. and Smidova, Z. and Turner, D. (2018), "Human Capital in the OECD's Quantification Of Structural Reforms", unpublished draft, OECD.

Bye, B. and Fæhn, T. and Grünfeld, L. (2011), "Growth and Innovation Policy in a Small, Open Economy: Should You Stimulate Domestic R&D or Exports?", *The B.E. Journal of Economic Analysis & Policy* Vol. 11:1, Article 42.

Cebotari, A. (2008), "Contingent liabilities: issues and practice", IMF WP/08/245.

Competition and Markets Authority (CMA) (2015), *Productivity and Competition. A Summary of the Evidence*, CMA45.

Da-Rocha, J. M. and Restuccia, D. and Tavares, M. M. (2019), "Firing Costs, Misallocation, and Aggregate Productivity", *Journal of Economic Dynamics and Control*, forthcoming, https://www.sciencedirect.com/science/article/pii/S0165188918303762

European Commission (2017a): Fiscal Rules dataset. https://ec.europa.eu/info/publications/fiscal-rules-database_en

European Commission (2017b), Report from the Commission, Finland, Report prepared in accordance with Article 126(3) of the Treaty, COM(2017) 532 final. https://ec.europa.eu/transparency/regdoc/rep/1/2017/EN/COM-2017-532-F1-EN-MAIN-PART-1.PDF

Fabrizio, S. and Mody, A. (2006), "Can Budget Institutions Counteract Political Indiscipline?", *Economic Policy* 21 (48): 689–739.

FitchRatings (2018), Finland, Full rating report, 23.8.2018.

Fons-Rosen, C. and Kalemli-Ozcan, S. and Sørensen, B. and Villegas-Sanchez, C. and Volosovych, V. (2018), "Quantifying Productivity Gains from Foreign Investment", NBER Working Paper No. 18920.

Hallerberg, M. and Yläoutinen S. (2010), "Political Power, Fiscal Institutions and Budgetary Outcomes in Central and East European Countries", *Journal of Public Policy* 30 (01): 45-62.

Hallerberg, M. and Strauch, R. and von Hagen, J. (2009), *Fiscal Governance: Evidence from Europe*, Cambridge: Cambridge University Press.

Harju, J. and Kosonen, T. and Laukkanen, M. and Palanne, K. and Sallee, J. (2018a), "Studying fuel and car tax policies using microdata: evidence from Finland, Sweden and Norway", Publication series of the Government's analysis, assessment and research activities 70/2018.

Harju, J. and Kosonen, T. and Nordström Skans, O. (2018b), "Firm Types, Price-Setting Strategies, and Consumption-Tax Incidence", *Journal of Public Economics* 165, 48-72.

Holm, P. and Nivalainen, S. and Volk, R. (2008), "Työvoiman alueellisen liikkuvuuden kannustavuus", Pellervon taloudellisen tutkimuslaitoksen raportteja 206.

Hsieh, C.-T. and Klenow, P. J. (2009), "Misallocation and Manufacturing TFP in China and India", *The Quarterly Journal of Economics* 124 no. 4, 1403-48.

IMF (2012), "Fiscal Rules in Response to the Crisis – Toward the 'Next-Generation' Rules. A New Datase", IMF Working paper 12/187.

IMF (2017), FINLAND, 2017 ARTICLE IV CONSULTATION – Press Release; Staff Report; And Statement By The Executive Director For Finland. IMF Country Report No. 17/370.

IMF (2018), "Second-Generation Fiscal Rules: Balancing Simplicity, Flexibility, and Enforcea-bility", IMF Staff Discussion note 18/04.

IPCC (2014), Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, Geneve: IPCC.

Kangas, O. and Niemelä M. (2017), "Riskit, vakuutus ja sosiaalivakuutus" in *Sosiaalivakuutus*. Edited by Havakka, P. and Niemelä, M. and Uusitalo, H., Finva.

Kannustinloukkutyöryhmä (2017a), KANNUSTINLOUKUT JA ALUEELLINEN LIIKKUMINEN TYÖRYHMÄN SELVITYKSIÄ. https://vm.fi/artikkeli/-/asset_publisher/tyoryhma-selvitti-kannustinloukkujen-purkamista-laajasti-paatoksia-puolivalitarkastelussa

Kannustinloukkutyöryhmä (2017b), Kannustinloukkuselvityksen liitteet. https://vm.fi/do-cuments/10623/0/kannustinloukkuselvityksen-liitteet/6aee473d-f2f8-4242-8bf7-c949a-34d34ca/kannustinloukkuselvityksen-liitteet.pdf

Kari, S. and Määttänen, N. and Ropponen, O. and Tamminen, S. and Valkonen, T. (2018), "Common or own goals: Reforming the financing of the European Union", Publication series of the Government's analysis, assessment and research activities 29/2018.

Kauhanen, A. (2016), "The Future of Work: Challenges for Men and Women", ETLA Brief No 50. http://pub.etla.fi/ETLA-Muistio-Brief-50.pdf

Kauhanen, A. (2018), "The Effects of an Education-Leave Program on Educational Attainment and Labor-Market Outcomes", ETLA Working Papers No 56. http://pub.etla.fi/ET-LA-Working-Papers-56.pdf

Kauppinen, I. and Ropponen, O. (2018), Taxation, migration and location of innovative activity. Background report for the Economic Policy Council. https://www.talouspolitiikanarviointineuvosto.fi/raportit/raportti-2017/

Khan, L. M (2017), "Amazon's Antitrust Paradox", Yale Law Journal, 126:3.

Kirkko-Jaakkola, M. (2018), Kansainvälinen palkkaverovertailu 2018. Verotietoa 83. Veronmaksajain Keskusliitto. https://www.veronmaksajat.fi/luvut/Selvitykset/kansainvalinen-palkkaverovertailu-2018/

Kleven, H. J. and Landais, C. and Saez, E. and Schultz, E. (2014), "Migration and Wage Effects of Taxing Top Earners: Evidence of the Foreigners' Tax Scheme in Denmark", *Quarterly Journal of Economics* 129, 333–78. https://ideas.repec.org/a/oup/qjecon/v129y2014i1p333-378.html

Korhonen, E. and Niemi, J. and Ekuri, R. and Oksanen, R. and Miettinen, H. and Parviainen, J. and Haapanen, A. and Patanen, T. (2018), "Kuntien rakennuskannan kehitys- ja säästöpotentiaali", Publication series of the Government's analysis, assessment and research activities 5/2018.

Korkea-aho, E. and Tiensuu, P. (2018), "Lobbarirekisterin kansainväliset mallit", Publication series of the Government's analysis, assessment and research activities 57/2018. http://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/161047/57-2018-Lobbarirekisterin%20 kansainvaliset%20mallit.pdf

Kosonen, T. (2014), "To Work or Not to Work? The Effect of Childcare Subsidies on the Labour Supply of Parents", *The B.E. Journal of Economic Analysis & Policy*, 14(3).

Kosonen, T. (2015), "More and Cheaper Haircuts after VAT Cut? On the Efficiency and Incidence of Service Sector Consumption Taxes", *Journal of Public Economics* 131, 87–100.

Kosonen, T. (2016), "Alennetuille alv-kannoille ei ole hyviä perusteluja", *Talous ja Yhteiskunta* 2/2016. http://www.labour.fi/ty/tylehti/talous-yhteiskunta-22016/alennetuille-alv-kannoille-ei-ole-hyvia-perusteluja/

Kotamäki, M. and Ollonqvist, J. (2018), "Financial Incentives to Work Decomposed: The Finnish Case", Aboa Centre for Economics Discussion paper No. 119, June 2018.

Kröger, O. and Rauhanen, T. (toim.) (2010), "Verotuet Suomessa 2009", VATT Valmisteluraportit 5/2010. http://urn.fi/URN:ISBN:978-951-561-944-0

Kyyrä, T. and Matikka, T. and Pesola, H. (2018), "Työttömyysturvan suojaosa ja työttömyyden aikainen työskentely", Publication series of the Government's analysis, assessment and research activities 45/2018.

Kyyrä, T. and Pesola, H. (2017), "Long-term effects of extended unemployment benefits for older workers", VATT Working Papers 89.

Maczulskij, T. and Böckerman, P. and Kosonen, T. (2018), "Job Displacement, Inter-Regional Mobility and Long-Term Earnings", Palkansaajien tutkimuslaitos, WORKING PAPERS 323.

Maddison Project Database, version 2018. Bolt, J., Inklaar, R. and de Jong, H. and Luiten van Zanden, J. (2018), "Rebasing 'Maddison': new income comparisons and the shape of long-run economic development", Maddison Project Working paper 10.

Maliranta, M. (2017), "Johtamisen laatu, talouden uudistuminen ja tuottavuus: Arvioita Suomen tilasta", Työpoliittinen Aikakauskirja, 60 (2).

Maliranta, M. and Valmari, N. (2017), "Suomen teollisuustuotannon uudistuminen tuotantolinjatasolla", ETLA Raportit No 72.

Maliranta, M. and Ohlsbom, R. (2017), "Suomen tehdasteollisuuden johtamiskäytäntöjen laatu", ETLA Raportit No 73.

Matikka, T. and Harju, J. and Kosonen, T. (2015), "Tuloverotuksen vaikutus työn tarjontaan", Publication series of the Government's analysis, assessment and research activities 5/2016. https://vatt.fi/artikkeli/-/asset_publisher/tuloverotuksen-vaikutus-tyon-tarjontaan-vnk-

Mirrlees, J. and Adam, S. and Besley, T. and Blundell, R. and Bond, S. and Chote, R. and Gammie, M. and Johnson, P. and Myles, G. and Poterba, J. M. (toim.) (2011), "The economic approach to tax design" teoksessa *Tax by Design: The Mirrlees Review*, Oxford: Oxford University Press for Institute for Fiscal Studies. https://www.ifs.org.uk/publications/5353

OECD (2010), *Tax Policy Reform and Economic Growth*, OECD Publishing, Paris. https://dx.doi.org/10.1787/9789264091085-en

OECD (2017a), *Taxation and Skills*, OECD Tax Policy Studies, No. 24, OECD Publishing, Paris. https://doi.org/10.1787/9789264269385-en

OECD (2017b), *Government at a Glance 2017*, OECD Publishing, Paris. http://dx.doi.org/10.1787/gov_glance-2017-en

OECD (2018a), *OECD Economic Surveys: Finland 2018*, OECD Publishing, Paris. https://dx.doi.org/10.1787/eco_surveys-fin-2018-en

OECD (2018b), *Taxing Wages 2018*, OECD Publishing, Paris. https://doi.org/10.1787/tax_wages-2018-en

Ormala, E. (2019), "Suomen kilpailukyvyn ja talouskasvun turvaaminen 2020-luvulla", Työja elinkeinoministeriön julkaisuja 2019:1.

Pärnänen, A. and Kambur, O. (2017), "Suomi-Ruotsi-vertailu: pienten lasten äitien työssäolossa ei suuria eroja", *Tieto&Trendit* 25.4.2017 http://www.stat.fi/tietotrendit/artikkelit/2017/suomiruotsi-vertailu-pienten-lasten-aitien-tyossaolossa-ei-suuria-eroja/

Parpo, A. and Moisio, P. (2006), "Toimeentulotuen saannin kesto ja dynamiikka Suomessa 1992–2003" Yhteiskuntapolitiikka 71 (2): 121-133.

Pehkonen, J. and Huuskonen, J. and Tornberg, K. (2018), "Kohtaanto työmarkkinoilla – havaintoja ja politiikkajohtopäätöksiä", Publication series of the Government's analysis, assessment and research activities 15/2018.

Pekkala-Kerr, S., and Maczulskij, T. and Maliranta, M. (2016), "Within and Between Firm Trends in Job Polarization: Role of Globalization and Technology", ETLA Working Papers No 41. http://pub.etla.fi/ETLA-Working-Papers-41.pdf

Peters, G. (2018), Mitigation pathways, emission scenarios & stabilizing temperature. CICERO. Energy System Analysis (20.2.2018 Yale).

Pohjola, M. (1996), Tehoton pääoma: Uusi näkökulma taloutemme ongelmiin, WSOY

Pohjola, M. (2017a), "Suomen talouskasvu ja sen lähteet 1860–2015", Kansantaloudellinen aikakauskirja 3/2017.

Pohjola, M. (2017b), "Tuottavuus, rakennemuutos ja talouskasvu 1975–2015", Kansantaloudellinen aikakauskirja 4/2017

Rauhanen, T. (2017), Verotuet valtion politiikkavälineenä ja ohjauskeinona, VATT julkaisuja 71. http://www.doria.fi/handle/10024/149391

Restuccia, D. and Rogerson, R. (2008), "Policy Distortions and Aggregate Productivity with Heterogeneous Establishments", *Review of Economic Dynamics* 11, no. 4, 707-720. Ftoisin kui

Takalo, T. and Toivanen O. (2018), "Economics of Finnish Innovation Policy", https://www.talouspolitiikanarviointineuvosto.fi/en/reports/report-2017/

Tietge, U. and Díaz, S. and Mock, P. and Bandivadekar, A. and Dornof, J. and Ligterink, L. (2018), From laboratory to road: A 2018 update of official and 'real-world' fuel consumption

and CO2 values for passenger cars in Europe, https://www.theicct.org/publications/laboratory-road-2018-update

Ministry of Economic Affairs and Employment (2017), Virkamiesselvitys yritystuista ja niiden vaikutuksista, Työ- ja elinkeinoministeriön julkaisuja 22/2017.

Prime Minister's Office (2018), Kansliapäällikkötyöryhmän ehdotukset nopean aikavälin työllisyyttä edistäviksi toimiksi ja talouskasvun jatkumista tukeviksi toimiksi.

National Audit Office of Finland (2017), Valtiontalouden tarkastusviraston tarkastuskertomus 16/2017, Kybersuojauksen järjestäminen, https://www.vtv.fi/julkaisut/kybersuojauksen-jarjestaminen/

National Audit Office of Finland (2018), Valtiontalouden tarkastusviraston tarkastuskertomukset 4/2018, Julkisyhteisöjen ehdolliset vastuut.

Ministry of Finance (2010), Verotuksen kehittämistyöryhmän loppuraportti, 51/2010. Valtiovarainministeriön julkaisuja, 51/2010. https://vnk.fi/julkaisu?pubid=3801

Ministry of Finance (2013), Asuntomarkkinoiden rooli työvoiman alueellisessa liikkuvuudessa. Työvoiman alueellista liikkuvuutta edistävä työryhmä, Väliraportti I. 2/2013.

Ministry of Finance (2017), Yritysverotuksen asiantuntijatyöryhmän raportti. Valtiovarainministeriön julkaisuja, 12/2017. http://urn.fi/URN:ISBN:978-952-251-838-5

Ministry of Finance (2018a), 19 kysymystä ja vastausta Suomen työmarkkinoista ja työvoimakapeikoista. Työryhmän raportti 17.1.2018. https://vm.fi/documents/10623/6248314/ Julkaisu_tyovoimakapeikkoraportti/3352515b-506a-4812-90b0-13262857a406?version=1.0

Ministry of Finance (2018b), Europe 2020 strategy, Spring 2018., Ministry of Finance publications – 10a/2018. https://vm.fi/en/europe-2020

Ministry of Finance (2018c), Rakentaminen 2018–2019. Rakennusalan suhdanneryhmä, syksy 2018. Valtiovarainministeriön julkaisu – 31/2018. https://vm.fi/rakennusalan-suhdanteet

Viitamäki, H. (2015), Työnteon kannustimet – mitä jää käteen? VATT Muistiot 50. http://urn. fi/URN:NBN:fi-fe2018042618570

von Hagen J. and Harden I. J. (1995), "Budget processes and commitment to fiscal discipline", *European Economic review* 39, 771-779.

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