State Treasury
Republic of Finland

24

Debt Management Annual Review 2024

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The Debt Management Annual Review summarises the funding and liquidity management operations of Finland's central government in 2024.

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1 Winds of change

Director of Finance **ANU SAMMALLAHTI**

Photo: Janne Liuski

Despite global risks, Finland has shown determination in tackling the issues at hand with decisive planning and action in many policy segments – like in economic, energy and defence policies.

A turnaround in monetary policy in key regions globally was witnessed in 2024 with both the U.S. Federal Reserve and the European Central Bank cutting policy rates multiple times. Furthermore, the ECB ended reinvestments in its last remaining monetary policy purchase programme, the Pandemic Emergency Purchase Programme (PEPP), at the end of the year. The latter means that in Europe, the ECB balance sheet of monetary policy assets no longer supports the secondary market of debt securities but has started to reduce.

Thus, it is up to the capital markets to digest government debt issuance. In the euro government space, this means over EUR 400 billion of net issuance in 2025 with almost the same amount of debt maturing on the ECB balance sheet and proceeds not reinvested.

> “And yet, the global economic growth is expected to reach 3.3%, which is only slightly below the average of recent decades.”

Likewise, geopolitical and political events that some foresee to be spelling the end of the multilateral contractual world order as we know it have taken place. Such fundamental change may or may not come to fruition, but certainly the risks of authoritarian governance spurring and keeping up aggression of a diverse nature, trade tensions affecting global growth, and spread of disinformation weakening trust have been on the rise. With wars raging and endowments of key resources becoming a strategic prerogative, the world has become a more precarious place.

Yet, global economic growth is expected to reach 3.3%, which is only slightly below the average of recent decades. And despite the risks mentioned above, technological

“Finland’s strong credit, commitment to sound governance, and solid track record in sustainable development will support our bonds and serve investors well in years to come.”

and political change can create significant opportunities for progress and welfare in numerous corners of the world.

What does all this mean for the Republic of Finland Government Bond (RFGB) market? Rising interest rates certainly have helped in keeping government bonds relevant for investors with monetary policy market stimulus being removed. Finland has shown determination of tackling the issues at hand with decisive action and planning in many policy segments – like in economic, energy and defence policies.

Sourcing economic growth

The outlook for medium-term economic growth in Finland has been a key theme for some time. In this Debt Management Annual Review, we have invited two guest columnists to touch upon the topic from different perspectives.

Mika Maliranta writes about the recent rise in the number of medium-sized enterprises that are adopting and commercialising new technologies while expanding operations thus offering a potential boost to the economy. **Roger Wessman** concludes how immigration, contributing to the working-age population, could improve the dependency ratio, the public sector deficit and, combined with faster economic growth, significantly slow the rise in the public debt ratio.

With these views we wish to underline the future potential for the economy and public finances.

Revising debt management strategy and State Treasury organisation

Operational turning points were a feature of Finnish government debt management in 2024.

The medium-term debt management strategy was revised by the Ministry of Finance in 2024. **Pauli Kariniemi** explains in his article the reasoning and objectives of the revision. Raising the average maturity of the debt portfolio over the medium term is expected to improve the predictability of interest expenditure while at the same time resulting in a somewhat higher expected average cost of debt. The strategy revision also includes measures promoting the safeguarding of liquidity, e.g. strengthening the cash buffer.

At the State Treasury, the organisation was revamped at the end of 2024 to strengthen core functions and reenforce co-operation across the organisation. In 2025, Debt Management is a new department separate from the government loans and guarantees administering functions that were previously part of the Finance Division. At the same time, two functions, Communications and IT Management, were centralised in the new organisation.

Issuance strategy

In 2024, the Republic of Finland successfully raised EUR 42.8 billion of funding in the capital markets covering the budgetary funding requirement and safeguarding central government liquidity. In 2025 the scale of our funding programme is approximately the same as last year. The gross borrowing requirement, including short-term funding, is foreseen to be EUR 41.9 billion currently. Given this similarity, the funding strategy and operations are expected to largely resemble those of 2024.

Keeping the RFGB bonds attractive to investors remains our long-term goal. We believe that Finland's strong credit, commitment to sound governance and solid track record in sustainable development will support our bonds and serve investors well in the years to come.

Anu Sammallahti is Director of Finance and Head of Debt Management at the State Treasury Finland.

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Operating environment

Deputy Director **MIKA AROLA**
Senior Manager **MIKA TASA**

The year 2024 was a challenging one for the Finnish economy as gross domestic product (GDP) stayed more or less still. Output was most adversely affected by the significant reduction in construction. On the other hand, Finland's exports increased despite the challenging international environment. In 2025 the GDP is expected to return to clear growth.

Finland's exports recovered in 2024, driven particularly by the strong growth in services sold to Asia and Europe. Conversely, the contraction in goods trade within the Eurozone has continued, explaining the subdued performance of Finnish goods exports. Finland's current account was close to a balance in 2024.

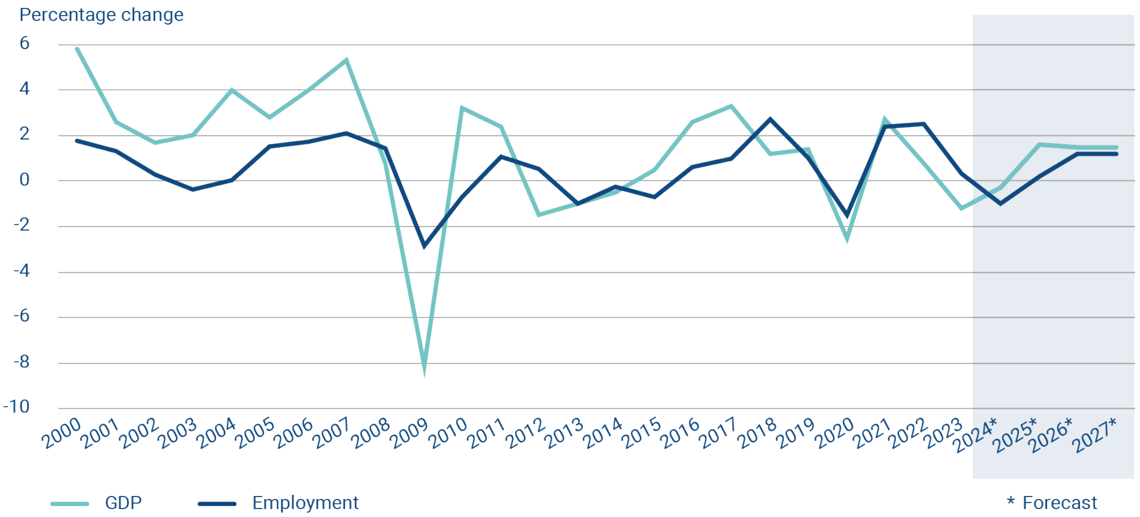
Inflation slowed down significantly in 2024 compared to the previous year. The average inflation rate was 1.6% in 2024. Price pressures were kept in check despite the increase in the standard VAT rate. Inflation is expected to remain moderate in the coming years. The slowdown in inflation contributed to the increase in real household disposable income in 2024. However, private consumption did not rise as household saving increased significantly.

Consumer confidence was particularly dampened by the rise in unemployment. The unemployment rate is estimated to have risen to 8.3% in 2024. Job vacancies decreased, and employment weakened especially in industry and construction. In 2025, the labour market is expected to recover, but the decline in unemployment is likely to be slow. Finland's employment rate remained relatively high at 76.6% despite the increase in unemployment in 2024.

Investment is estimated to have decreased in 2024 but a clear turn for the better is expected for 2025, boosted by the falling interest rates. In construction, the bottom has likely been surpassed though the volume of granted building permits is still low. Along with the recovery in construction, machine and equipment investment is expected to turn into growth.

Gross domestic product (GDP) and employment

Sources: Statistics Finland, Ministry of Finance Dec/2024



The graph shows information on the annual change in GDP and employment in Finland.

Public finances

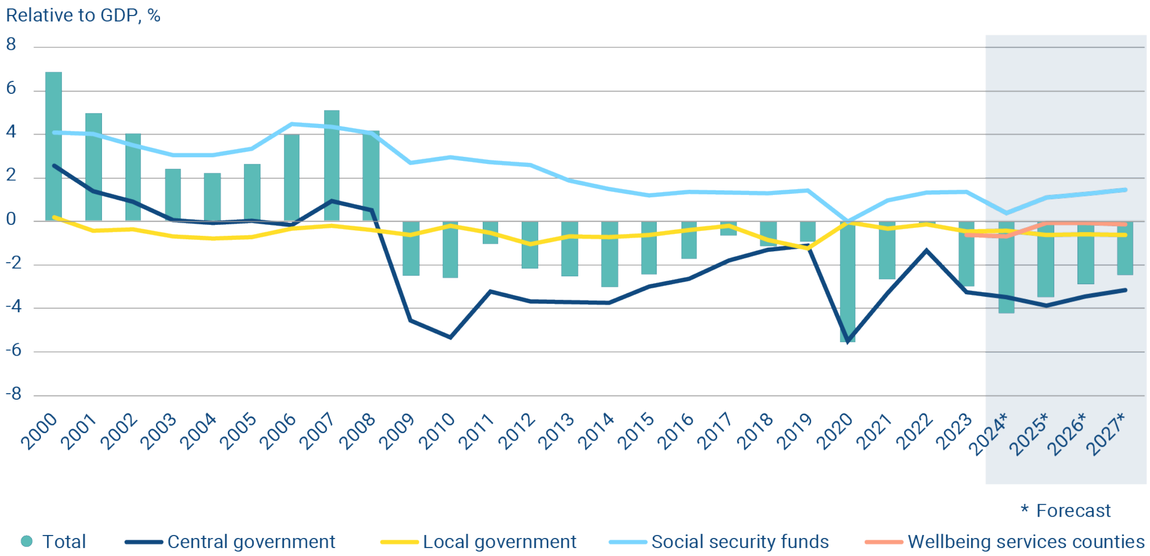
The year 2024 was difficult for Finland's public finances. The general government financial deficit is estimated to have been 4.2% relative to GDP, while the general government debt ratio now exceeds 82%. The growing debt levels were driven by weak economic conditions, an increase in contingency expenditure and the lingering effects of rapid inflation in previous years. In 2025, the deficit is expected to improve to 3.5%. Defence spending will increase expenses, but the fiscal consolidation measures decided by the Government will significantly reduce expenditure and increase revenue.

Among the subsectors of Finland's general government, the central government remains most in deficit. Central government's spending pressures have come from national defence and border security requirements and higher interest expenditure, among other factors. The local government as well as the wellbeing services counties were also in deficit in 2024, however, the general government finances are balanced by the surplus in the social security funds.

Finland's general government debt stood at 82.5% relative to GDP at the end of 2024. The debt ratio increased by 5.4 percentage points from the previous year. Despite extensive fiscal consolidation, the debt ratio will first continue to rise but more slowly, after which it is foreseen to stabilise by the end of the decade. At the end of 2024, the

Financial balance of general government

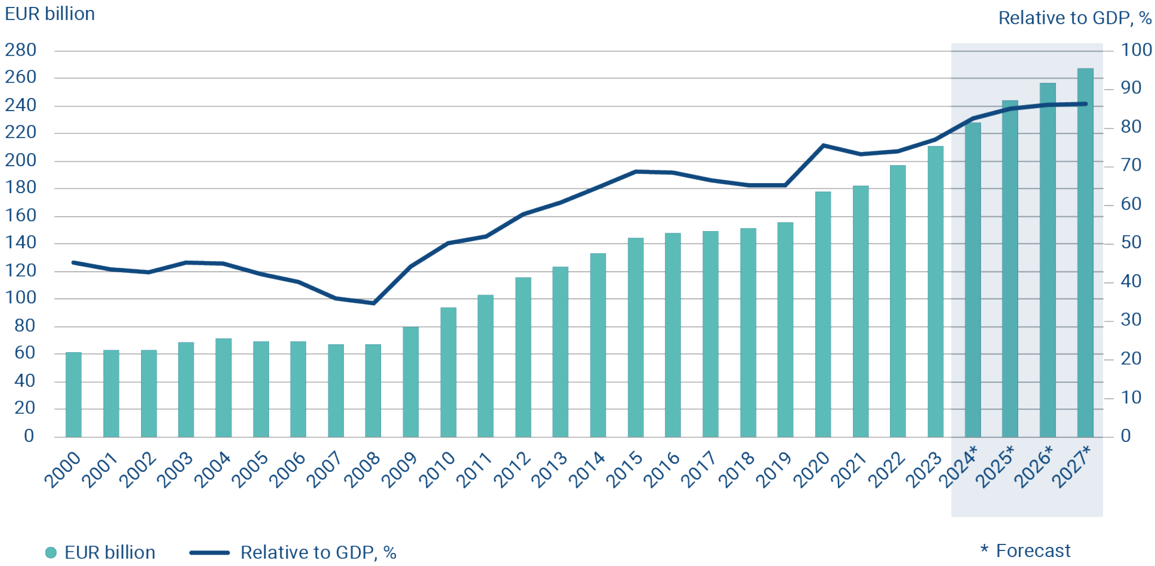
Sources: Statistics Finland, Ministry of Finance Dec/2024



The graph shows the financial balance of the Finnish general government. Social security funds are running a surplus while central and local government show deficits.

General government debt

Sources: Statistics Finland, Ministry of Finance Dec/2024



The graph shows the volume of Finland's general government debt. In 2024, the general government debt was EUR 227.9 billion. The debt-to-GDP ratio was 82.5%.

estimate for the central government debt is 61.2% relative to GDP, while the central government deficit is estimated at 3.5% relative to GDP. The central government debt-to-GDP ratio increased by more than four percentage points from the previous year.

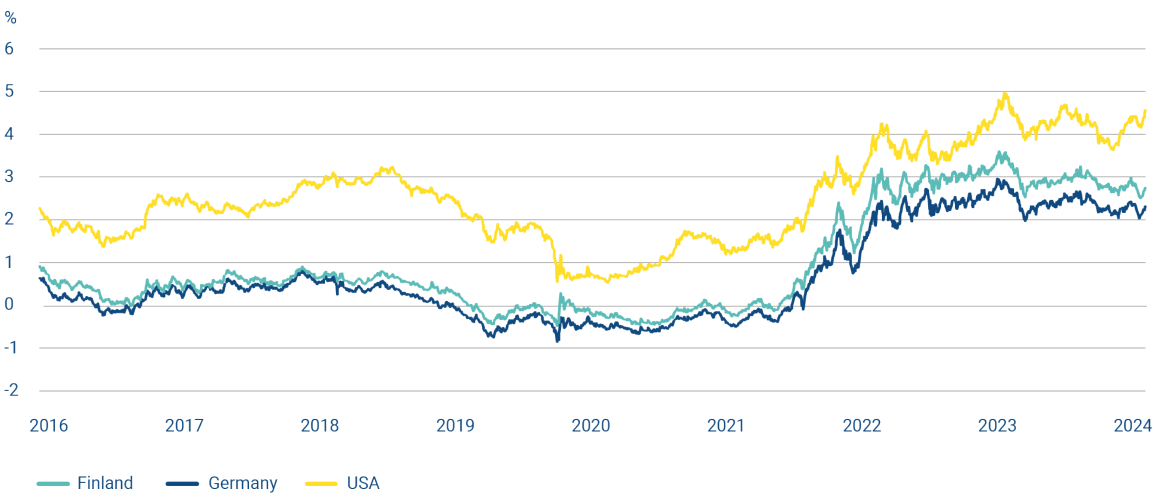
The Republic of Finland has solicited credit ratings from Fitch Ratings (AA+ / negative outlook) and Moody's Ratings (Aa1 / stable outlook). In addition to these solicited ratings, the Republic of Finland has several unsolicited credit ratings.

Interest rate developments

The continued slowdown in inflation in 2024 led the US Federal Reserve (FED) and the European Central Bank (ECB) to start lowering interest rates. The ECB cut the deposit rate three times in June, September, and December from 4% to 3.25%. Similarly, the FED cut rates in September, November, and December by a total of one percentage point. The ECB has ended its monetary policy purchasing programmes and related reinvestments, the latest of which (under the Pandemic Emergency Purchasing Programme, PEPP) were discontinued at the end of 2024.

10-year government bond yields

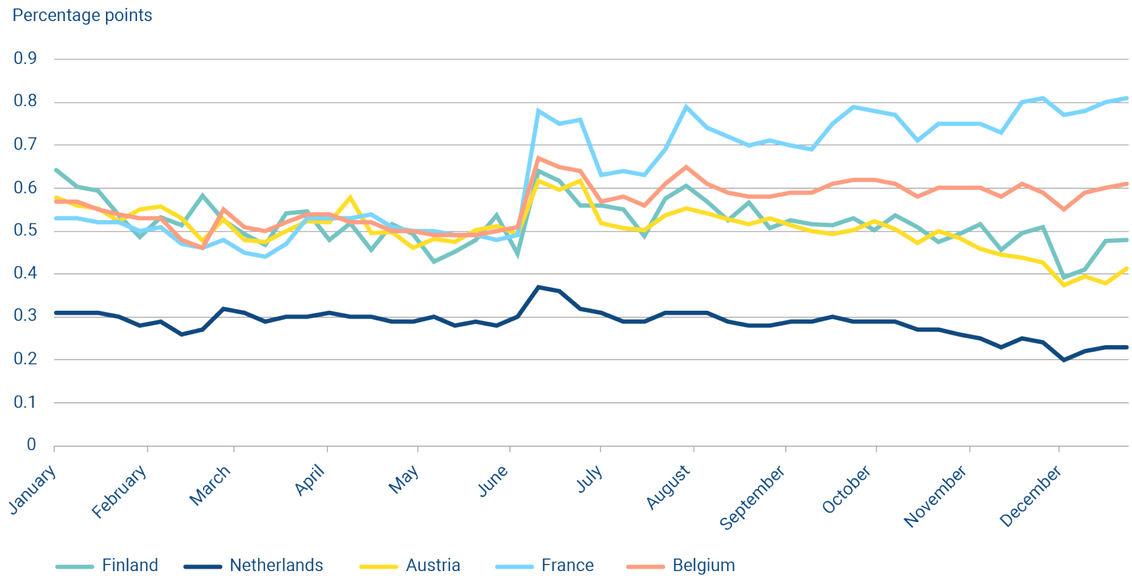
Source: Macrobond



The graph shows the 10-year government bond yields of Germany, Finland and the United States in 2016–2024.

10-year spreads to Germany

Source: Macrobond



The graph shows the 10-year bond spreads of Finland, the Netherlands, Austria, France and Belgium against Germany.

The interest rates on Finnish government bonds rose in the first half of the year and similarly fell in the second, except in December, when rates turned upward again. The yield on the 10-year benchmark bond rose from the opening level of 2.66% to 2.74% at year end. In the secondary market, the 10-year RFGB benchmark bond has yielded on average 2.85% in 2024.

The yields on Finnish and German government bonds remained fairly stable during the year. In the US, the government bond yields rose towards the end of the year. This was influenced by **Donald Trump**'s re-election to office in November 2024 and the consequent rise in inflation expectations, which in turn reduced the expectations for rate cuts. Following the end of the ECB's asset purchasing programmes and given the large borrowing needs of euro area countries, the supply of government bonds increased, which significantly widened the yield spreads relative to swaps during 2024. The yield spread of Finland's 10-year benchmark bond to Germany was somewhat stable in 2024, narrowing towards the end of the year. A similar movement relative to Germany was seen in the yield spreads of peer sovereigns like the Netherlands and Austria.

Primary dealers in 2024

BofA Securities	Barclays	BNP Paribas
Citi	Credit Agricole	Danske Bank
Deutsche Bank	Goldman Sachs	HSBC
J.P. Morgan	Nomura	Nordea
	Société Générale	

The graph shows the Primary Dealers of the Republic of Finland in 2024.

Secondary market trading

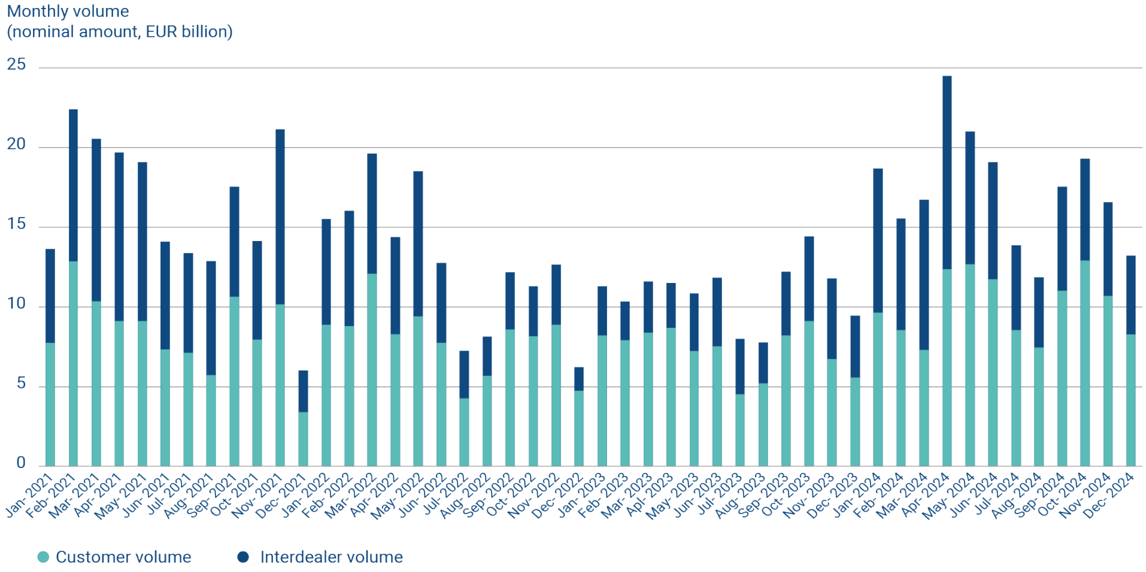
It is a priority for the State Treasury to work actively with the Primary Dealers to maintain and further enhance the liquidity of the Finnish government bonds. Primary Dealers report customer trade volumes to the State Treasury within the Harmonized Reporting Format as agreed by the EFC Sub-Committee on EU Sovereign Debt Markets.[1] The reporting takes place on a monthly basis, and the data is consolidated and used for monitoring and analysis.

According to HRF data, the overall secondary market customer turnover volume increased in comparison to 2023. The annual turnover in total was EUR 121.3 billion (EUR 87.6 billion in 2023). The average monthly turnover volume (sales and purchases) was EUR 10.1 billion in 2024 (EUR 7.3 billion in 2023). In relative terms, the monthly average turnover volume was 7.0% of the total outstanding euro benchmark bond stock (5.6% in 2023).

Finnish government benchmark bonds can be traded on the MTS Finland and ICAP BrokerTec interdealer platforms. The State Treasury does not participate in secondary market activity, and the interdealer trading is based on the activity of the Primary

1 Using Harmonized Reporting Format, the national data on secondary market turnover from each euro area country is then aggregated into Euro Market Activity Report (EMAR), published by the ESDM on a quarterly basis. Further information here.

Secondary market volumes of Finnish government bonds



The graph shows the secondary market volumes of Finnish government bonds in 2021-2024. In 2024, the nominal interdealer trading volume was on average EUR 7.2 billion per month. The average monthly customer volume was EUR 10.1 billion.

Dealers and other market participants. In 2024, the nominal interdealer trading volume (turnover, i.e., sales plus purchases) was on average EUR 7.2 billion per month (EUR 3.6 billion in 2023).

The State Treasury actively follows the Primary Dealer quoting activity in the secondary markets. There are guidelines for the Primary Dealers on quoting for different maturities in the interdealer market, where the bid-offer spread of the price quotes is observed and tracked. The average bid-offer spread of all the market makers is calculated and each Primary Dealer benchmarked against the average. On a weekly basis, the State Treasury reports the analysed spread data for the benchmark bond quotes back to the individual Primary Dealer banks. The secondary market liquidity for RFGBs improved in 2024 in terms of tighter bid-offer spreads compared to the previous year.

Mika Arola is Deputy Director for Risk Control & Legal Affairs at the State Treasury Finland .

Mika Tasa is Senior Manager of Funding & Liquidity Management at the State Treasury Finland.

3

Growth is brewing under the surface

Professor **MIKA MALIRANTA**

Photo: Lauri Rotko

A solid foundation for future economic and productivity growth has developed within the Finnish business sector. We now have a wealth of young medium-sized enterprises that are growing and ready to provide a significant boost to Finland's growth in the coming years. Their potential should start to reveal itself once the economic cycle finally normalises.

When navigating the forest, you should keep your eyes on the ground to avoid tripping over any stones and stumps. At times, however, you must also look ahead to avoid getting lost. Economic policy debate often focuses on short-term fluctuations: inflation, the next round of wage negotiations, and changes in employment rates. In such a case, long-term developments may go unnoticed, especially those that have been brewing under the surface.

When we look beyond today's bleak economic figures, we can see promising structural changes within the business sector: Finnish companies have renewed their R&D activities, new and young companies are beginning to hit their stride, and the structures of the Finnish economy are changing in encouraging ways. This indicates that we have what it takes for strong long-term growth.

Economic growth comes from productivity and technology

Above all, Finland needs growth in its labour productivity, i.e. more added value per worked hour. This means companies that produce more and better-quality goods and services for every hour spent working. Quality is reflected in the customers' satisfaction and willingness to pay for goods. Improved productivity means increased profits for business owners and better wages for employees. A boost to productivity would make it easier to balance Finland's public finances. Moreover, growth that is based on improved productivity is ecologically more sustainable growth.

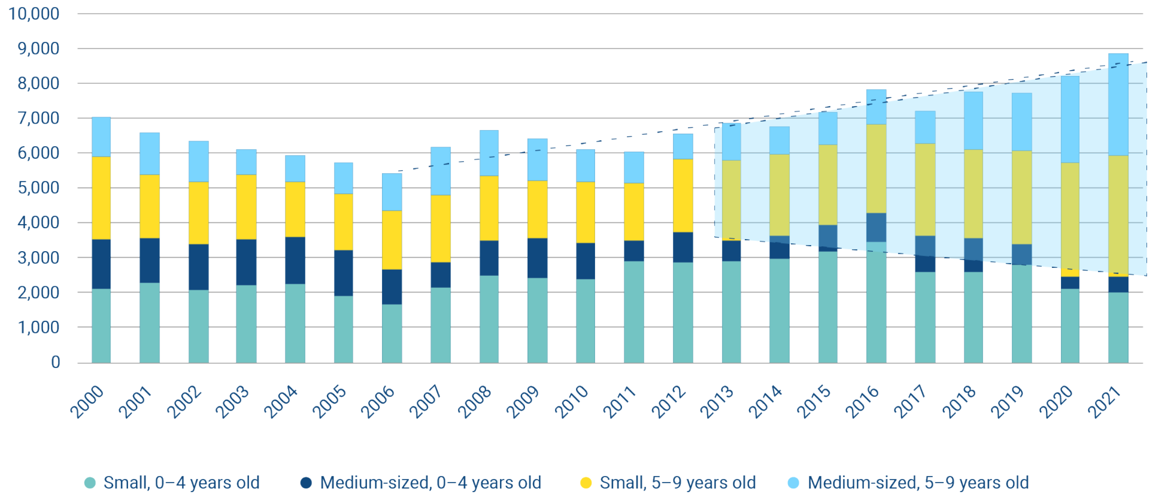
R&D is the key

Before a company starts to make an impact on the productivity of the national economy, it will often have gone through three phases. In most cases, the first phase of creating high-productivity jobs starts with the company's investment in research and development.

In the early 2010s, an exceptionally high number of new and innovative small companies began to emerge in Finland. Some of them increased their research activities and have already grown into medium-sized enterprises. At the same time, many companies have renewed their R&D activities. The share of private services has grown. A growing number of R&D staff in these companies have a doctoral degree, and we can also see an increase in the share of basic research.

R&D staff at new and young SMEs

Source: Fornaro and Maliranta 2023



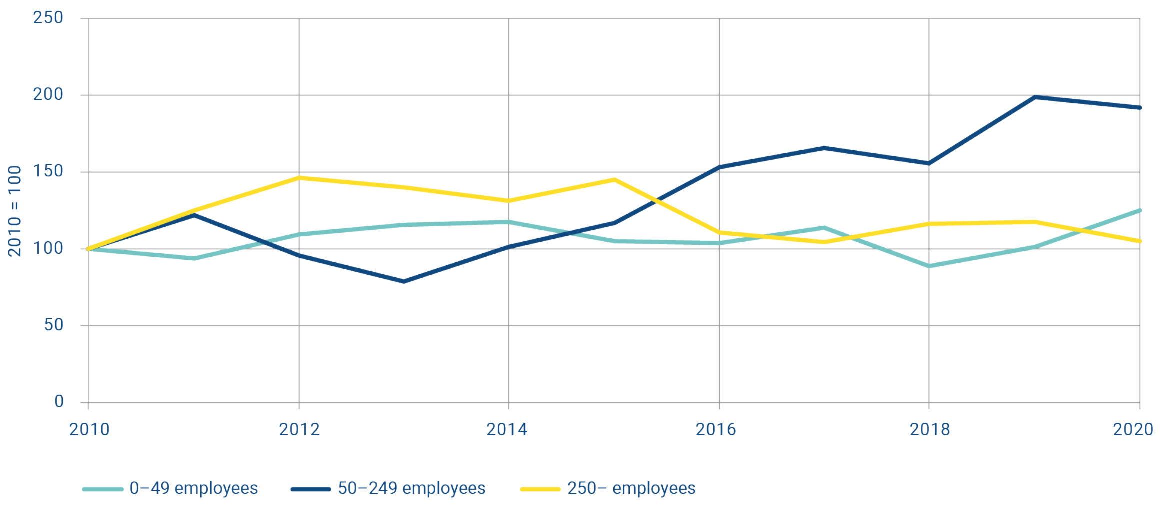
The graph shows the development of R&D personnel in new and young small and medium-sized enterprises in Finland from 2000 to 2021. The dashed line illustrates the trend in the overall number of R&D personnel. The frames indicate how the number of R&D personnel in young (5-9 years old) small and medium-sized enterprises has developed from 2013 to 2021.

It is interesting to note that foreign-owned, medium-sized companies have significantly increased their research and development headcount in Finland, especially in the second half of the 2010s. In other words, the skilled and deep-pocketed multinational capital has recognised Finland's development and growth potential.

R&D expenditure by foreign-owned companies in Finland, in real terms

Source: Statistics Finland

Year 2010 indexed as 100



The chart shows the development of real R&D expenditures by foreign-owned companies in Finland from 2010 to 2020.

Putting technology into practice

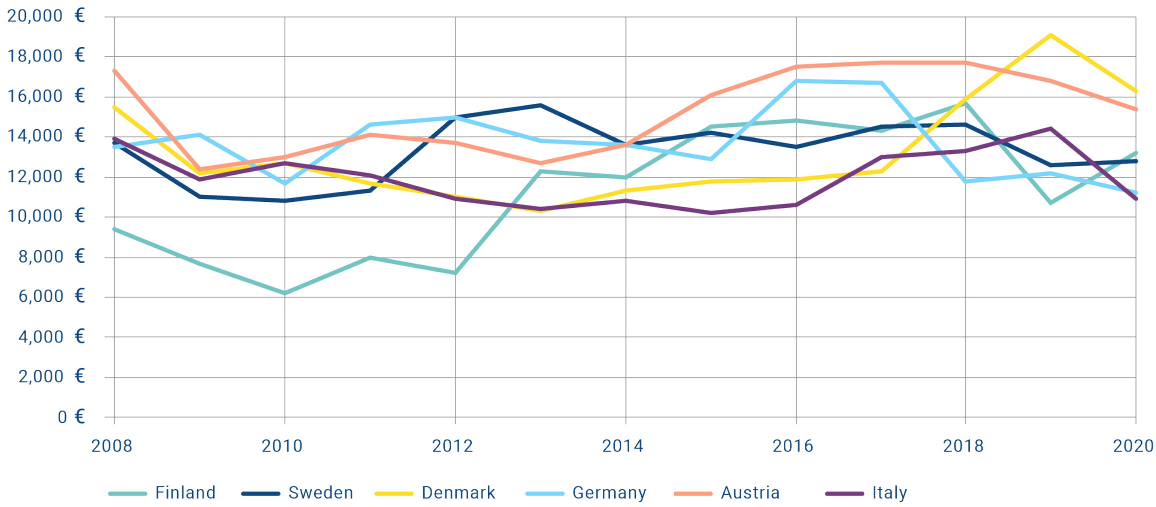
In the second phase, innovations are taken into use and brought to the market for real-life testing. If the new products prove to be of high quality and their means of production efficient, the company has the prerequisites for profitability.

Throughout the 2010s, new firms entered and other firms exited the market at a rapid pace. Thus, the turnover rate of companies has accelerated. The share of new products in the firms' turnover decreased in the first half of the 2010s, but a clear upward trend can be seen in recent years. Eurostat's innovation statistics also indicate that Finnish companies have adopted new technologies at a very fast pace in the early 2020s compared to their international peers.

"Finnish companies have adopted new technologies at a very fast pace in the early 2020s compared to their international peers."

Investments by foreign-owned companies per employee, by operating country

Source: Eurostat



The graph shows the development of investments per employee by foreign companies in Finland, Sweden, Denmark, Germany, Austria, and Italy from 2008 to 2020.

Scaling up makes the difference

When a company's R&D activities result in successfully deployed technologies, it has the financial incentives to expand its operations. The share of companies in Finland that have rapidly increased their headcount (by at least 10% per year) grew strongly in the 2010s. In the latter half of the decade, the share of employment of such companies was already higher than in Sweden or Denmark – not to mention Germany, France, and Austria, which clearly lagged behind Finland in this respect.

Once the technology has successfully been deployed, the companies have incentives to invest in machinery and equipment. Production capital in the corporate sector began to grow strongly in the second half of the 2010s. The foreign-owned companies, among others, significantly increased their investments in machinery and equipment at their Finnish sites in the latter part of the 2010s. They have also created many new jobs in Finland.

Growth outlook is promising

Finnish companies have thus steadily built a solid foundation for future productivity and economic growth. We have plenty of young and growing medium-sized enterprises and, based on research literature, we can now expect these companies to give a significant boost to Finland’s growth in the coming years. Their potential should start to reveal itself once the economic cycle finally normalises.

In other words, Finland’s economic growth factors are still there and in good shape. We simply need to nurture them so that they can secure Finland’s growth in the near future.

Mika Maliranta (PhD, Economics) is Director of the Labour Institute for Economic Research LABORE and Professor at the University of Jyväskylä. His research is focused on economic growth, labour markets, and productivity. He also serves as the chair of the OECD’s Working Party on Industry Analysis (WPIA), the vice chair of the Finnish Legislation Evaluation Council, and a member of the Finnish Productivity Board.

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Funding

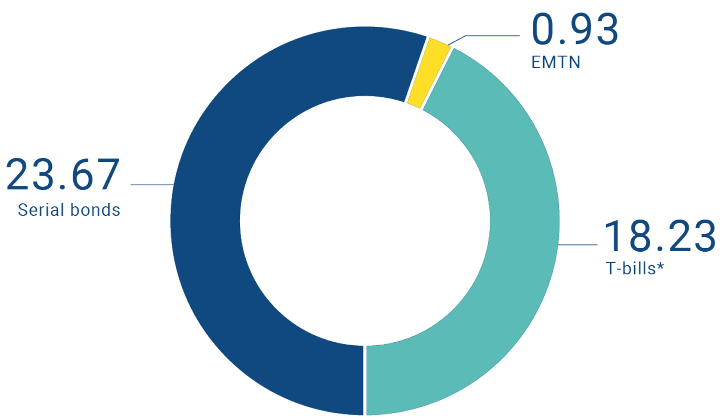
Director of Finance **ANU SAMMALLAHTI**
Senior Manager **MIKA TASA**

In 2024, the Republic of Finland's realised gross borrowing totaled EUR 42.8 billion. Of this amount, long-term issuance accounted for EUR 24.6 billion (57%). The rest, EUR 18.2 billion (43%), was short-term borrowing. Realised net borrowing amounted to EUR 12.58 billion.

The central government's gross borrowing requirement remains around EUR 42 billion in 2025, after which it is estimated to decrease to EUR 35-39 billion annually. At the end of the year, the central government debt stock reached approximately EUR 169 billion.

Central government borrowing in 2024

Issuance by instrument type, EUR billion

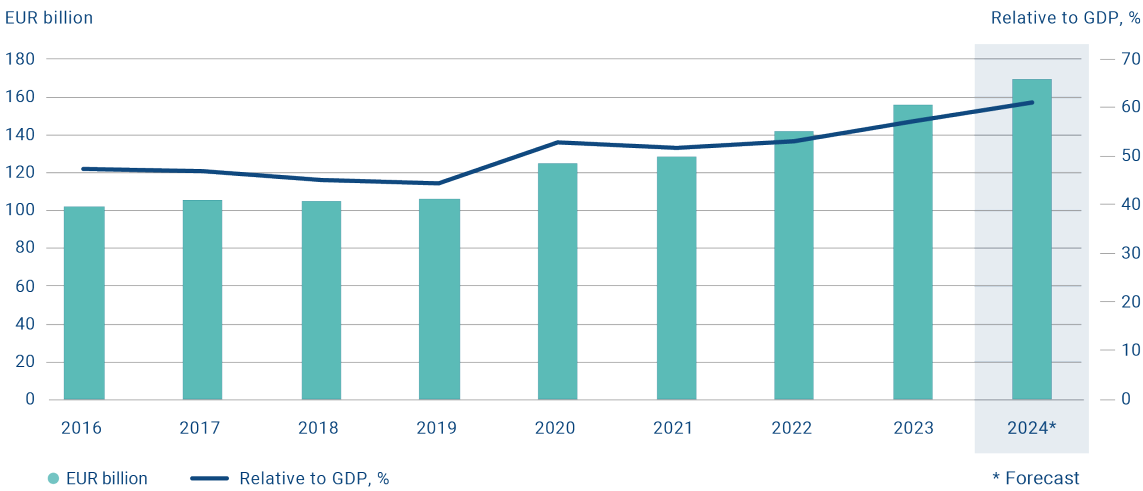


*Excluding funding for intra-government funds, unincorporated state enterprises and intra-year T-bill issuance

The realised gross borrowing amount in 2024 was EUR 42.83 billion. Of this amount, long-term issuance accounted for EUR 24.60 billion and short-term borrowing for EUR 18.23 billion.

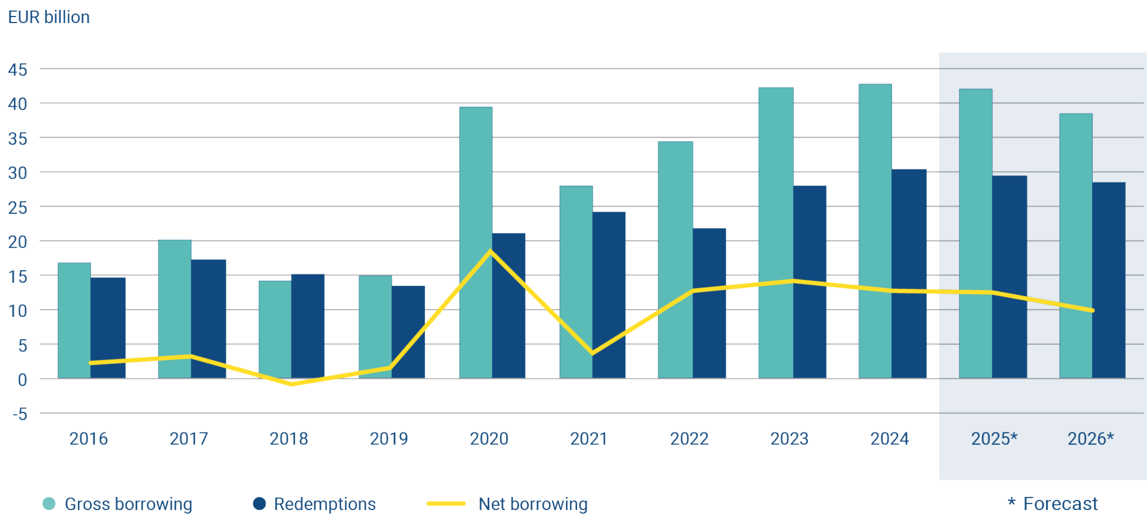
According to the forecast by the Ministry of Finance, the estimated net borrowing requirement for the year 2025 is EUR 12.50 billion. With EUR 29.46 billion of redemptions, the gross borrowing requirement totals EUR 41.96 billion.

Central government debt



The graph shows the volume of Finland's central government debt and debt in relation to GDP in 2016-2024. The central government debt was EUR 169.41 billion at the end of 2024. The debt-to-GDP ratio was 61,20%.

Redemptions and net borrowing



The graph shows annual gross borrowing, redemptions and net borrowing in 2016-2026. Redemptions of EUR 30.25 billion took place in 2024 while net borrowing amounted to EUR 12.58 billion.

Funding strategy

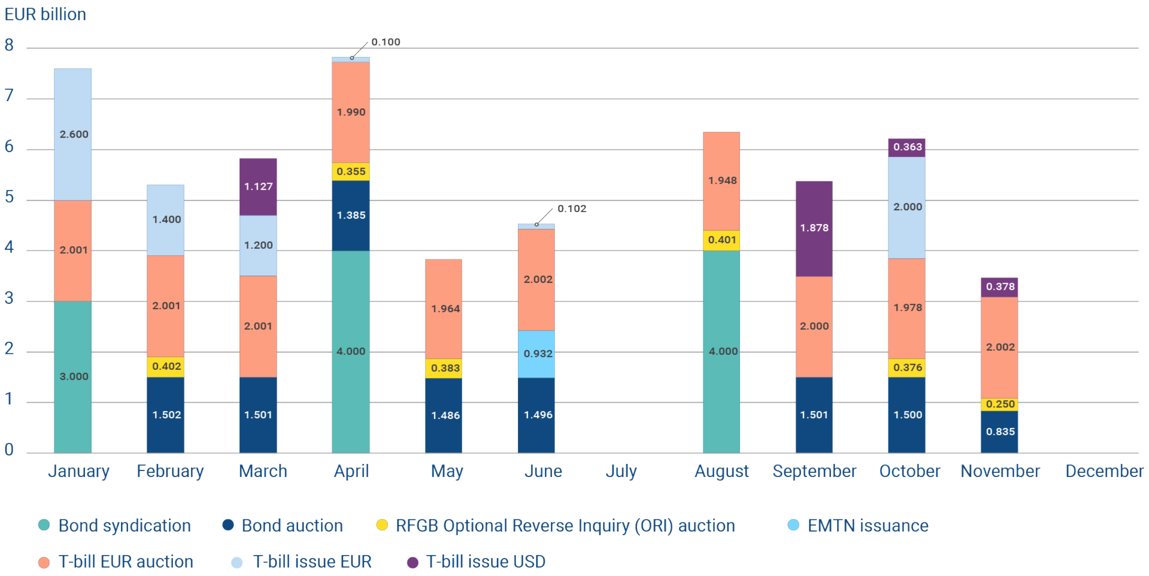
The funding strategy of the Republic of Finland is based on euro benchmark bond issuance. New benchmark bonds are issued in syndicated form. Syndications are complemented with regular bond tap auctions, which raise the outstanding volumes of the existing bond lines. There is also a Euro medium-term note (EMTN) programme under which the Republic of Finland can issue bonds in foreign currencies to serve a broader investor base. However, issuance in foreign currencies is subject to market conditions and a reasonable funding cost in comparison to euro issuance.

The current funding volume supports three new euro benchmark bond syndications per year, tap auctions of existing benchmark bonds and one benchmark-sized USD bond issue. The short-term funding is carried out by issuing Treasury bills. In terms of bond maturities, the annual issuance pattern of a new 10-year bond is complemented with a new long-term bond – either 15, 20 or 30 years – to maintain a liquid benchmark bond curve up to 30 years. The funding plan for 2025 includes a new 20-year benchmark bond, which was emitted already in January. Due to the redemption profile, the third new benchmark bond in 2025 is likely to carry either a 7-year or 15-year tenor. Market conditions permitting, issuance in non-euro currencies, most likely a USD benchmark bond, may complement the long-term funding. The share of short-term funding, i.e. Treasury bills, is estimated to account for approximately 45% of the gross annual borrowing in 2025.

The objective of the State Treasury is to maintain Finland’s position as a recognised and reliable issuer in the markets and thus ensure the demand for Finnish government bonds in the future.

“Issuance in foreign currencies is subject to market conditions, and a reasonable funding cost in comparison to euro issuance.”

Operations in 2024



The graph shows the operations conducted by the State Treasury in 2024. Finland issued three new euro-denominated benchmark bonds, one USD-denominated bond, and arranged eight bond auctions. The short-term funding was carried out by issuing Treasury bills.

Funding operations and investor demand

In 2024, the Republic of Finland issued three new euro-denominated benchmark bonds and one USD-denominated bond. A total of 14 benchmark bond auctions were conducted during the year. Short-term funding was carried out by issuing Treasury bills in auctions and in ECP format.

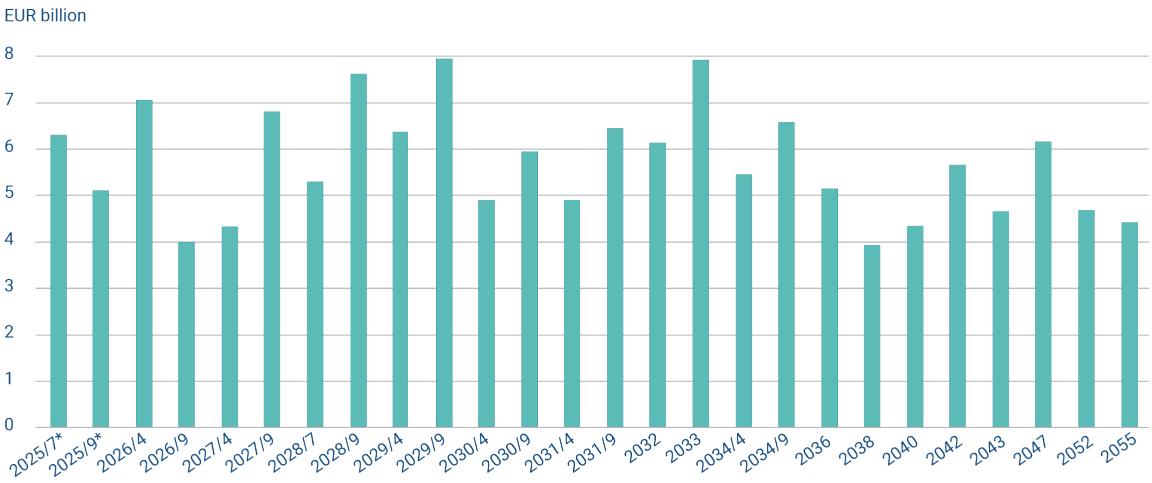
The first syndicated bond issue of the year took place in January when Finland raised EUR 3 billion with a new long 30-year benchmark bond. The bond has a maturity date of 15.4.2055 and pays an annual coupon of 2.95%. As customary, the top five performing Primary Dealer banks of the previous year were appointed as lead managers for the issue, and the other Primary Dealers as co-leads. The order book exceeded EUR 9 billion with over 90 investors participating in the transaction. The new 30-year line is the longest bond in the RFGB yield curve to date and attracted strong pension fund and asset manager participation.

The second syndicated transaction in April was a new 10-year benchmark bond with a maturity date of 15.9.2034. The bond was priced at 20 basis points over the euro swap curve to yield 3.016%. The bond attracted an order book many times greater than the issue size – EUR 23 billion – and included offers from over 160 investors. The broad-based demand allowed upsizing the deal from the targeted EUR 3 billion to EUR 4 billion at issuance.

The third euro-denominated syndicated issuance of the year was a new 5-year benchmark due 15 April 2030. The bond was issued in the latter part of August and was priced at 10 basis points over the euro swap curve to yield 2.550%. The high-quality order book of over EUR 10 billion and offers from more than 80 investors again allowed upsizing the deal to EUR 4 billion at issuance.

In June, the Republic of Finland syndicated its first US dollar bond in four years by raising USD 1 billion with a new 10-year bond that matures on 2 July 2034. The yield at issuance was 4.399%, which was 55 basis points above the mid-swap rate (USD SOFR) and 15.7 basis points over the pricing reference of UST 4.375% due 15 May 2034. Issuing in US dollars complements Finland's euro-denominated borrowing and its purpose is to serve a more global investor base.

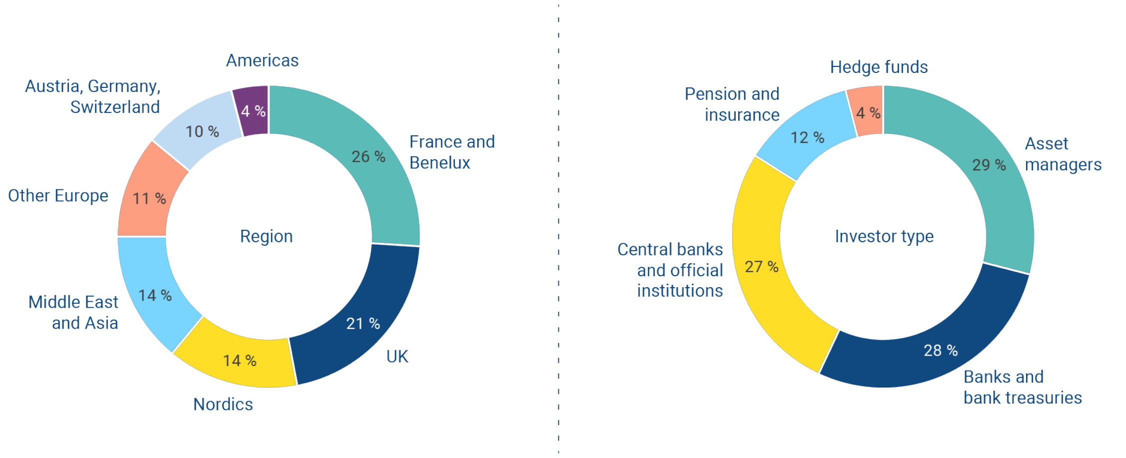
Benchmark bonds



* Serial bond, no benchmark status

The graph shows all outstanding serial bonds issued by the State Treasury. Of these, the majority are benchmark bonds.

Syndicated issuance participation 2024



The graph shows the syndicated issuance participation in 2024 by region and investor type.

Tap auctions

In addition to the syndicated issues, the State Treasury conducts tap auctions on existing benchmark bonds in the primary market. An auction calendar is published quarterly on the State Treasury website. In 2024, eight regular benchmark bond auctions and six optional reverse inquiry (ORI) auctions were conducted in total. Five regular auctions were held in the first half of the year, and three in the latter part of the year.

The total auctioned funding volume via benchmark bond auctions was EUR 13,373 million, of which EUR 2,167 million were from ORI auctions. All auctions were dual line auctions including two bonds with different maturities auctioned in the same auction. The bid-to-cover ratios for the auctioned securities (excluding ORI auctions) varied from 1.19 to 2.47. The issued amounts were between EUR 414 and EUR 971 million per bond per auction, excluding ORI auctions.

Serial bond auctions

Auction date	Maturity year	Issued amount MEUR	Issue yield	Bid-to-cover
8 Feb 2024	2028	151	2,595 %	4.01
8 Feb 2024	2034	251	2,863 %	2.55
20 Feb 2024	2029	751	2,694 %	1.58
20 Feb 2024	2033	751	2.833 %	1.95
19 Mar 2024	2029	531	2.740 %	1.99
19 Mar 2024	2033	970	2.872 %	1.34
4 Apr 2024	2032	185	2.811 %	2.09
4 Apr 2024	2042	170	3.083 %	1.21
16 Apr 2024	2029	805	2.762 %	1.35
16 Apr 2024	2055	580	3.125 %	1.45
21 May 2024	2029	771	2.854 %	1.45
21 May 2024	2034	715	2.996 %	1.73
30 May 2024	2026	190	3.190 %	2.06
30 May 2024	2047	193	3.285 %	1.60
11 Jun 2024	2034	856	3.262 %	1.19
11 Jun 2024	2055	640	3.389 %	1.34
29 Aug 2024	4/2029	100	2.483 %	6.51
29 Aug 2024	9/2029	301	2.491 %	5.65
17 Sep 2024	2029	971	2.331 %	1.97
17 Sep 2024	2034	530	2.581 %	1.92
15 Oct 2024	2030	900	2.438 %	1.68
15 Oct 2024	2034	600	2.713 %	2.35
24 Oct 2024	2034	25	2.719 %	21.4
24 Oct 2024	2040	351	3.029 %	1.34
19 Nov 2024	2029	421	2.372 %	2.89
19 Nov 2024	2034	414	2.763 %	2.47
28 Nov 2024	2027	50	2.128 %	2.60
28 Nov 2024	2055	200	2.870 %	1.55

The table shows serial bond auctions.

“The total auctioned funding volume via benchmark bond auctions was EUR 13,373 million, of which EUR 2,167 million were from ORI auctions.”

Optional Reverse Inquiry Auctions

The State Treasury introduced ORI auctions for benchmark bonds in March 2023 and – following a positive response from the Primary Dealers – continued them in 2024. The purpose of the facility is to support the RFGB secondary market liquidity, by providing an opportunity for market makers to source off-the-run bonds in the primary market regularly.

An ORI auction is conducted only when one or more Primary Dealers express interest for a particular bond or bonds prior to a scheduled auction date. The number of potential auctioned lines is limited to two, and the maximum total amount to be issued is EUR 400 million.

Short-term funding

The State Treasury issues Treasury bills in euros and US dollars through banks included in the Treasury Bill Dealer Group, according to the financing needs of the central government.

Euro-denominated Republic of Finland Treasury bills (RFTBs) are issued via auctions. In auctions, the counterparties in the Treasury Bill Dealer Group can submit bids, and the price of the auctioned security is determined based on the received bids.

In 2024, the State Treasury held 10 Treasury bill auctions, raising a total of EUR 19,887 million, including funding for intra-government funds.

Treasury bill auctions

Auction date	Maturity date	Issued amount MEUR	Issue yield	Bid-to-cover
9 Jan 2024	13 Aug 2024	1,001	3.660%	1.55
9 Jan 2024	13 Nov 2024	1,000	3.465%	1.39
13 Feb 2024	13 Aug 2024	1,001	3.780%	2.26
13 Feb 2024	13 Nov 2024	1,000	3.630%	1.96
12 Mar 2024	13 Feb 2025	1,001	3.540%	1.64
12 Mar 2024	13 Nov 2024	1,000	3685%	2.25
9 Apr 2024	13 Feb 2025	1,000	3.545%	1.44
9 Apr 2024	13 Nov 2024	990	3.680%	1.80
14 May 2024	13 Feb 2025	1,147	3.570%	1.56
14 May 2024	13 Nov 2024	817	3.650%	2.02
4 Jun 2024	13 Feb 2025	984	3.560%	1.77
4 Jun 2024	13 May 2025	1,018	3.485%	1.54
13 Aug 2024	13 Feb 2025	972	3.330%	1.89
13 Aug 2024	13 May 2025	976	3.140%	1.77
10 Sep 2024	13 May 2025	1,040	3.070%	1.48
10 Sep 2024	13 Aug 2025	960	2.895%	1.47
8 Oct 2024	13 May 2025	978	2.950%	1.49
8 Oct 2024	13 Aug 2025	1,000	2.825%	1.63
12 Nov 2024	13 May 2025	1,001	2.830%	1.34
12 Nov 2024	13 Aug 2025	1,001	2.630%	1.29

The table shows Treasury bill auctions.

The State Treasury may also issue Treasury bills on other occasions, depending on the demand and financing needs, in which case the State Treasury defines the reference price for the issue. This issuance method resembles that of Euro Commercial Paper programmes (ECP). Treasury bills in ECP format can be issued in two currencies: in euros and in US dollars.

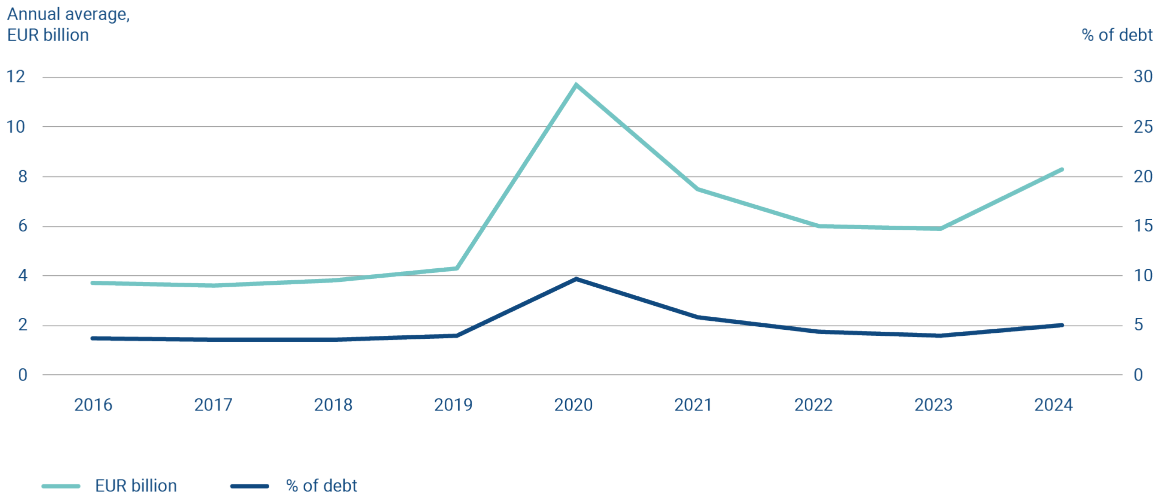
In 2024, ECP format Treasury bill issuance was conducted both in USD and EUR based on pricing and demand during the year. The gross ECP issuance in USD was 4.1 billion and in EUR 7.4 billion.

The average maturity in USD ECP issuance was 7.8 months and EUR ECP issuance 8.0 months. The outstanding stocks of USD- and EUR-denominated Treasury bills at year end were USD 4,120 million and EUR 15,380 million (USD 1,800 million and EUR 19,062 million in 2023).

Liquidity management

The amount of central government cash reserves varies daily depending on income and expenditure flows. The size of the cash buffer is based on an assessment of sufficient liquidity and a limit on uncovered net cash flows. The average size of central government's liquid cash funds increased in 2024. This was due to changes in the debt management guidelines, set by the Ministry of Finance, where the central government's liquidity limits were tightened. More information on Finland's debt management strategy update can be found in Chapter 7.

Liquid cash funds



The annual average of liquid cash funds was EUR 8.3 billion or 5.0% of debt in 2024.

Cash flows follow both intra-month and annual seasonal patterns due to timing mismatches in income and expenditure. Changes in the budget deficit during the fiscal year also affect liquidity management via changes in funding requirements.

As the primary focus is sufficient liquidity, actual borrowing may deviate from that budgeted for the fiscal year for various reasons, e.g., deferrable allowances which are budgeted in a specific year but used over a number of years. In 2024, central government's realised borrowing exceeded the budgeted amount by approximately EUR 600 million as cash reserves were boosted before year end to secure sufficient liquidity. The requirement to post Credit Support cash collateral fell during the year, which reduced the funding need.

The cash reserves are invested in very short-term maturities using primarily bank and central bank deposits and triparty repos. The latter means depositing funds with eligible counterparties while receiving a bond or bill as collateral for the term of the deposit. The collateral is managed by a third party, e.g., a central securities depository.

Liquidity management relies on the central government cash flow forecast system. All government accounting entities forecast their income and expenditure for the next 12-month period into the system. The State Treasury uses this data as a basis for liquidity management decisions.

Anu Sammallahti is Director of Finance and Head of Debt Management at the State Treasury Finland.

Mika Tasa is Senior Manager of Funding & Liquidity Management at the State Treasury Finland.

5

Increase in immigration improves outlook for Finnish economy

Economist **ROGER WESSMAN**

Photo: Lauri Rotko

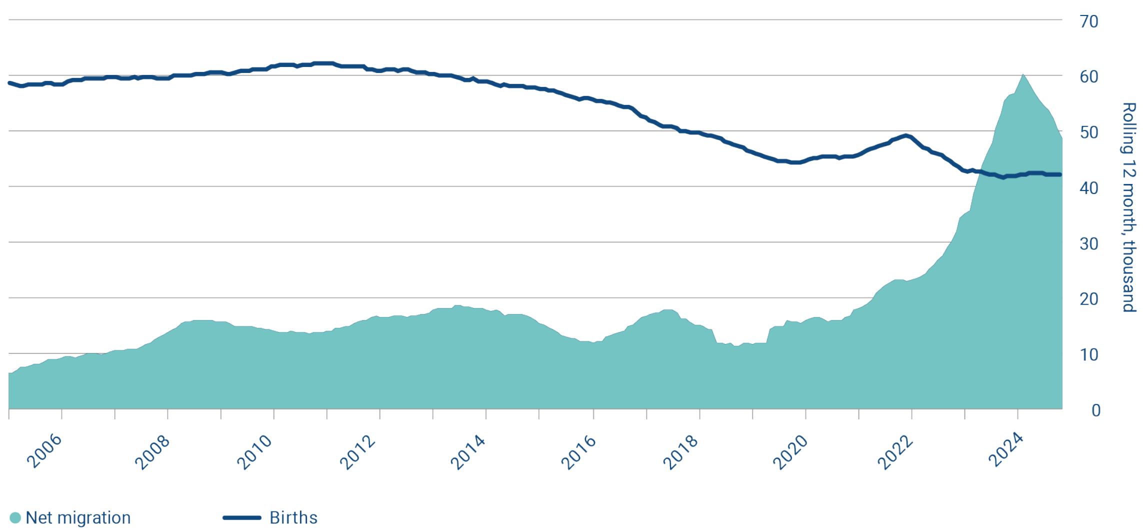
A surprisingly rapid increase in immigration over the last few years has halted the decline of the working-age population in Finland. If net migration continues to exceed previous expectations, it could boost the potential growth rate by up to half a percentage point. A lower dependency ratio would decrease the public sector deficit and, combined with faster economic growth, significantly slow the rise in the public debt ratio.

The prospect of a rapidly aging population has long been a key concern for Finnish public finances. The working-age population started to decline as the baby boomers aged. The post-war baby boom was particularly drastic in Finland, as most potential fathers were conscripted during the Second World War. A gradual decline in fertility seemed to ensure that the supply of workers would continue to diminish for the foreseeable future.

Contrary to forecasts, the working-age population stopped declining in 2022 and has grown by around half a percent in the past two years. This is explained by a surge in immigration.

Migration and fertility

Sources: Macrobond, Statistics Finland



The graph shows the development of Finland's net immigration and births from 2006 to 2024.

Not just a temporary fluke

The spike in net migration in 2023 is partly due to refugees from the war in Ukraine. However, the rise in immigration started before the war, and net annual migration has been twice as high as during the previous decade even excluding Ukrainians.

Finnish employers have become increasingly keen to seek workers from abroad due to a tightening labour market. The pressure to recruit foreign workers increased toward the end of the last decade, as the economy recovered from the prolonged economic slump after the financial crises and unemployment fell. Travel restrictions during the pandemic, however, delayed the upswing in immigration until 2022.

The present government explicitly recognises the need for international recruitment. It aims, for example, to shorten the time for approval of work permits as well as to increase the supply of English-language education and day care.

The economic downturn triggered by the ECB rate hikes has dampened the demand for foreign workers, especially in the construction sector. That net migration has remained strong lends additional credence to the view that we have seen a shift toward permanently faster immigration.

"The present government explicitly recognises the need for international recruitment."

Boost to growth

Based on recent developments, Statistics Finland calculates that the annual growth of the working-age population could be half a percentage point higher than it projected in its 2021 forecast. The projection assumes that immigration will remain at recent levels, excluding Ukrainian refugees. The Ministry of Finance, in its economic forecasts, has a significantly more conservative outlook for future immigration.

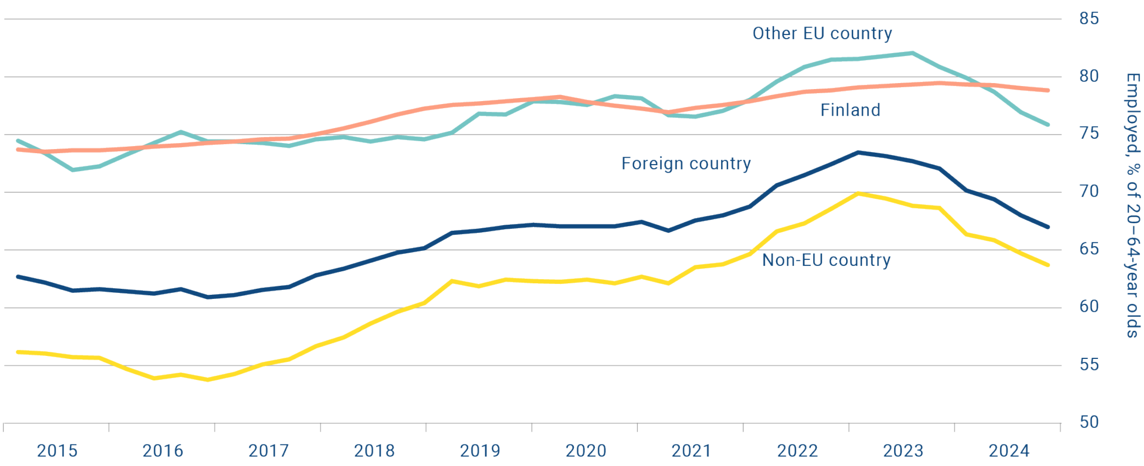
The impact on GDP growth depends on how well and how productively the immigrants are employed. On average, the employment rate of foreign-born residents is about ten percentage points lower than that of native Finns. The average hourly income of foreign-born workers is also fifteen percentage points lower than that of native-born workers, indicating they perform less productive work. The Ministry of Finance accordingly assumes that the boost to GDP growth would be notably smaller than the boost to the growth of the working-age population.

However, the employment rate of foreigners varies significantly depending on the reason for migration. Refugees have often had great difficulties finding gainful employment. Foreigners granted residence permits to work have an even higher employment rate than native-born residents. Foreigners coming to study also quickly gain employment.

The average income of work-related immigrants is even slightly higher than that of native-born residents, despite their lower average wage, because they work more hours on average. Thus, the boost to GDP from increasing work-related immigration could well be as large as the rise in the working-age population.

Employment rate by country of birth

Sources: Macrobond, Eurostat



The graph shows the development of employment rates for those born abroad, born in other EU countries, born outside the EU, and born in Finland from 2015 to 2024.

As work and education have become the predominant drivers for immigration, the difference in the employment rate of foreign-born and native residents has sharply shrunk over the past decade. However, the recent downturn is a reminder that the employment of immigrants is also very sensitive to the business cycle.

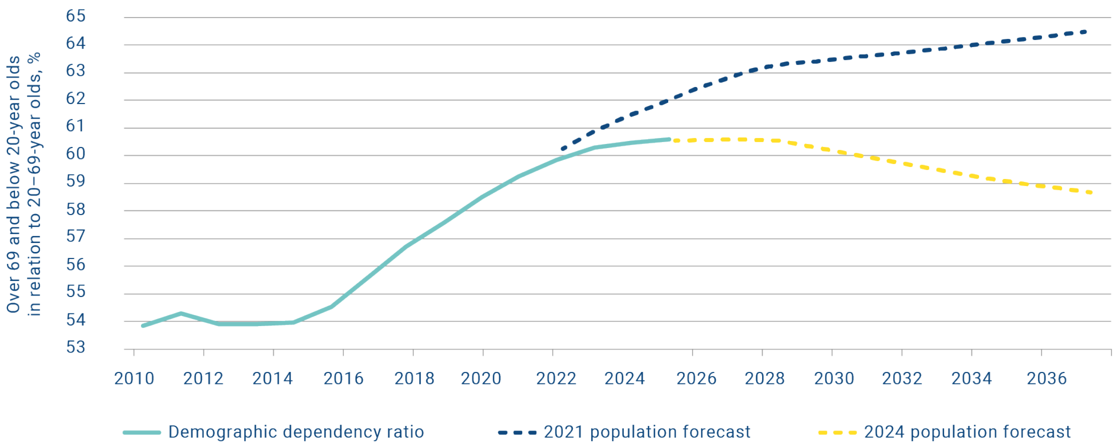
The employment rate of native residents has also risen substantially in Finland over the past decade. A major reason for this is several reforms aimed at increasing the retirement age. The median retirement age has risen from 63.1 years in 2017 to 64.3 years in 2023 and is set to continue climbing as the minimum retirement age is set to gradually increase.

Smaller deficits, less debt

Increased immigration has a clear positive impact on the ratio of non-working-age to working-age population, i.e., the dependency ratio, as the immigrants are clearly younger than the overall population. Statistics Finland now projects that the dependency ratio will decline over the next decade. The dependency ratio in 2035 is expected to be nine percent lower than assumed in 2021.

Dependency ratio

Sources: Macrobond, Statistics Finland



The graph shows the actual development of Finland's dependency ratio from 2010 to 2024, along with two projections until 2036. The dependency ratio is presented in the graph as the proportion of the population under 20 years old and over 69 years old relative to the working-age population.

A decreasing dependency ratio would particularly improve the state of the statutory pension system, alleviating the pressure to raise social security contributions. State finances would also improve as the costs of caring for the elderly would be distributed across a larger number of taxpayers.

Even without any decline in public deficits, faster GDP growth would mean that the public debt ratio would rise less than previously assumed. An increase of half a percentage point in annual GDP growth would, in 10 years, push the public debt-to-GDP ratio almost five percentage points lower than it would otherwise be.

While no panacea, faster immigration could thus substantially help the government in its efforts to stabilize public debt.

Roger Wessman is an independent economic consultant. He has followed the Finnish economy and public finances for over thirty years in various positions, including as chief economist for Nordea and Evli Banks.

6

Risk management principles

Deputy Director **MIKA AROLA**

Photo: Laura Lumimaa

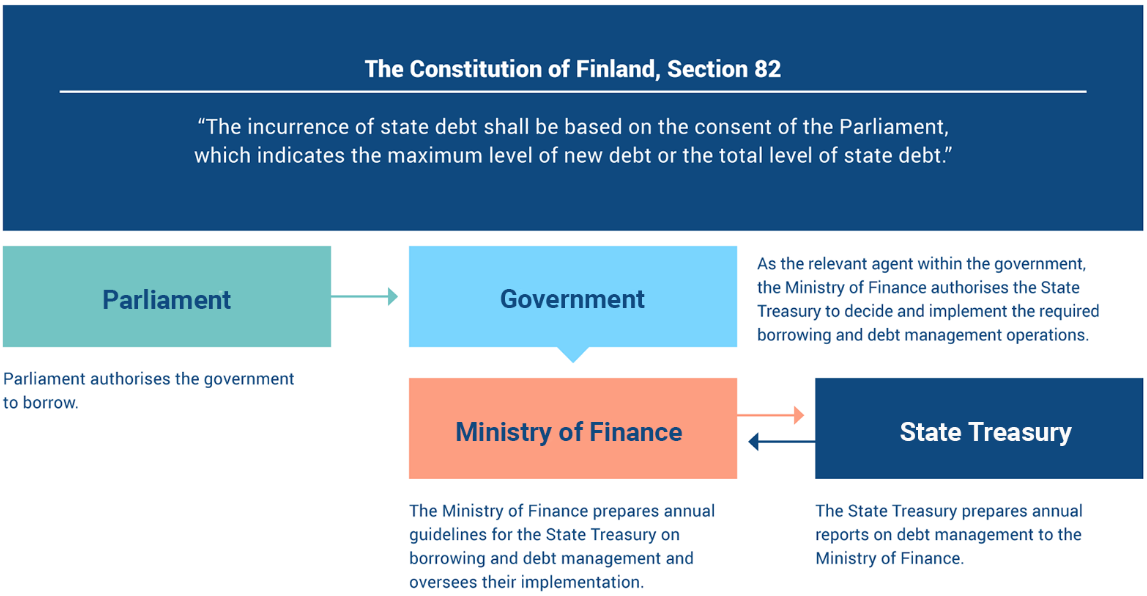
The strategic goal of debt management is to cover the central government's financing needs and minimise the long-term costs of debt with measures that adhere to an acceptable level of risk.

Framework of government borrowing

The strategy for central government debt management is set by the Ministry of Finance. The State Treasury carries out its debt management tasks in accordance with the Ministry's instructions.

The Ministry's guidelines set out the general principles and objectives of debt management, the instruments and risk level, as well as any other applicable restrictions. The State Treasury is authorised to raise funds provided that the nominal value of the central government debt does not exceed EUR 205 billion. Of this amount, up to EUR 35 billion may by short-term debt.

The State Treasury is authorised to take out short-term loans when necessary to safeguard the central government's liquidity and, as part of its risk management, to enter into derivative agreements that comply with the terms and instructions issued by the Ministry of Finance.



The infograph shows the legal framework and the division of functions of government borrowing between the Parliament, the Government, the Ministry of Finance, and the State Treasury.

The State Treasury reports regularly to the Ministry of Finance on its debt management. Key information on the central government's debt management is also published annually in the central government's financial statements and the Government's annual report. The central government's financial statements are published every year in March and the Government's annual report in May.

Risk management: an essential part of sound debt management

The goal of risk management is to avoid unexpected losses and safeguard the continuation of operations. The aim of central government is to manage all risks in a systematic manner. Its risk management process consists of identification of risks, quantification and evaluation of risks, risk monitoring and reporting, and active management of its risk positions.

The main risks are **financing risk** (long-term refinancing risk and short-term liquidity risk), **market risk** (interest and exchange rate risk), **credit risk**, **operational risk**, and **legal risk**.

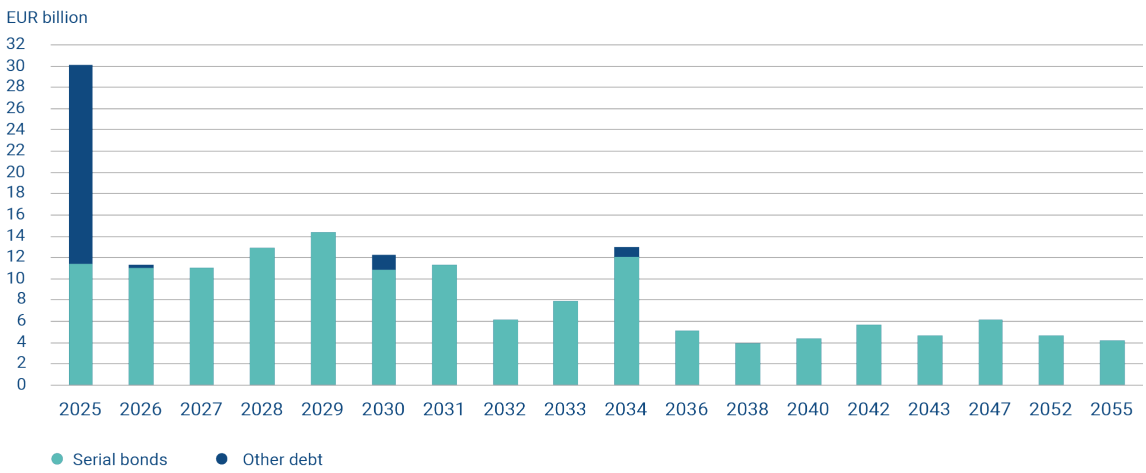
"The main risks are financing risk, market risk, credit risk, operational risk, and legal risk."

Financing risk

Financing risk can be divided into refinancing risk and liquidity risk. The former is generally measured by the amount of required refinancing, for example, over the course of a year. However, financing risks are also affected by other factors, especially the need to ensure adequate and diverse sources of funding. The latter refers to the risk associated with the central government short-term financing needs compared to its liquid cash funds and funding capability.

The State Treasury manages refinancing risk first and foremost by avoiding large maturity concentrations of debt subject to limits set by the Ministry of Finance. Refinancing risk can also be alleviated by diversifying funding in different instruments, investor types and geographic areas. This reduces the risk associated with an individual source of funding and improves the liquidity and attractiveness of government bonds to investors.

Repayment profile of central government debt



The graph shows the repayment profile of central government debt.

The State Treasury manages liquidity risk by keeping a sufficient cash buffer. This buffer will be larger if uncertainty related to the availability of funding is perceived to rise. The debt management guidelines include a minimum target time (of 30 days) for how long the central government must be able to cover its current and expected expenditures without new borrowing.

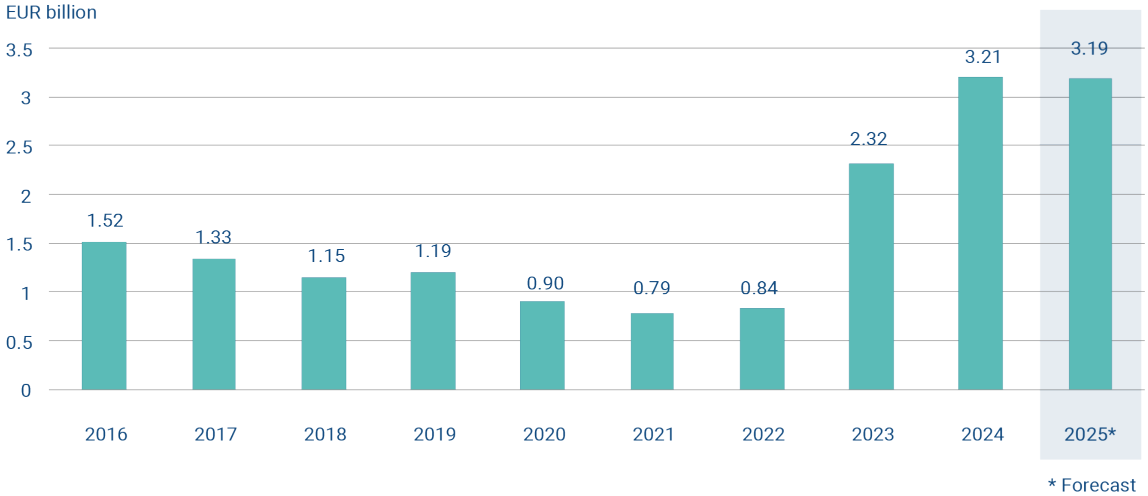
Liquidity risk management is based on the central government cash flow forecast system. In practice, the cash reserves are primarily invested in the Bank of Finland. Cash reserves can also be invested in other collateralised or low-risk short-term maturities.

Market risks

A new target variable for the interest rate risk management of the central government debt is the weighted average maturity at issuance (WAMI). For borrowing that has taken place from the beginning of 2024, the target for WAMI is on average seven years in the medium term. The weighted average maturity can deviate by up to six months from the aforementioned average maturity at the end of the evaluation period. For short-term borrowing, the calculation applies to the year-end debt stock and the average maturity of short-term issuance during the year. In 2024, the weighted average maturity at issuance was 7.70 years.

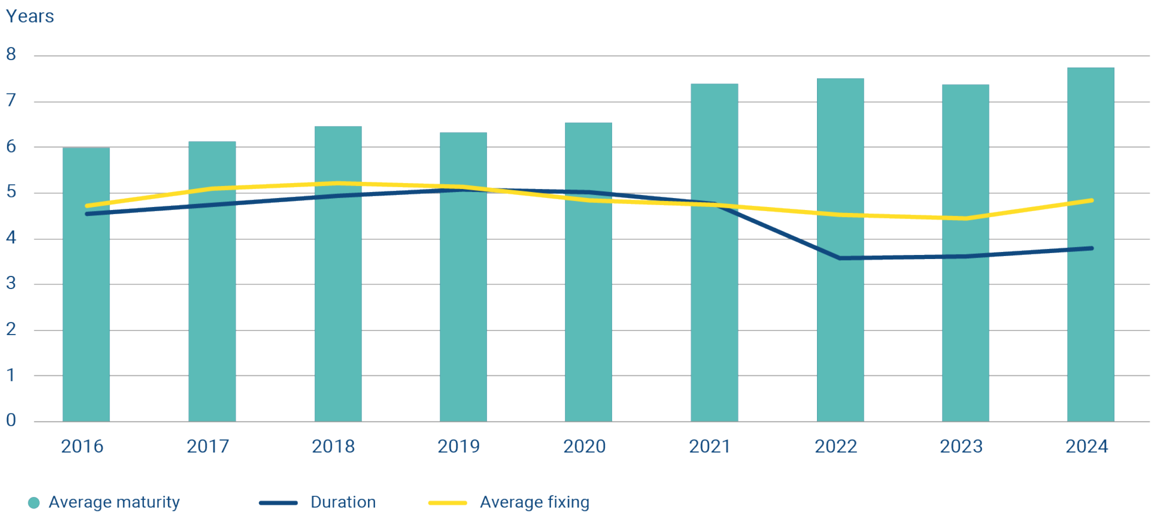
The central government takes no exchange rate risk in debt management operations. There was no exchange rate risk relating to the outstanding debt at the end of 2024.

Interest expenses of budgetary debt



The statistics present the annual interest expenses of budgetary debt in 2016-25. In 2024 the interest expenses were EUR 3.21 billion. The forecast for 2025 is EUR 3.19 billion.

Interest rate sensitivity of central government debt



The statistics present key figures on the interest rate sensitivity of central government debt. At the end of 2024, the average fixing of the central government debt was 4.84 years and duration 3.79 years. The average maturity was 7.75 years.

Credit risk

Credit risk arises from the investment of cash assets and derivative agreements. The government requires its counterparties to have a high-level creditworthiness, and the Ministry of Finance's guidelines set limits and minimum thresholds for the credit ratings of counterparties. Credit risk management is particularly critical in large cash investments. To reduce the credit risk associated with cash investments, the State Treasury primarily invests cash assets in the Bank of Finland and additionally in, for example, secured tripartite repo agreements.

The State Treasury uses collateral to reduce the long-term credit risk arising from derivatives. Like many other sovereign borrowers, Finland uses a collateral agreement (CSA, Credit Support Annex) under the ISDA framework agreement. A bilateral collateral agreement means that both parties are obligated to provide collateral against derivative positions.

Operational risk

Operational risk means a risk arising from external factors, technology, or the inadequate performance of personnel, organisation or processes. A field requiring special attention is data security, which encompasses the security of both documents and IT systems. Equal focus is given to developing and continuously testing operative business continuity plans. Regular audits by external cybersecurity experts have also spurred improvements in operative processes.

The principles of operational risk management are implemented in daily operations. Incidences of realised risk events and near-miss incidents are compiled and reported to management. The State Treasury monitors risk factors and events regularly and makes risk assessments.

Legal risk

Legal risk is the risk resulting from failure to comply with laws and regulations or established market practices as well as invalidity, nullity, voidability, discontinuation or the lack of documentation of contracts, agreements and decisions.

The State Treasury has prepared a set of internal guidelines for the management of legal risks. The State Treasury actively monitors its legal operating environment and reacts to significant changes quickly when necessary.

The objectives of legal risk management are to ensure compliance with all applicable laws, rules and regulations and to minimize legal risk by utilising standard agreements and the government's own templates. In addition, steps are taken to ensure that employees are familiar with legislation, regulations and market practices concerning their activities.

Internal Control

Internal control is an integral part of the management of the State Treasury. Internal control ensures the quality and efficiency of operational processes, the reliability of internal and external reporting, and compliance with laws and regulations. A sound system of internal control helps all parts of the organisation to reach their targets.

As part of internal control all main debt management processes are evaluated on an annual basis. The assessment pays special attention to the clarity of the State Treasury's objectives, risks, and control procedures.

Mika Arola is Deputy Director for Risk Control & Legal Affairs at the State Treasury Finland

7

Debt management strategy updated against changed environment

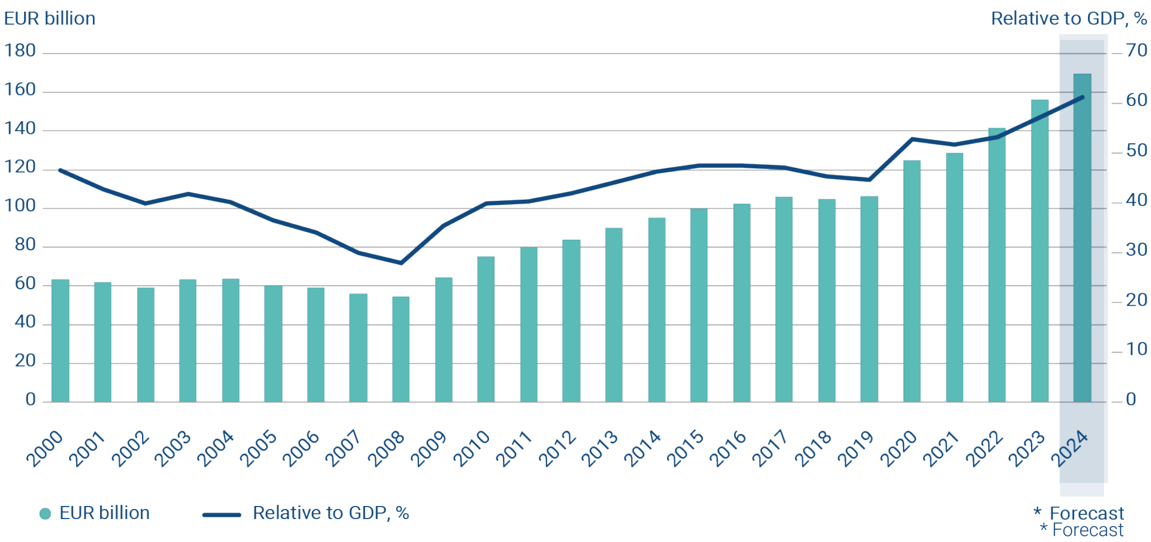
Director General **PAULI KARINIEMI**

Photo: Petri Jauhiainen

The Ministry of Finance defines the debt management strategy that the State Treasury uses to carry out its operational debt management duties. In 2024, the Ministry of Finance updated its medium-term strategy for debt management.

The Ministry of Finance introduced its previous debt management strategy in the early 2000s. Over the years, the ministry has reformed the central government's debt management guidelines several times, but its key risk choices and parameters remained essentially the same. Our operating environment, however, has changed significantly since the early 2000s: the central government's debt-to-GDP ratio has more than doubled (Figure 1), and the outlook for economic growth remains subdued due to the aging population. The central government's finances have been in deficit for a long time (Figure 2), and its fiscal position is unlikely to change much, at least not in the near future. This means that the borrowing requirement will remain around EUR 40 billion annually. Furthermore, the regulatory environment has changed since the financial crisis, and overall economic uncertainty is high.

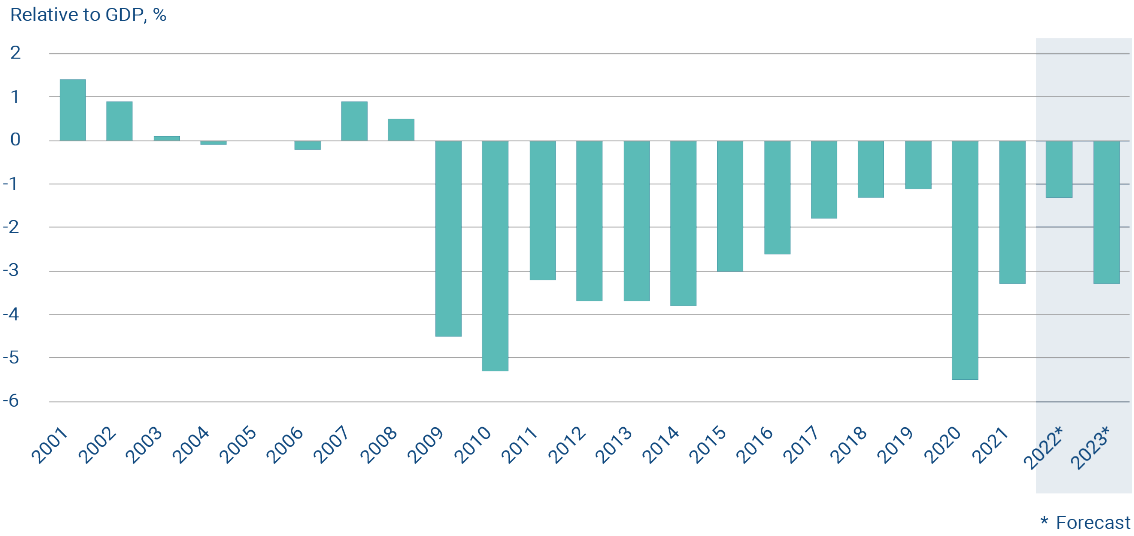
Central government debt



The graph shows the volume of Finland's central government debt and debt in relation to GDP in 2000–2024.

Financial position of central government

Source: Statistics Finland



The graph shows the development of central government's financial position in Finland from 2001 to 2023, in relation to GDP.

> "The change in the central government's interest rate risk position will be gradual and moderate."

So given that the central government's risk-bearing capacity is weaker than before, there has been a need to reassess the risk choices made in its debt management. And for this reason, a more conservative approach to strategy was needed for a better alignment between the risk choices and the current and the foreseeable economic conditions. Our strategy update draws on recommendations of external evaluation reports. The aim of the update is to reduce the risks in debt management while also simplifying the operations.

The key change is to gradually reduce the interest rate risk associated with debt. The planned change will:

- **provide protection** against fluctuations in interest rates
- **increase the predictability** of interest expenditure
- **support the planning** of economic policy.

This change is likely to increase the expected interest expenditure in the long term to some extent, compared to a situation where no change would have been made.

> "Lengthening of the interest rate risk position will be achieved without significantly altering the central government's established funding strategy."

Lengthening of the interest rate risk position will be achieved without significantly altering the central government's established funding strategy by no longer entering into new interest rate derivative agreements. This way, the desired interest rate risk position can be gradually achieved within approximately five years.

In addition, a new target variable for new borrowing is expressed in the form of Weighted Average Maturity at Issuance (WAMI), thus combining the interest rate risk management and financing risk management. The target WAMI set in the strategy – an average calculated over the medium term – is approximately seven years. The change in the central government's interest rate risk position will be gradual and moderate. At the end of the review period (2024– 2028), the Finland's interest rate risk position will have converged toward that of our European peers while still remaining at the shorter end of the spectrum.

By not entering into new interest rate derivative agreements, the potential need to provide cash collateral to counterparties will also be reduced. The change will thus reduce Finland's current, EUR 3.5-billion collateral portfolio, as well as the potential amount of borrowing needed to finance the collateral, in the coming years. Moreover, the operational and legal risks related to derivatives and collateral movements will be diminished.

The updated strategy imposes a new minimum liquidity requirement for how long the central government must be able to cover its known expenditures without new borrowing. The new limit does not substantially alter the central government's current liquidity position – rather, it makes the Ministry's preferences explicit on this matter. In addition, the strategy contains certain other clarifications to the risk levels of the central government's cash management, with the goal of strengthening its liquidity.

Our operating environment will continue to change, now and in the future. The key fiscal policy target of the Prime Minister **Petteri Orpo**’s government is to stabilise the general government debt-to-GDP ratio by 2027. The Government has already enacted significant fiscal consolidation measures to achieve this target. In central government’s debt management, we will review the current strategy annually and commission a more extensive, external evaluation in approximately 4-5 years’ time. These evaluations will help us revise and develop the strategy in the future as well.

Pauli Kariniemi is Director General and Head of the Finacial Markets Department at the Ministry of Finance of Finland.

8

Currency hedging provides predictability for defence investments

Deputy Director **JUSSI TUULISAARI**

Photo: Finnish Air Force

In December 2021, after a lengthy bidding process, the Finnish government authorised the Finnish Defence Forces to sign a procurement agreement with the US government for Finland's next multi-role fighter. This fighter procurement represents the largest defence investment in Finland's history, and it will significantly impact Finland's defence capabilities well into the 2060s. The multi-role fighter that will replace Finland's current Hornet fleet is the Lockheed Martin F-35A Lightning II. Finland's first F-35A fighters will be ready by autumn 2025.

The F-35 fighter project – a significant hedging operation

The State Treasury implemented the currency hedging for the Finnish Defence Forces' F-35 fighter project. In addition to the 64 multi-role fighters, this sizable investment includes weapons, software, equipment, and services. All purchases will be paid in US dollars, exposing the project to significant currency risk. For this reason, the Ministerial Committee on Economic Policy decided in December 2021 to hedge half of the approximately EUR 10 billion procurement against any exchange rate fluctuation-related risks.

The State Treasury carried out the hedging using foreign currency forward contracts, which are used to fix the price of a currency in advance for future currency transactions. The State Treasury executed the currency forward contracts between February 2023 and February 2024, with an average exchange rate of EUR 1 = USD 1.1256. The State Treasury's hedging approach proved much more cost-effective than the offers received from banks.

The currency hedging will provide security and predictability for the Finnish Defence Forces and the entire public finances for the duration of the payment plan, which will last until 2030. In fact, the decision has already proven its worth – the strengthened US dollar has meant that any already matured hedges have brought significant savings to the central government.

The Finnish Border Guard’s multi-role aircraft project – concrete savings

In 2024, the State Treasury also implemented the currency hedging for the Finnish Border Guard’s multi-role aircraft project. The aircraft purchased from the American Sierra Nevada Corporation will significantly improve Finland’s border security and the monitoring of its territorial integrity. The approximately EUR 160 million procurement was made in US dollars.

Thanks to the currency hedging implemented by the State Treasury, the project achieved cost savings of over EUR 4 million compared to the fixed-euro price offered by the supplier. The State Treasury carried out its hedging with two days of market operations, setting the average exchange rate of the contracts to EUR 1 = USD 1.0994.

The currency hedging provided predictability for the aircraft procurement, and the achieved cost savings helped secure the acquisition of the project’s key capabilities. So far, the State Treasury’s hedging appears to have been a financially prudent decision for this project as well.

What is currency hedging and why does it matter?

Currency hedging is a way to manage the risks related to exchange rate fluctuations. Unhedged, currency-denominated procurements can result in significant cost fluctuations, jeopardising a project’s goals and the predictability of its budget. This is particularly critical for the public sector, where operational planning and transparency play a vitally important role.

Currency hedging uses financial instruments, such as currency forwards, which are used to set the exchange rate in advance.

> “Unhedged purchases in foreign currency can cause significant cost fluctuations, which endangers the goals of the projects and budget predictability.”

Centralised currency hedging management brings savings

The central government’s procurement units have typically hedged against currency risks by requesting quotes in euros. However, this has resulted in significant hidden costs, with suppliers taking on the currency risk and pricing the associated hedging costs and risk premiums into their offers.

The State Treasury can implement its hedges at significantly cost-effective rates and, once commissioned, manage the entire hedging process from start to finish.

Why is the State Treasury an effective choice for currency hedging?

- **Global networks:** the State Treasury operates with large international financial institutions, allowing it to secure competitive market rates.
- **Established processes, expertise, and IT systems:** the State Treasury has decades of experience in the state’s borrowing and currency hedging-related market operations and associated IT systems.
- **Cost-effectiveness:** centralised operations minimise unnecessary costs and associated risks while also enabling centralised reporting.

Enhancing financial management through extended cooperation

One of the most significant administrative policy objectives of the current government term is improving the productivity of public administration. Extending currency hedging to other central government agencies is a good example of how overall economic efficiency could be improved, and these activities could be expanded even further.

The State Treasury is able to manage the significant currency hedging needs of all state procurement units. By strengthening its resources and utilising its current expertise, the State Treasury could, in some cases, also expand its efforts to interest rate hedging and providing support in procurement planning, economic assessment, and reporting activities. Centralised management and more extensive hedging activities would benefit both individual agencies and the central government's entire administration and economy. These services would also allow ministries to centrally manage and report on their procurements.

Expanding the State Treasury's centralised financial services would allow the state's procurement units to focus more on their core tasks while also keeping the central government's finances and risks better under control. All in all, these activities would provide significant long-term benefits to Finland's public finances.

Jussi Tuulisaari is Deputy Director and Head of Funding at the State Treasury Finland.

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Finland’s climate actions assessed for investors

Investor Relations Manager **TIINA HEINILÄ**

Photo: Anne Kaihola

In addition to comprehensive domestic and EU-level monitoring, Finland's progress in climate actions has now been assessed from an investor's perspective with the expansion of the ASCOR framework evaluation to 70 countries in 2024. Countries need to enhance their ambition and accelerate climate action to mitigate climate change. Among high-income countries, however, Finland ranks in the top quarter in terms of both its emission reduction pathways and policy actions.*

How are climate change adaptation and mitigation progressing in different countries? ASCOR (Assessing Sovereign Climate-related Opportunities and Risks) is an initiative and open tool by and for investors who wish to assess sovereigns from a climate change perspective. ASCOR published its first independent assessment of the climate actions of 25 countries in 2023, and in 2024, the assessment was expanded to 70 countries, including the Nordics. The assessed countries now cover a total of 85% of global greenhouse gas emissions and 90% of the world's GDP. The country-specific assessments are updated annually, with the next round scheduled for late 2025.

The ASCOR tool allows for the examination of sovereign issuers from a risk and opportunity perspective. The tool is divided into three themes – the first focuses on **emission reduction pathways**, where both historical emissions and future targets are examined. The second theme comprehensively assesses existing **policy actions** on climate change mitigation, adaptation, and a just transition. The third theme, **climate finance**, evaluates each country's participation in international climate finance and the transparency of its climate action costs to taxpayers.

ASCOR does not rank countries but aims to support investors in assessing sovereign climate risks by providing comparable data on how sovereigns are managing their transition, physical and social risks.

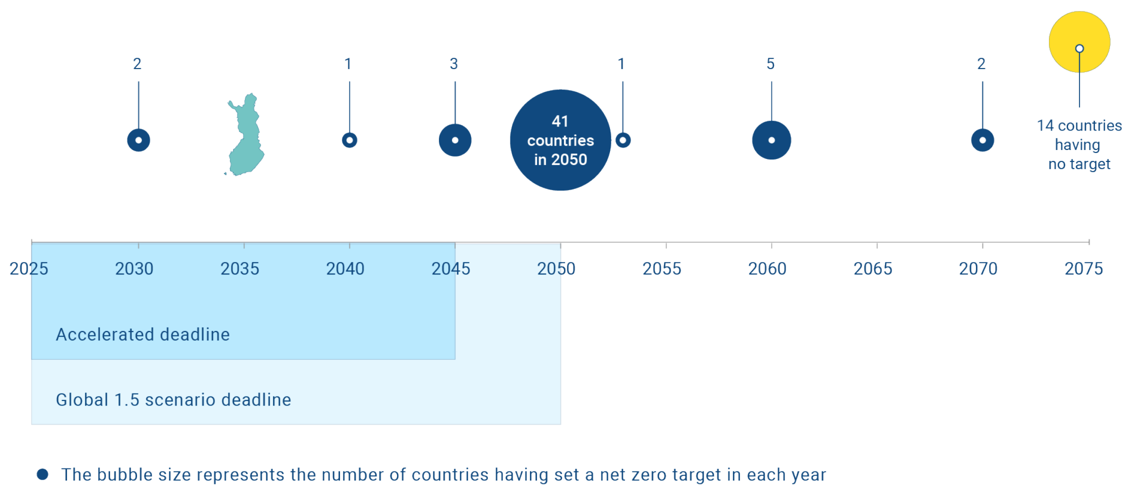
Finland's strengths: an early carbon neutrality goal and comprehensive carbon pricing

In the ASCOR assessment, the areas where Finland stands out are its climate legislation, early carbon neutrality goal, and comprehensive carbon emissions pricing.

Finland's Climate Act was reformed in 2022. Its key contents include Finland's goal of becoming carbon neutral by 2035, its emission reduction targets based on the recommendations of Finland's Climate Panel, and the obligation of strengthening carbon sinks. Of the 70 assessed countries, only 7 have committed to a carbon neutrality goal that is earlier than 2050, and only 2 have a goal that is earlier than Finland's. The Climate Act also reinforced Finland's climate policy planning system, which includes 4 plans (medium-term and long-term climate plans, the national climate change adaptation plan, and the land use sector's climate plan). In other words, the institutional foundation of Finland's climate actions is strong.

Net zero target years of countries assessed against ASCOR framework

Source: ASCOR State of Transition in Sovereigns 2024



The graph shows the net zero target years for 70 countries assessed against the ASCOR framework on a timeline. Finland's target is carbon neutrality by 2035. Carbon neutrality means that emissions and sinks must be balanced, meaning greenhouse gas emissions are at most equal to removals.

As part of its approach to carbon pricing, Finland relies on the EU Emissions Trading System and a carbon tax, which Finland was the first country in the world to implement in 1990. While most developed countries have a carbon tax and/or emissions trading system, or a combination of both, their coverage can be low. In the ASCOR assessment, only 9 of the 62 high-income countries have a carbon pricing system that covers more than 50% of national carbon dioxide emissions and whose carbon prices are in line with the targets of the Paris Agreement – that is, exceeding the minimum price per tonne of carbon dioxide, which was USD 75 in 2023. Finland is among these countries.

More is required from sovereigns – Finland's emission reduction trend comparatively strong

The Paris Agreement's goal, which also applies to Finland, is to limit the rise in global average temperature to below 2 degrees and keeping it below 1.5 degrees. Effective emission reductions are needed to stay within this limit.

The Finnish Government reports on its greenhouse gas emissions to the European Commission and the UNFCCC Secretariat, as required by international agreements. The ASCOR framework uses a different source, so the figures representing historical emissions or emission reduction trends are not the same as those used by the Finnish Government. However, the emission reduction trend is clear. According to the ASCOR methodology, Finland's total emissions have decreased by an average of -5.7% per year over the last 5 years, which is significantly higher than the average of all assessed high-income countries (-1.9%). For comparison, according to the data reported by Statistics Finland, Finland's total emissions decreased by an average of 3.6% per year from 2017 to 2022, and by as much as 6.2% per year from 2018 to 2023.

Finland's greenhouse gas emissions have decreased significantly as of late, especially in energy production, where the use of fossil fuels has been replaced by nuclear, hydro and wind power. Emissions decreased particularly strongly in 2023 – by 10% in all – with the first full year of operation of the Olkiluoto 3 nuclear power plant, continued investment in wind power generation, and a marked increase in hydropower production.

The 2030 target in Finland's Climate Act aims to reduce total emissions by 60% compared to the level recorded in 1990. The EU is collectively committed to the

“Additional measures are needed across all sectors, and especially in the land-use and effort-sharing sectors.”

goals of the Paris Agreement, and as an EU member state, Finland’s emission reduction pathway for 2030 is set by binding EU legislation, which includes annual emission quotas. In other words, the ASCOR assessment does not provide a country-specific estimate of whether Finland’s 2030 target is in line with the 1.5-degree target. According to the Finnish Government’s latest estimate, the projected emission reduction trend for 2030 is close to the target level, but it will require additional measures, which have been estimated at 1.3 million tonnes of CO_2 equivalent.

Countries challenged by international climate financing

International climate financing was a timely topic in 2024 due to the COP29 climate conference held in Baku, Azerbaijan. The conference agreed on a new climate finance target of USD 300 billion, replacing the current annual target of USD 100 billion. This goal must be achieved by 2035.

The ASCOR assessment, however, indicates that only 19% of developed states participate in international climate financing with sufficient contributions relative to their economic size. Finland is not among these nations. Finland supports climate actions in developing states as part of its development financing efforts, which have been subjected to cuts during the current government term.

Achieving the goals of the Paris Agreement will require a reduction in the use of fossil fuels. The ASCOR assessment shows that only a few countries have committed to a deadline for ending their fossil fuel subsidies. Finland also provides indirect subsidies for fossil fuels, such as lower tax rates. However, Finland has also enacted a law that bans the use of coal in energy production by 2029. Finland is poised to phase out the use of fossil fuels in electricity and heat production within the next few years, possibly ahead of schedule.

Finland's Annual Climate Report 2024: additional measures required, especially in the land-use sector

Detailed, sector-specific information on Finland's climate actions can be found in the Finnish Government's Annual Climate Report. It examines the general development of greenhouse gas emissions and the sufficiency of the planned measures in relation to the national climate targets and Finland's EU obligations. The preparation of the Annual Climate Report is mandated by Finland's Climate Act.

Finland's climate goals

Finland's climate targets are defined by EU legislation and Finland's Climate Act. Finland's EU-level commitment is to halve its emissions in the effort-sharing sector – such as transport and agriculture – by 2030*. At the EU level, a specific level of carbon sinks has also been agreed for the land-use sector for 2030, and that there should be no net emissions from the land-use sector between 2021 and 2025.

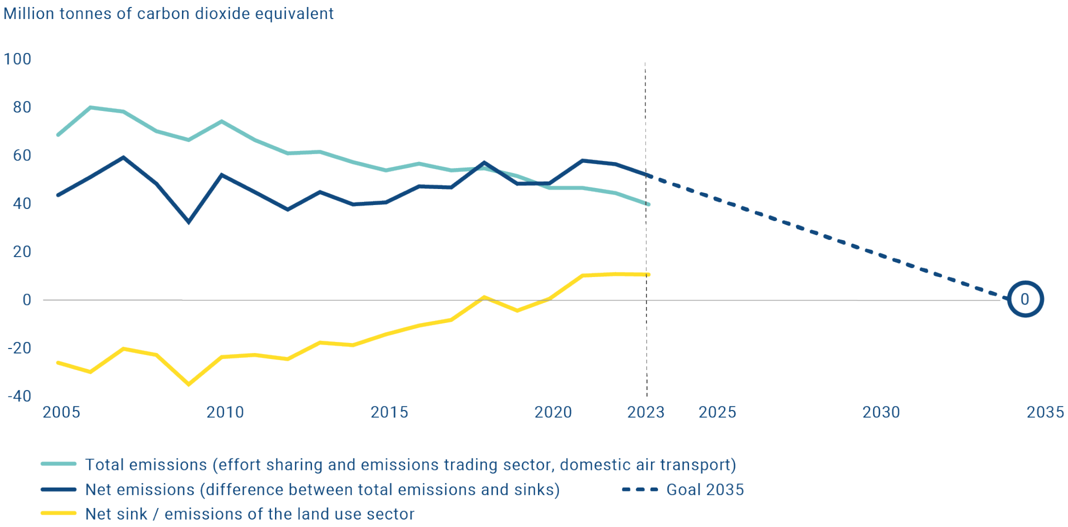
The goal of Finland's own national Climate Act is to reduce emissions by 60% by 2030** and achieve carbon neutrality by 2035. Carbon neutrality means balancing Finland's emissions with its carbon sinks.

* Compared to the 2005 level
** Compared to the 1990 level

According to the latest Annual Climate Report published in June 2024, Finland needs to take additional measures to achieve its goals. Additional measures are needed across all sectors, and especially in the land-use and effort-sharing sectors.

Finland's greenhouse gas emissions trends

(Ministry of the Environment) and Statistics Finland



The graph shows the development of Finland's greenhouse gas emissions from 2005 to 2023. The development is presented both excluding (total emissions) and including (net emissions) the land-use sector. LULUCF stands for land use, land-use change and forestry.

Finland's greenhouse gas emissions decreased by 10% in 2023 – and by 19% in the emissions trading sector. The decline in emissions was mainly achieved as a result of the transition to clean electricity production. Finland's electricity production is already nearly emissions-free.

The effort-sharing sector's emissions in Finland decreased by 4% in 2023. Emissions decreased in all emission categories, including transport and agriculture, which represent the sector's largest emission sources. Overall, the effort-sharing sector's emissions have decreased slowly compared to the emissions trading sector and in relation to climate targets. There is currently uncertainty about whether Finland will achieve its EU commitments for the effort-sharing sector.

In the land-use sector (land use, land-use change, and forestry), Finland is clearly falling short of its EU commitments for 2021–2025. To cover its deficit, Finland can attempt to purchase carbon sink units from other member states. The land-use sector was a source of emissions for Finland in 2023. The carbon sink of forests has been on a downward trend for several years, mainly due to increased logging activities. The Finnish Government is committed to actions that will strengthen its carbon sinks in the land-use sector.

Sources:

*Table 3.1. in State of Transition in Sovereigns 2024: Tracking national climate action for investors. Transition Pathway Initiative Centre (TPI Centre), November 2024.

Finland country assessment, ASCOR 2024 (data collected 23 August, 2024)

Annual Climate Report 2024 (Ministry of the Environment, Finland)

Statistics Finland: Emissions in the energy sector continued to decrease in 2023 – the land use sector was a significant source of emissions (15 January 2025)

Tiina Heinilä is Investor Relations Manager at the State Treasury Finland.

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Key figures

Economy	2023	2024*	2025*	2026*	2027*
GDP at market prices, change in volume, %	-1.2	-0.3	1.6	1.5	1.5
Imports, change in volume, %	-6.6	-0.3	4.4	3.0	2.8
Exports, change in volume, %	0.2	0.4	3.4	3.1	2.4
Consumer price index, change %	6.2	1.6	1.1	1.4	1.8
Unemployment rate, %	7.2	8.3	8.4	7.9	7.4
Current account, relative to GDP, %	-0.4	-0.1	-0.4	-0.3	-0.4
Tax rati, relative to GDP.%	42.5	42.1	42.5	42.4	42.4

Forecast, Ministry of Finance

Government finances	2023	2024*	2025*	2026*	2027*
General government net lending, relative to GDP, %	-3.0	-4.2	-3.5	-2.9	-2.5
Central government net lending, relative to GDP, %	-3.3	-3.5	-3.9	-3.5	-3.2
General government debt, relative to GDP, %	77.1	82.5	85.0	86.1	86.3
Central government debt, relative to GDP, %	57.1	61.2	63.2	64.1	64.4

Forecast, Ministry of Finance

Central government debt and borrowing*	2023	2024
Central government debt, EUR billion	156.2	169.4
Bonds, EUR billion	132.8	148.2
Treasury bills, EUR billion	20.2	18.7
Other debt, EUR billion	3.1	2.6
Gross issuance, EUR billion	42.3	42.8
Net borrowing, EUR billion	14.2	12.6

*Central government debt administered by the State Treasury

Risk management	2023	2024
Interest on budgetary debt, EUR billion	2.3	3.2
Effective interest rate on debt portfolio, %	2.1	2.0
Average maturity	7.4	7.8
Duration	3.6	3.8
Average fixing	4.4	4.8
Weighted Average Maturity at Issuance (WAMI), years		7.7

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