FUNDING AND DEBT MANAGEMENT

The NTMA is responsible for borrowing on behalf of the Government and managing the National Debt in order to ensure liquidity for the Exchequer and to minimise the interest burden over the medium term.

Irish Bond Market Review

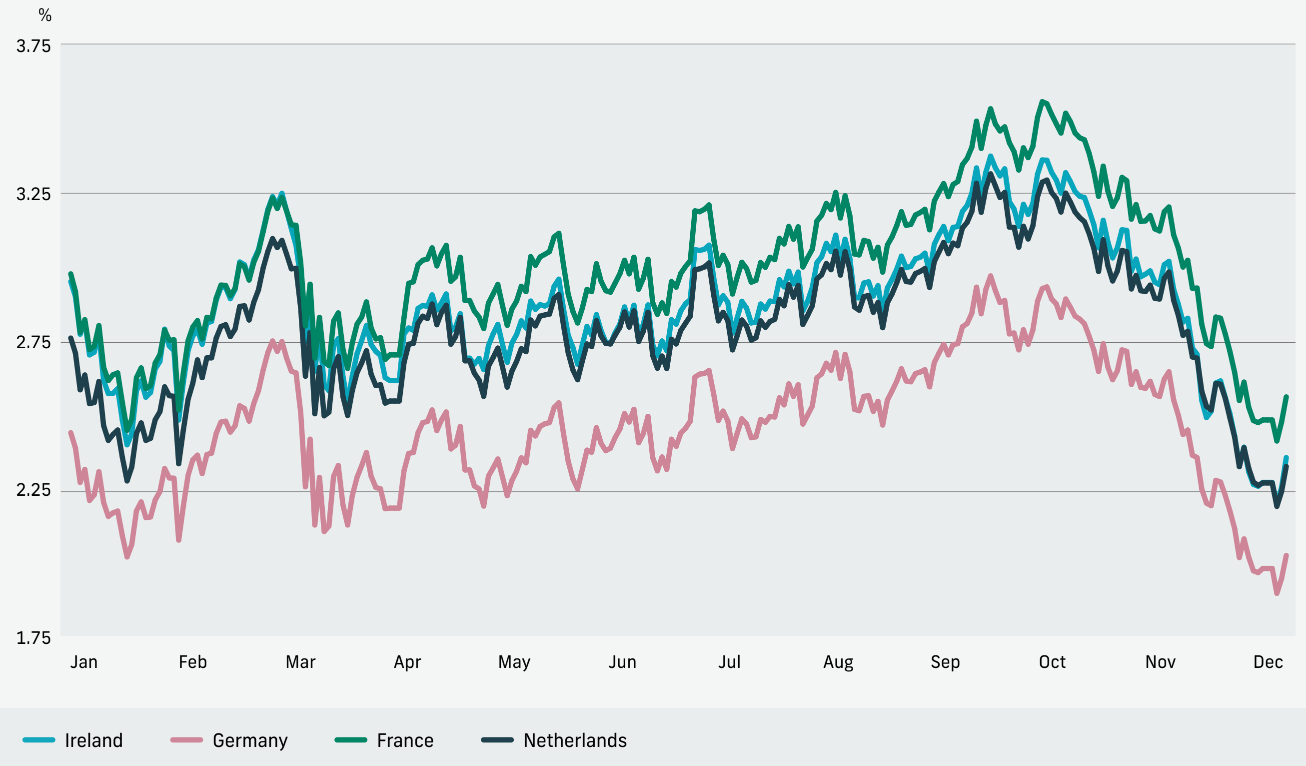
Inflation, Central Bank monetary policy and geopolitical conflicts continued to be major themes in global bond markets in 2023. The European Central Bank (ECB) raised interest rates by another 200 basis points (bps) during the year, following 250bps of increases in 2022. At the end of 2023, the deposit facility rate stood at 4% while the main refinancing rate was 4.5%.

Irish sovereign bond yields, like other European sovereigns, generally trended higher in the first 10 months of the year. There was volatility, particularly approaching ECB Governing Council meeting dates, as well as around the release of key economic data. The Irish 10-year bond yield started the year at just below 3%. It reached over 3.2% in early March before declining to just above 2.5% later that same month. There followed a general upward trend in yields, notwithstanding the occasional increase in bond prices which temporarily lowered borrowing costs. The Irish 10-year reached a high for the year of close to 3.4% in October.

As year-end approached, markets began to speculate that further ECB interest rate increases were unlikely and so, turned their focus towards the possibility of interest rate cuts in 2024. This resulted in a sharp decline in euro area sovereign bond yields. The Irish 10-year yield closed the year at just below 2.4%.

Ireland's limited borrowing requirements and favourable economic and fiscal backdrop were reflected in the improved risk profile of Irish bonds which saw Irish yields trade closer to those of core European sovereign issuers. The Irish 10-year bond yield, which was c. 50bps higher than the German equivalent (the "spread") at the start of 2023, ended the year at closer to 30bps higher. Ireland's 10-year bond yield traded at an average of c. 10bps above the Netherlands equivalent throughout 2023. Moreover, Ireland's 10-year bond yield was lower than the French equivalent for the majority of the year.

10-year European Sovereign Bond Yields in 2023



Funding Activity

Long-Term Funding

In December 2022, the NTMA published its Annual Funding Plan for 2023, which outlined that it planned to issue €7bn to €11bn of bonds over the course of the year. Reflecting the continued strength of Ireland's fiscal position, the NTMA ultimately issued towards the lower bound of this range.

A total of €7bn of benchmark bonds were issued through one bond syndication and three dual-bond auctions in 2023, with a further €0.4bn issued in the non-competitive[3] part of the bond auctions. This total long-term funding of €7.4bn was completed at a weighted average yield of 3.19% and a weighted average maturity of 18.5 years.

€bn	Nominal Issuance	Cash Proceeds
Syndications/auctions	7.0	6.2
Non-competitive auctions	0.4	0.3
Total Benchmark Bond Issuance	**7.4**	**6.5**
- Weighted average yield	3.19%	
- Weighted average maturity	18.5yrs	

The NTMA undertook one bond syndication in 2023, issuing a new 20-year green bond in January. The bond matures in October 2043. €3.5bn was issued at a yield of 3.106%.

3 *This part of the auction is generally aimed at smaller investors. It opens immediately after the competitive auction has closed until 10.00am two business days following the competitive auction. Primary dealers are entitled to bid for up to 15% of their respective successful bids in the competitive auction.*

Limited Bond Issuance at a Time When Yields Have Risen

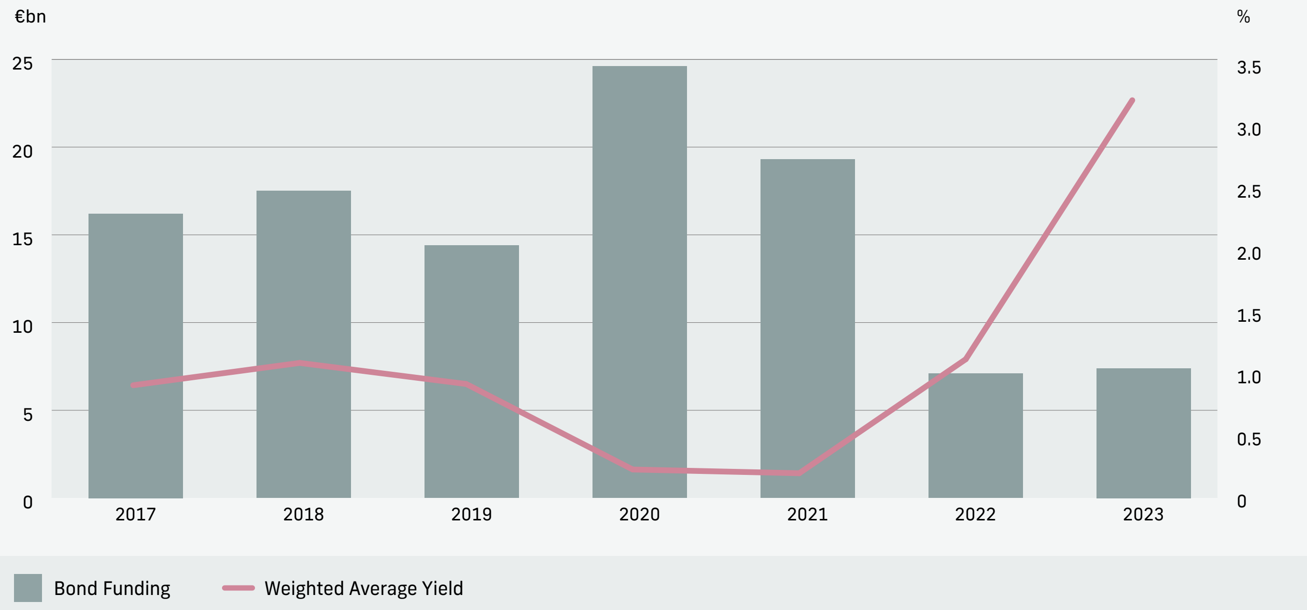
The volume of bond issuance in 2023, and indeed in 2022, at just over €7bn in both years, stands in stark contrast to the levels issued in the preceding five years.

Over that five-year period, 2017 to 2021, the NTMA issued an annual average of more than €18bn of benchmark bonds. Total issuance of €92bn was completed over this period at a weighted average yield of just 0.6%.

While this was, in part, driven by the increased funding requirement resulting from the COVID-19 pandemic, the NTMA took advantage of the historically low interest rates brought about by the ECB's Quantitative Easing (QE) programmes to pre-fund future debt maturities and lengthen and smoothen the maturity profile of Ireland's medium and long-term (MLT) debt portfolio, the weighted average maturity of which stood at almost 10 years at end-2023.

This strategy of pre-funding, coupled with the strong recovery in the public finances post-pandemic, means the NTMA has had to borrow significantly less as interest rates have risen. This is reflected in the much lower volume of issuance in 2022 - €7.1bn at a weighted average yield of 1.1% - and in 2023 - €7.4bn at 3.2%. Bond issuance in 2024 will be at a similar level to 2023 and 2022, with a target funding range of €6bn to €10bn. This lower volume of issuance in recent years will help to mitigate the impact of higher yields on the debt service bill.

Benchmark Bond Funding 2017-2023



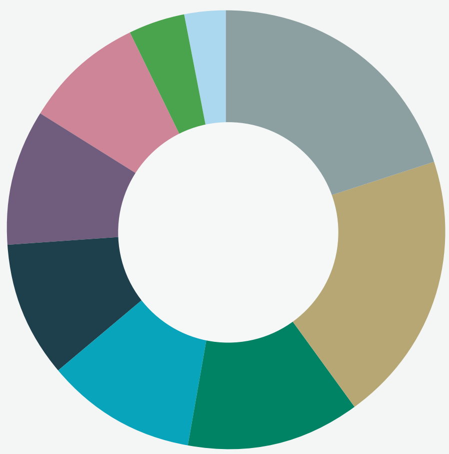
Irish Sovereign Green Bonds

In January 2023, the NTMA issued €3.5bn of Ireland's second Irish Sovereign Green Bond (ISGB) which will mature in October 2043. This provides green bond investors with access to a new long-term tenor on the Irish yield curve. There was strong demand for the new ISGB with a total order book in excess of €35bn which included just under 300 individual accounts. It is estimated that c. 70% of these were Environmental, Social and Governance (ESG) investors. Ninety-six per cent of the issue was taken up by overseas investors. Further detail on the geographical distribution can be found in the chart below.

This new ISGB followed the inaugural issue in 2018 and brought the total ISGB issuance to over €10bn, accounting for some 7% of Ireland's benchmark bond curve at end-2023. With a strong pipeline of green expenditure by the State it was possible to allocate all the proceeds from the 2043 bond to projects undertaken in 2021 and 2022. The chart below shows the allocation of ISGB proceeds, including those from the new ISGB issued in January 2023, across the main eligible green categories. More than half of the proceeds have been allocated to the Clean Transportation category. Further details can be found in the 2022 ISGB Allocation Report which was published in summer 2023 and is available on the NTMA website.

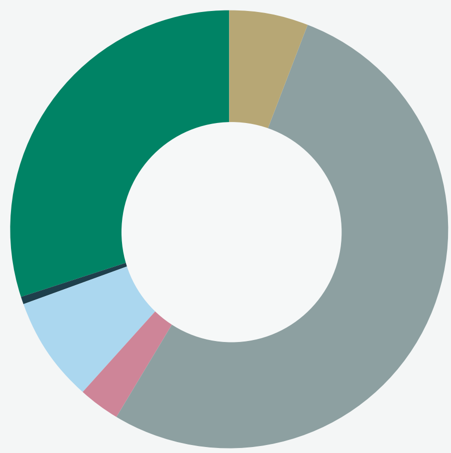
During 2023, the Department of Public Expenditure, National Development Plan (NDP) Delivery and Reform published an enhanced approach on green budgeting for 2024 which will improve the reporting under the ISGB programme in future Allocation Reports.

Investor Geographical Distribution for 2023 20-year Green Bond Syndication



20% Benelux
20% Germany, Austria & Switzerland
13% Nordics
11% Other Europe
10% UK
10% Italy
9% France
4% Ireland
3% Rest of World including the US

Allocation of ISGB Proceeds 2017-2022



53% Clean Transportation
30% Sustainable Water and Wastewater Management
8% Environmentally Sustainable Management of Living Natural Resources and Land Use
6% Built Environment / Energy Efficiency
3% Climate Change Adaptation
0.4% Renewable Energy

The NTMA also held three bond auctions in 2023, issuing a total of €3.9bn nominal (including non-competitive auction issuance of €0.4bn). Each auction was a dual auction, with two different bonds being offered. In total, six different bonds were sold in the three auctions, with maturities ranging from 2027 to 2050.

NTMA Bond Auctions 2023

Bond Name		Auction Size (€m)	Non-Competitive Auction (€m)	Yield (%)	Cover Ratio
9 March					
0.35%	Treasury Bond 2032	450	68	3.133	3.20
1.7%	Treasury Bond 2037	800	120	3.370	2.52
8 June					
1.3%	Treasury Bond 2033	300	10	2.840	2.97
1.5%	Treasury Bond 2050	950	143	3.359	1.60
14 September					
0.2%	Treasury Bond 2027	500	0	3.028	2.70
2%	Treasury Bond 2045	500	15	3.460	2.00

Short-Term Funding

As indicated in the NTMA's Annual Funding Plan for 2023 and reflecting its strong funding position, the NTMA did not issue any Treasury Bills in 2023.

The NTMA issued just over €4bn from Ireland's Euro Commercial Paper (ECP) programme in 2023. This issuance was completed at a weighted average, euro equivalent yield of 2.73% and a weighted average maturity of close to two months. As was the case at end-2022, there was no ECP outstanding at year-end 2023.

Short-term debt was also issued in the form of Exchequer Notes and Central Treasury Notes, with the majority of these notes being held by domestic public sector entities, including the National Reserve Fund (NRF). The aggregate total outstanding in Exchequer Notes and Central Treasury Notes at end-2023 was €17.4bn, up from €9.9bn at end-2022.

State Savings

State Savings is the brand name applied by the NTMA to the range of Irish Government savings products offered to personal savers.

During 2023, there was a small net outflow of less than €0.1bn from State Savings products, including Post Office Savings Bank (POSB) deposit accounts. This compares to a net inflow of €0.7bn in 2022. At year-end 2023, the total amount outstanding in fixed rate products and Prize Bonds was €19.8bn. When POSB deposit accounts are included, the year-end total outstanding was €24.7bn.

A rate increase was implemented in respect of certain State Savings products in March 2023, with a further rate increase implemented in respect of all State Savings products in October 2023. These were the first rate increases in over 15 years.

Registrations for State Savings Online remained strong throughout the year with customers able to view holdings and transactions online, see prize winnings and download annual statements.

The focus for State Savings remains on further digital developments to enhance the service offering to customers and build a sustainable business for the future.

State Savings Products

	Total Outstanding at End-2023 €m	Net Inflow/ (Outflow) in 2023 €m
Savings Bonds	2,468	51
4 Year Solidarity Bonds	1,474	(112)
10 Year Solidarity Bonds	5,009	150
Savings Certificates	5,660	(243)
Instalment Savings/Savings Stamps	547	(4)
Prize Bonds	4,650	(43)
POSB Deposit Accounts	4,889	121
Total	**24,697**	**(80)**

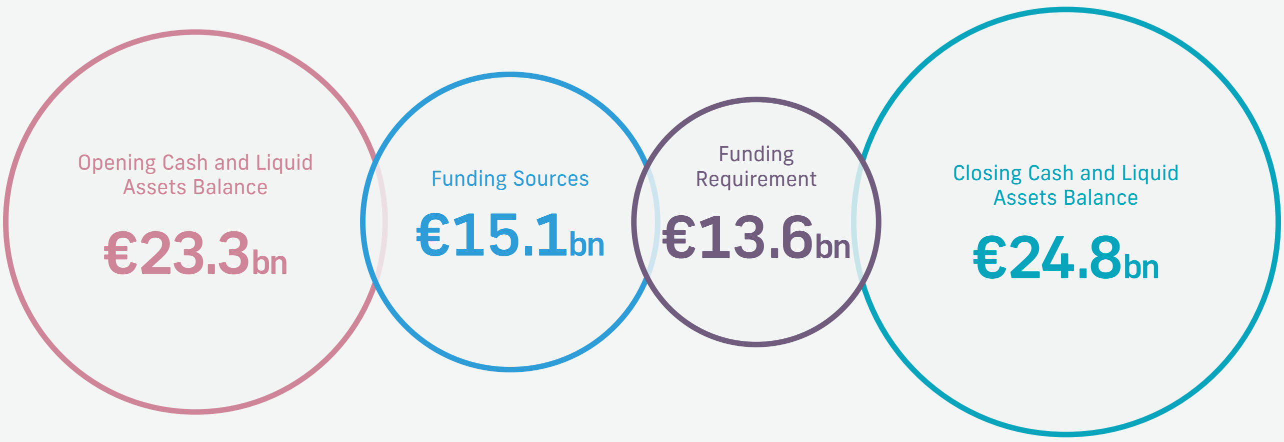
Figures may not total due to rounding.

Exchequer Funding Sources and Requirements 2023

The Exchequer had cash and liquid asset balances of €24.8bn at year-end 2023, an increase of €1.4bn on the end-2022 position.

In addition to the Exchequer surplus of €1.2bn, the main funding sources in 2023 were net short-term paper inflows of €7.5bn[4] and bond issuance proceeds of €6.5bn.

The main funding requirements were a €7bn bond maturity, a European Financial Stabilisation Mechanism (EFSM) loan maturity of €2bn, and the purchase of the final €2.5bn (€3.5bn cash price) of Floating Rate Bonds from the Central Bank of Ireland. Floating Rate Bonds are discussed in more detail on page 22.



Figures may not total due to rounding.

4 *Net short-term paper inflows in 2023 were primarily investments by other public sector bodies, including the NRF.*

Debt Profile and Debt Ratios

Net National Debt is the net debt incurred by the Exchequer after taking account of cash balances and other financial assets. Gross National Debt – the debt before the netting of those cash balances and other financial assets – is the primary component of General Government Debt (GGD). While the NTMA's debt management responsibilities relate to the National Debt measures, the focus of this section is on GGD which is a measure of the total gross consolidated debt of the State and the standard measure used for comparative purposes across the EU.

Composition of National Debt and General Government Debt at End-2023

		€bn
Government Bonds		
Fixed Rate Treasury	*142.8*	
Amortising	*0.4*	
Inflation-Linked	*1.2*	
Total		144.3
EU Programme Loans (EFSM & EFSF)		38.9
SURE Programme Loans		2.5
Other Medium and Long-term Debt		5.4
State Savings Schemes*		19.8
Short-Term Paper		17.4
Borrowings from Ministerial Funds		6.3
Gross National Debt		**234.5**
Less Exchequer Cash and Liquid Assets		24.8
Less Other Financial Assets		4.1
Net National Debt		**205.6**
Gross National Debt		**234.5**
General Government Debt Adjustments[5]		-13.9
General Government Debt		**220.7**

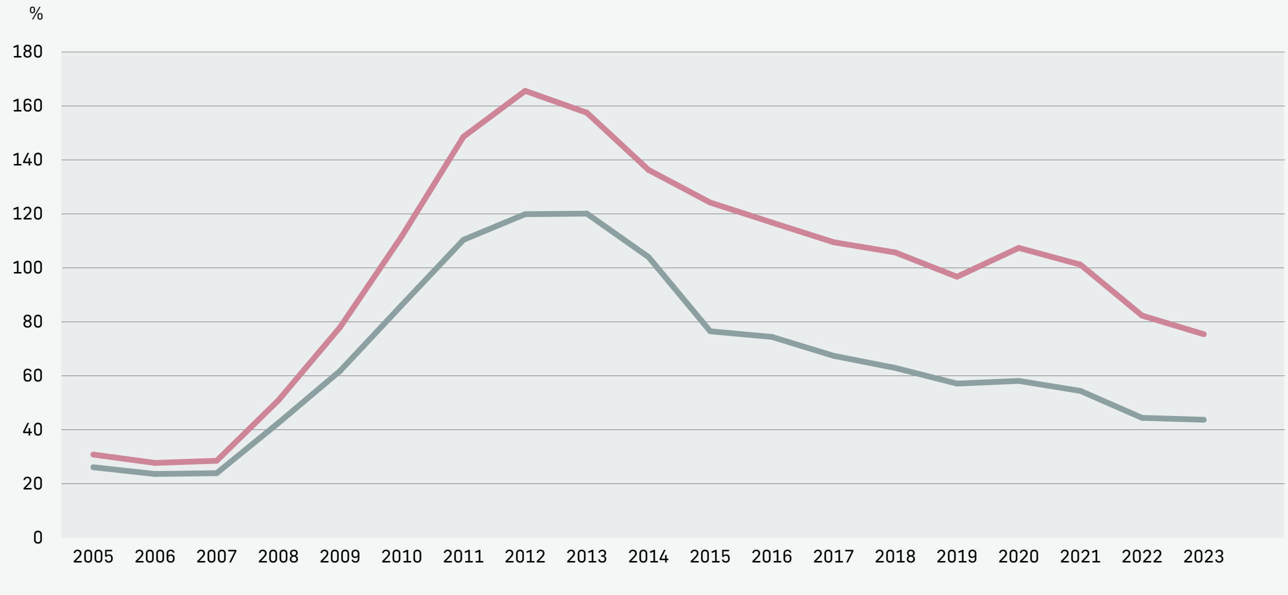
Figures may not total due to rounding.

Source: NTMA and Central Statistics Office (CSO)

*State Savings Schemes also include POSB deposits. While not an explicit component of the National Debt, these funds are mainly lent to the Exchequer as an alternative source of Exchequer funding and liquidity. Including POSB Deposits, total State Savings outstanding were €24.7bn at end-2023.

5 *These adjustments mostly reflect the consolidation of short-term Exchequer debt held by public sector bodies.*

General Government Debt Ratios 2005-2023



Source: NTMA, CSO and Department of Finance forecast for GNI* 2023

Ireland's GGD/GDP ratio was at 44% at end-2023. This compares to a ratio of 120% a decade ago.

The end-2023 ratio was very marginally below that of end-2022. While the absolute level of debt fell by more than €4bn, there was also a slight fall in the level of nominal GDP.

Of course, distortions to Ireland's GDP figures mean the GGD/GDP ratio is viewed as a less reliable indicator of sustainability for Ireland. In that context, it is necessary to focus on other metrics to obtain a truer picture of Ireland's debt burden.

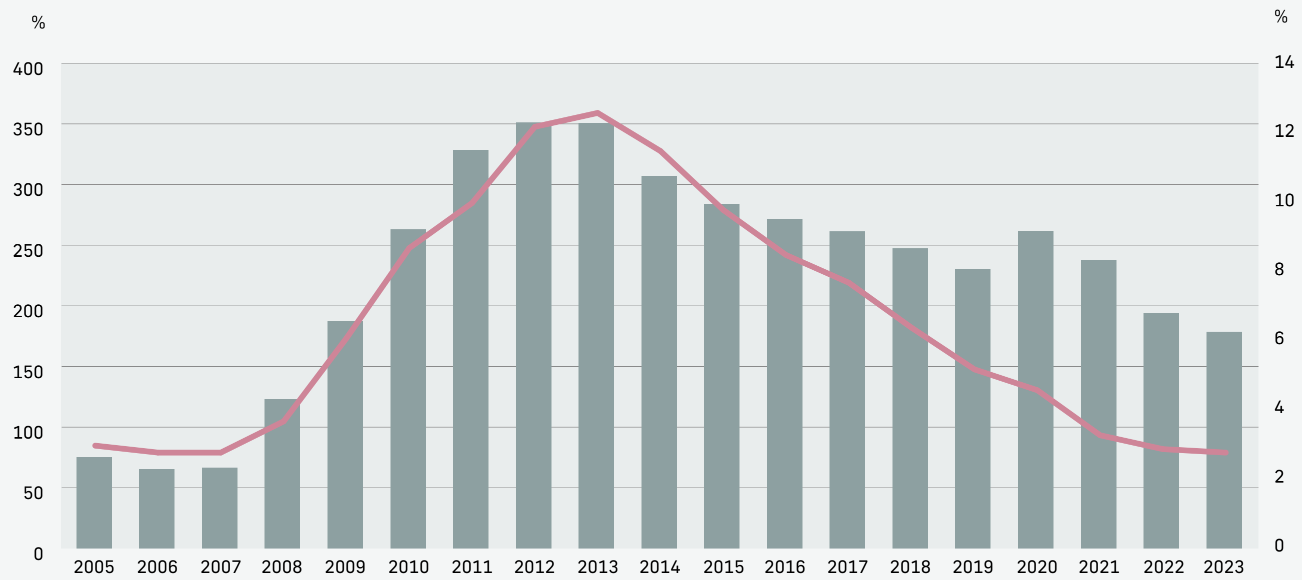
One such alternative metric is GGD as a percentage of Modified Gross National Income, or GNI*. GNI* is considered the best, though still an imperfect, guide to the size of Ireland's economy as it strips out the impact of certain multinationals' activities. Like the GGD/GDP ratio, the GGD/GNI* ratio has also declined significantly over the past decade and this trend continued in 2023. As of end-2023, the ratio stood at a forecast 76%, down six percentage points on end-2022 and significantly below its end-2012 peak of 166%.

Other metrics for examining the burden of public debt include both GGD and General Government interest as a percentage of General Government Revenue (GGR). GGR grew to almost €124bn in 2023, an increase of close to 7% on 2022. This was largely driven by growth in Exchequer tax revenue of 6% with corporation tax, income tax and VAT growing by 5%, 7% and 9% respectively in 2023.

At end-2023, the GGD/GGR ratio stood at 178%, a reduction of 15 percentage points on the end-2022 position. This compares to an end-2012 peak of 351%.

The interest/GGR ratio stood at 2.8% at end-2023, largely unchanged on the end-2022 position. This compares to a 2013 peak of almost 13%. The debt interest bill is discussed in more detail on page 19.

Other General Government Debt Metrics 2005-2023

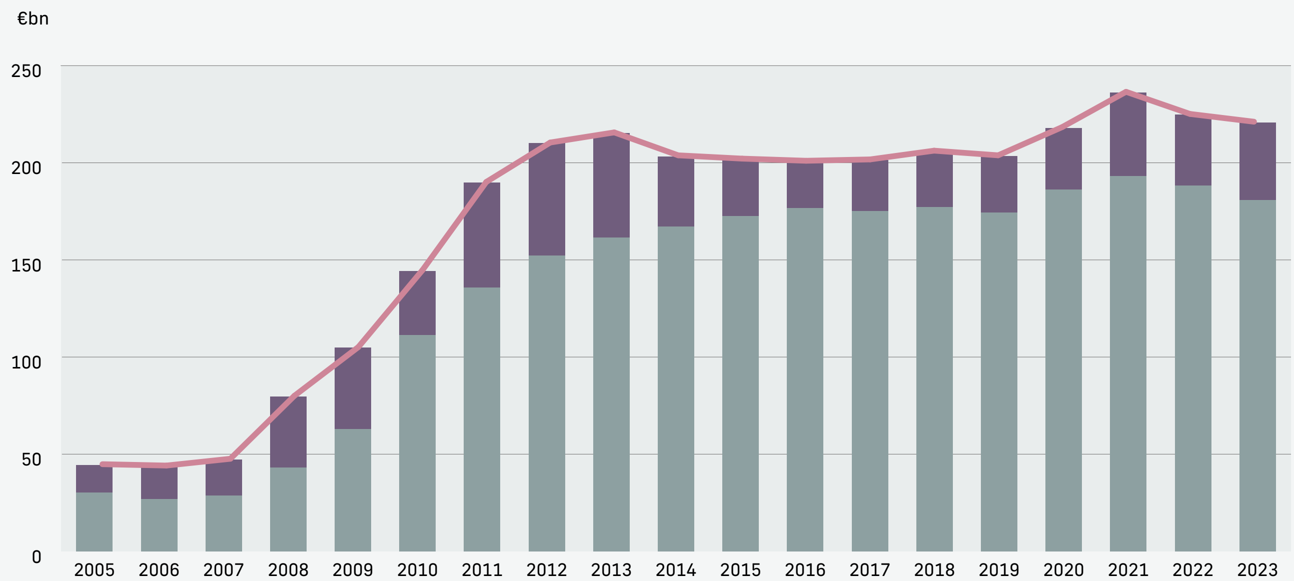


Gross Debt % of Revenue (LHS)   Interest % of Revenue (RHS)

Source: NTMA and CSO

GGD is a gross measure of debt. It does not allow for the netting of cash balances and other financial assets. However, the CSO does produce an estimate of General Government Net Debt. At end-2023, this stood at just below €181bn giving General Government assets of some €40bn. The main asset netted off for the purpose of calculating Net Debt is the Exchequer cash balance which was €19bn at end-2023. Other assets include Exchequer investments in sovereign Treasury Bills (€4.8bn at end-2023), as well as ISIF cash and non-equity investments. The Government's equity stakes in the Irish banking sector, most notably AIB, are not part of these assets.

Gross and Net General Government Debt 2005-2023



GG Net Debt   Cash Balances/Other Assets   GG Gross Debt

Source: NTMA and CSO

Debt Interest Bill

The NTMA's primary debt management objectives are to ensure liquidity for the Exchequer and to minimise the interest burden over the medium term.

Ireland's General Government interest bill peaked in 2013 at almost €8bn. It then fell significantly to €3.3bn in 2021, a fall of almost 60% versus the peak, largely reflecting the repayment of expensive financial crisis era debt and the ECB's QE programmes.

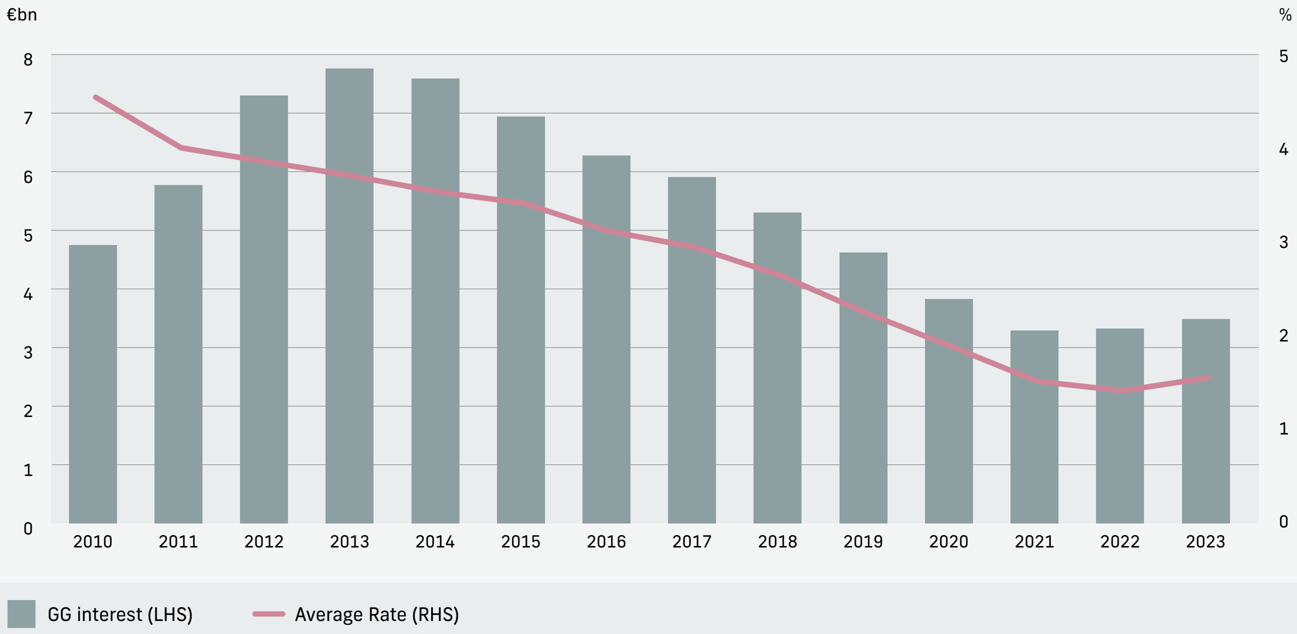
Despite the increase in borrowing costs seen in 2022 and 2023, the interest bill in 2023, at €3.5bn, was only marginally higher than the levels seen in each of the previous two years.

Reflecting the rising interest rate environment, the weighted average yield of benchmark bond issuance increased to 3.2% in 2023. This compares to a weighted average yield of 1.1% in 2022 and just 0.2% in 2021.

As in 2022, and reflecting the continued strength of the public finances, the NTMA issued just over €7bn of bonds in 2023. This limited volume of issuance in recent years is largely offsetting the higher yields so the impact on the debt interest bill thus far has been negligible. In addition, the vast majority of public debt is at fixed rates of interest.

Despite the rise in the marginal cost of borrowing, the average interest rate[6] on Ireland's stock of public debt has been stable at close to 1.5% for each of the last three years.

General Government Interest and Average Rate 2010-2023



Source: NTMA and CSO

6 *General Government interest as a percentage of the debt stock outstanding at the previous year-end.*

Irish Government Bond Market

Bond		Maturity Date	Outstanding End-2022 €m*	Outstanding End-2023 €m*	Change in 2023 €m*
3.9%	Treasury Bond 2023	20 March 2023	7,006	-	-7,006
3.4%	Treasury Bond 2024	18 March 2024	8,031	8,031	0
5.4%	Treasury Bond 2025	13 March 2025	11,490	11,490	0
1.0%	Treasury Bond 2026	15 May 2026	11,639	11,639	0
0.2%	Treasury Bond 2027	15 May 2027	7,251	7,751	+500
0.9%	Treasury Bond 2028	15 May 2028	8,458	8,458	0
1.1%	Treasury Bond 2029	15 May 2029	10,228	10,228	0
2.4%	Treasury Bond 2030	15 May 2030	9,409	9,409	0
0.2%	Treasury Bond 2030	18 October 2030	8,088	8,088	0
1.35%	Treasury Bond 2031	18 March 2031	6,848	6,848	0
0%	Treasury Bond 2031	18 October 2031	9,193	9,193	0
0.35%	Treasury Bond 2032	18 October 2032	4,691	5,208	+518
1.3%	Treasury Bond 2033	15 May 2033	5,085	5,395	+310
0.4%	Treasury Bond 2035	15 May 2035	5,366	5,366	0
1.7%	Treasury Bond 2037	15 May 2037	6,737	7,657	+920
0.55%	Treasury Bond 2041	22 April 2041	4,133	4,133	0
3%	Treasury Bond 2043	18 October 2043	-	3,500	+3,500
2.0%	Treasury Bond 2045	18 February 2045	10,568	11,083	+515
1.5%	Treasury Bond 2050	15 May 2050	8,089	9,181	+1,093

*Excluding repos.
Figures may not total due to rounding.

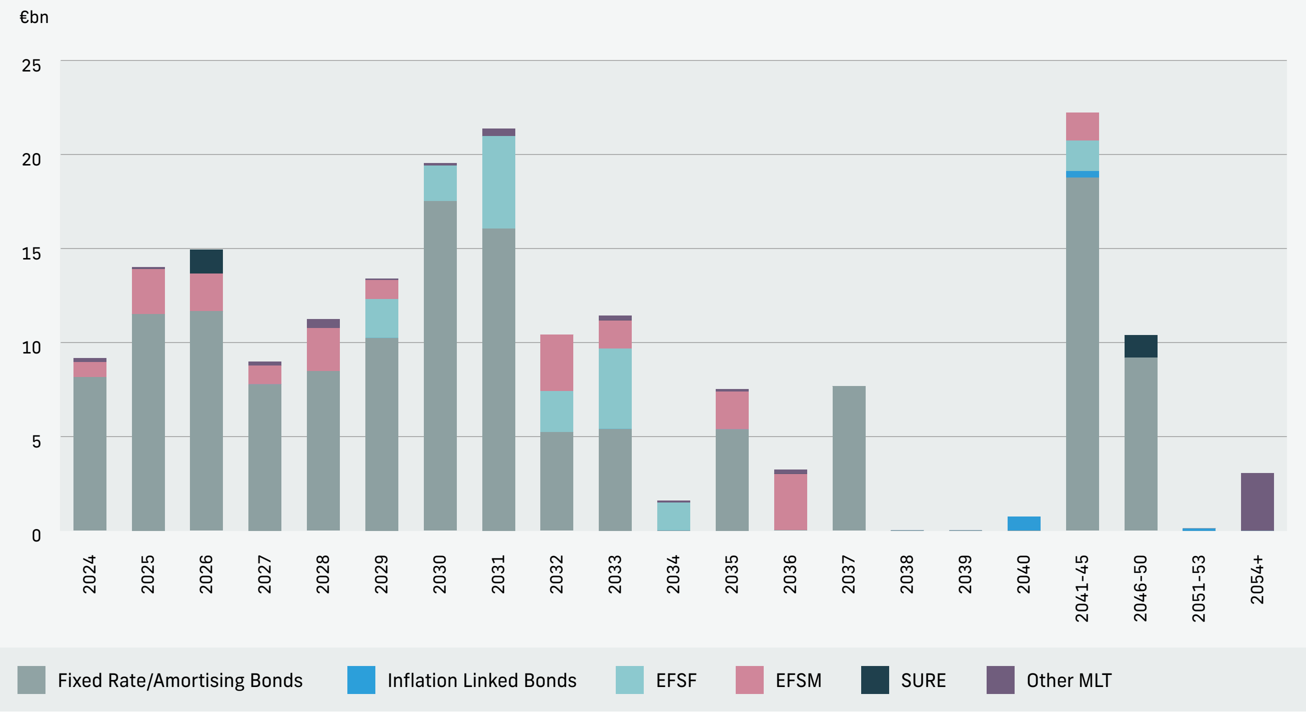
At end-2023, Ireland's benchmark bond curve consisted of 18 fixed rate bonds with a range of maturities extending to 2050. The total outstanding balance stood at almost €143bn.

The Irish Government bond market has a strong primary dealer group, mainly consisting of international investment banks with a global reach. In June 2023, the NTMA announced the recognition of Goodbody Stockbrokers UC as a primary dealer in Irish Government bonds. Also during 2023, Société Générale ceased to be a Primary Dealer in Irish Government bonds. At end-2023, there were 14 primary dealers with exclusive access to Irish Government bond auctions and they are required to quote continuous buy and sell prices in Irish benchmark bonds.

Maturity Profile

The maturity profile of Ireland's €191.1bn MLT debt portfolio, as at end-2023, is shown in the graph below. The weighted average maturity of the portfolio was 9.9 years at end-2023. This compares to €195.3bn at a weighted average maturity of 10.4 years at end-2022.

Maturity Profile of Ireland's MLT Debt at End-2023



There was one benchmark bond maturity in 2023. The 3.9% 2023 bond matured on 20 March with a balance of €7bn. This bond was first issued in March 2013 as a 10-year benchmark in a €5bn syndicated transaction at a yield of 4.15%.

At the time, it was a significant transaction as it marked the first occasion that the NTMA had issued a new 10-year benchmark bond since January 2010, prior to Ireland's entry into the EU-IMF Programme of Financial Support later that year.

Also of note, in the final quarter of the year, there was a €2bn EFSM loan maturity. As part of the EU-IMF Programme, Ireland borrowed a total of €22.5bn from this loan facility. This tranche was part of the first drawdown from this facility in January 2011 and was originally due to be repaid in 2015. However, reflecting the 2013 decision to extend the maturities of Ireland's EFSM and European Financial Stability Facility (EFSF) loans, it was refinanced by the EU in 2015 and extended to 2023. Following this maturity, the outstanding balance of Ireland's EFSM loans was €20.5bn at end-2023.

Furthermore, the final €2.5bn nominal of Floating Rate Bonds held by the Central Bank of Ireland were bought back and cancelled during 2023. This is discussed in further detail on page 22.

Continuing its strategy of recent years, the NTMA took the opportunity to pre-fund these maturities and redemptions.

Floating Rate Bonds

In February 2013, as part of the liquidation of Irish Bank Resolution Corporation (IBRC), promissory notes issued by the Irish Government during the financial crisis were exchanged for a portfolio of long-term government bonds.

The bonds, which were acquired by the Central Bank of Ireland, included eight new Floating Rate Bonds with a nominal value of €25.034bn which were issued by the NTMA. These Bonds had maturities ranging from 2038 to 2053.

The replacement of promissory notes with long dated Irish Government bonds smoothened Ireland's debt profile and reduced near-term borrowing requirements. It was viewed as an important factor in Ireland's re-entry to capital markets after the EU-IMF programme concluded in late 2013.

On 7 September 2023, the NTMA purchased and subsequently cancelled the final €534m of the Floating Rate Bond which was due to mature in 2053. This means that all eight of the Floating Rate Bonds issued in 2013 have now been fully purchased and cancelled.

Two key market conditions facilitated the accelerated redemption of these Floating Rate Bonds:

I. the low interest rate environment which prevailed for much of the last decade, particularly for longer maturities, supported by ECB policy measures; and

II. Ireland's relatively light refinancing obligations for much of the period since 2013.

These factors allowed the NTMA to issue medium to long-term fixed rate debt in the market to fund the purchases of these Floating Rate Bonds without creating excessive supply or overhang.

By refinancing these Floating Rate Bonds with fixed rate debt, the NTMA was effectively protecting Ireland against future interest rate increases.

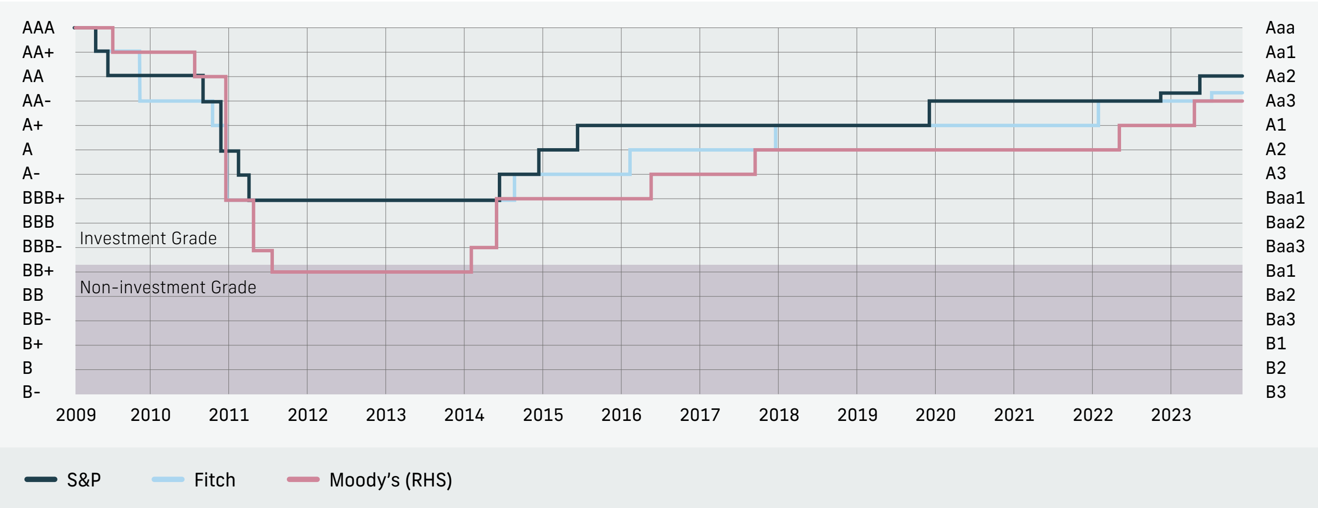
Floating Rate Bond	Original Nominal €m	Contractual Maturity Date	Date Fully Redeemed
2038	2,000	June 2038	October 2015
2041	2,000	June 2041	July 2016
2043	2,000	June 2043	February 2017
2045	3,000	June 2045	November 2017
2047	3,000	June 2047	July 2018
2049	3,000	June 2049	May 2019
2051	5,000	June 2051	January 2022
2053	5,034	June 2053	September 2023
Total	**25,034**		

Credit Ratings

2023 saw further positive movements in Ireland's credit ratings. In April, Moody's upgraded Ireland's rating for the second time in less than a year, bringing the rating to Aa3 with a stable outlook. In May, Standard & Poor's (S&P) also upgraded Ireland's rating by one notch, to AA, with a stable outlook. This was the first upgrade from S&P since 2019. Fitch maintained Ireland at AA- during 2023 but placed it on positive outlook in July. These changes in 2023 mean that Ireland is rated in the AA category with all the major global ratings agencies. The graph below charts Ireland's historical ratings for the three main rating agencies up to and including year-end 2023.

Morningstar DBRS and R&I maintained their ratings on Ireland at AA (low) and AA- respectively in 2023. KBRA upgraded Ireland to AA in May 2023.

In their assessments, the rating agencies noted the resilience of the Irish economy, strong revenue performance, and the improved debt sustainability metrics. The two proposed investment funds announced as part of Budget 2024 – the Future Ireland Fund and Infrastructure, Climate and Nature Fund – were broadly welcomed by the rating agencies with full judgement reserved until the funds are operational.



Ireland's Sovereign Credit Ratings – as at April 2024

Rating Agency	Long-Term rating	Short-Term rating	Outlook/ Trend
S&P	AA	A-1+	Stable
Moody's	Aa3	P-1	Stable
Fitch Ratings	AA-	F1+	Positive
Morningstar DBRS	AA (low)	R-1 (middle)	Positive
R&I	AA-	a-1+	Stable
KBRA	AA	K1+	Stable
Scope Ratings	AA-	S-1+	Positive

Investor Relations

The goal of the NTMA's Investor Relations programme is to develop and maintain long-term relationships with investors. It provides transparency to the market about Ireland's macroeconomic situation and the NTMA's funding plan. The programme ran a combination of in-person and virtual meetings in 2023.

Throughout the year, the NTMA met with investors from all the major financial centres across Europe, North America, and Asia, as well as a number of secondary centres. The NTMA met investors from 20 cities across 14 countries, including in-person and virtual meetings.

Ireland Apple Escrow Fund

The NTMA continues to perform certain functions of the Minister for Finance in relation to the investment of the Ireland Apple Escrow Fund (the "Fund") in accordance with delegation orders made by the Minister and related Ministerial directions. An Investment Committee comprising an equal number of members appointed by the NTMA (as agent of the Minister) and by the relevant Apple entities, is responsible for investment oversight and for monitoring the performance of the investment managers and the escrow agent/custodian. The committee met on four occasions during 2023.

In accordance with Section 28 of the *National Treasury Management Agency (Amendment) Act 2000* and at the direction of the Minister for Finance, the NTMA is required to prepare and keep accounts for the Fund, which are subject to audit by the Comptroller and Auditor General. These accounts, which are submitted annually to the Minister for Finance, reflect the overall value, income and expenditure of the Fund using IFRS accounting standards. All income, expenses, gains and losses accrue to the Fund. The accounts are published separately to the NTMA accounts.

Further information on the background to, and establishment of, the Fund as well as information on the performance of the Fund, can be found in the most recently published financial statements of the Ireland Apple Escrow Fund, which are published by the Department of Finance at www.gov.ie/publications.