

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.



Long-Term Funding

Total Long-Term Funding in 2021

€23bn

€19.3bn of benchmark bond issuance at a weighted average yield of 0.18% and a weighted average maturity of 14.4 years. An additional €0.9bn was issued in eight fixed rate, long term private placements with maturities ranging from 65 years to 100 years and a €0.1bn 30-year inflation linked bond. A €2.5bn loan from the EU's SURE Programme and €0.2bn EIB loan added diversification to the portfolio and brought total long term-funding in 2021 to €23bn.



New 10 and 20-Year Bonds

€9bn

€9bn out of the €23bn long-term funding in 2021 was raised from the sale of two new bonds by syndication:

- In January, €5.5bn of a new 10-year benchmark bond, maturing in October 2031, at a negative yield of -0.257%.
- In April, €3.5bn of a new 20-year benchmark bond, maturing in April 2041, at a yield of 0.585%.



Average Maturity

10.9Yrs

The weighted average maturity of Ireland's €202.7bn medium and long-term debt portfolio is estimated at 10.9 years at end-2021, down marginally from 11.3 years at end-2020.





Interest Bill Continues to Decline

€3.3bn

General Government Interest

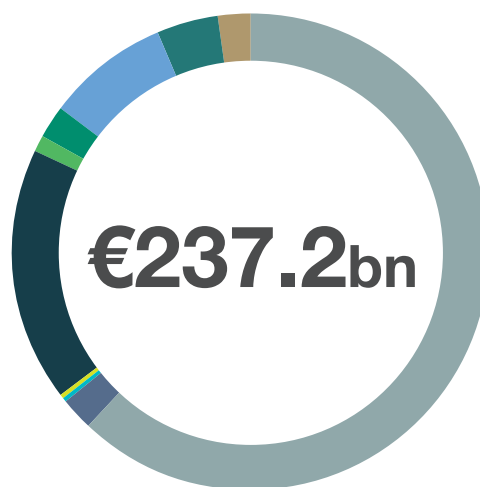
General Government interest costs continued to fall in 2021, to €3.3bn, from €3.8bn in 2020. This is almost 60% below the 2013 peak and is a level not seen since 2009. They were down €0.5bn or 14% on 2020.

3.4%

General Government Revenue

Falling interest cost coupled with strong revenue growth means interest as a percentage of General Government revenue was down to 3.4% in 2021 from 4.6% in 2020. This compares to almost 13% in 2013.

Gross National Debt at End-2021



Fixed Rate Treasury Bonds	€147.1bn
Floating Rate Bonds	€5.5bn
Amortising Bonds	€0.4bn
Inflation-Linked Bonds	€1.1bn
EU Loans	€40.9bn
SURE Programme	€2.5bn
Other Medium & Long-Term Debt	€5.2bn
State Savings	€19.6bn
Short-Term Paper	€9.8bn
Borrowing from Ministerial Funds	€5.1bn

Figures may not total due to rounding.

Funding and Debt Management (continued)

Irish Bond Market Review

The main influences on bond markets in 2021 were the ongoing COVID-19 pandemic, the re-emergence of inflation and the resulting response of central banks.

In the first week of January, the NTMA issued a new 10-year bond at a yield of -0.257%. This was the lowest ever yield on 10-year debt issued by the NTMA. This negative yield environment persisted throughout the early months of the year. Bond markets were strongly supported by central bank bond buying, as a significant new wave of COVID-19 infections brought the reintroduction of restrictions.

With additional borrowing required to fund spending and fiscal stimulus to curb the effects of the pandemic, the scale of sovereign bond issuance began to weigh on financial markets during the second quarter. Investors were also concerned by rising inflation that could be further heightened by the reopening of the economy after the easing of restrictions. Sovereign yields began to rise with the Irish 10-year yield reaching 0.32% in mid-May.

Markets stabilised during the summer months, as vaccine rollouts accelerated, and restrictions were lifted. However, COVID uncertainty continued as the Delta variant began to spread globally. Ireland's 10-year yield dropped back into negative territory, falling to -0.12% in August.

Inflation came sharply into focus for investors in the latter part of the year. Viewed initially as being transitory in nature, that view softened as year-end approached. The reaction of global central banks was keenly observed, from the decision to start tapering bond purchases to the pace of prospective interest rate hikes in the coming years. This was balanced by new variants of infections which led to further waves of COVID-19. However, the impact of these new cases was more limited as vaccines and boosters kept hospitalisation rates low and as a result there was less need for economic restrictions.

With the ECB continuing to buy large amounts of euro sovereign bonds throughout the year, there was no significant widening of credit spreads despite the economic uncertainty. The Irish 10-year spread to Germany widened from lows of 25bps in January to 42bps at year-end. This was in line with other comparable European countries and Ireland's spread to France and Belgium was steady throughout the year.

Quantitative Easing – Continued Support Through 2021

There were no major developments to the ECB's quantitative easing (QE) programme during 2021 after it was expanded in 2020 to counter the risks to euro area economies posed by the COVID-19 pandemic.

The €1.85trn Pandemic Emergency Purchase Programme (PEPP) continued to conduct purchases at a relatively steady pace during the year, with small fluctuations quarter-to-quarter reflecting prevailing economic conditions. Net purchases under the PEPP ended in March 2022. The reinvestment of maturing principal payments will continue until at least the end of 2024.

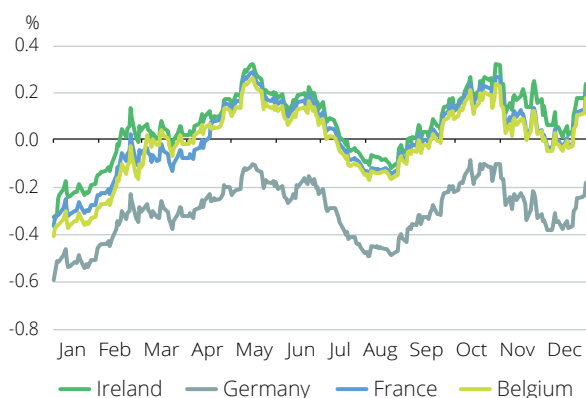
The long-running ECB Asset Purchase Programme (APP) conducted net purchases of €20bn a month during 2021 and in Q1 2022. To ease the ending of net purchases under the PEPP, the ECB announced in December 2021 a recalibration of monthly purchases under the APP to €40bn in Q2 2022, €30bn in Q3 2022 and €20bn from Q4 2022, or for as long as necessary. However, in March 2022 the ECB announced the acceleration of tapering of the APP. Monthly purchases under the APP for 2022 will now be €40bn in April, €30bn in May and €20bn in June. The rate of net purchases in Q3 will be data dependent. Reinvestments of maturing principal payments will continue for an extended period of time past the date when the ECB starts raising its key interest rates.

The ECB also said at its most recent Governing Council meeting in April 2022, that any adjustments to its key interest rates will take place some time after the end of net purchases under the APP and will be gradual.

During 2021, net purchases of Ireland's debt across the two programmes totalled approximately €17bn.

By end-2021 the cumulative net purchases of Irish bonds under the APP – introduced in 2015 – totalled €41bn and under the PEPP – introduced in 2020 – totalled approximately €24bn.

10-year sovereign bond yields in 2021



Funding Activity

Long-Term Funding

The NTMA's original bond funding range for 2021 was €16bn to €20bn. However, in July the Government published its Summer Economic Statement (SES) in which it forecast a higher deficit for 2021. With strong pre-funded cash balances, this did not require the original funding range to be increased but instead it was narrowed, to €18bn to €20bn for the year.

The NTMA ultimately completed €18.5bn nominal of benchmark bond issuance. A further €0.8bn was issued in the non-competitive bond auctions, bringing the total bond issuance to €19.3bn. This funding had a weighted average yield of 0.18% and a weighted average maturity of 14.4 years.

The NTMA raised almost €1bn in other long-term debt issued under its Euro Medium Term Note (EMTN) Programme. There were eight, fixed-rate private placements with long maturities ranging from 65 years to 100 years and one 30-year inflation linked bond.

This focus on long-term issuance, at low rates, was a continuation of the NTMA's strategy of recent years.

Additionally, in March, the NTMA drew down €2.5bn from the EU's SURE Programme in two tranches, €1.3bn 5-year and €1.2bn 25-year. This instrument was for temporary support to mitigate unemployment risks that arose because of the pandemic. Lastly, there was a €0.2bn European Investment Bank (EIB) loan. This brought total long-term nominal funding to €23bn.

€bn	Nominal	Cash
Syndications/auctions	18.5	19.4
Non-competitive auctions	0.8	0.9
1. Total Benchmark Bond Issuance	19.3	20.3
- Weighted average yield	0.18%	
- Weighted average maturity	14.4 yrs	
2. Private Placements	0.9	0.9
3. Inflation Linked Bond	0.1	0.1
4. EU SURE Programme	2.5	2.5
5. EIB Loan	0.2	0.2
Total Long-Term	23.0	24.0

As shown in the table, cash proceeds exceeded nominal issuance in 2021 by c. €1bn owing to the net premium on bonds issuance i.e. where bonds sold were trading above par.

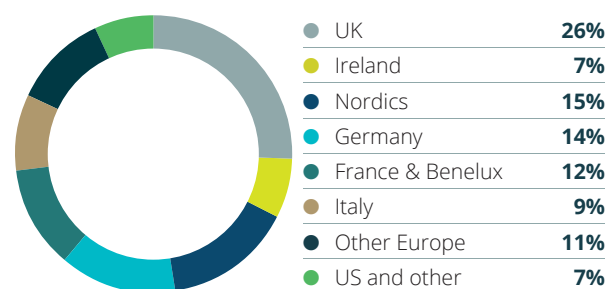
The NTMA undertook two bond syndications in 2021, issuing new bonds maturing in 2031 and 2041.

The first syndication of the year was a new 10-year benchmark bond in January, with €5.5bn sold at a yield of -0.257%. This was the lowest ever yield on 10-year debt issued by the NTMA. The total order book was in excess of €40bn, from over 240 individual accounts. 93% was taken up by overseas investors with the largest distribution of 33% going to UK investors.

The second syndication of the year was a new 20-year benchmark, which took place in April. €3.5bn was issued at a yield of 0.585%. The order book exceeded €35bn from over 200 individual accounts. Strong overseas interest was again seen with 94% of investors from outside Ireland. The largest distribution of 21% went to Germany, followed by the UK at 15%.

Combined Investor Geographic Distribution

For two bond syndications in 2021



Figures may not total due to rounding.

The NTMA also held seven bond auctions during the year issuing a total of €10.3bn, including the non-competitive auctions. Eleven different bonds were sold, with maturities across the curve, from just under 5 years to almost 30 years. Continuing the trend from 2020, four of these auctions saw three different bonds being offered. Notably, the November auction offered the Irish Sovereign Green Bond (ISGB) for €0.75bn. This brought the total outstanding in the March 2031 ISGB to over €6.8bn.

Funding and Debt Management (continued)

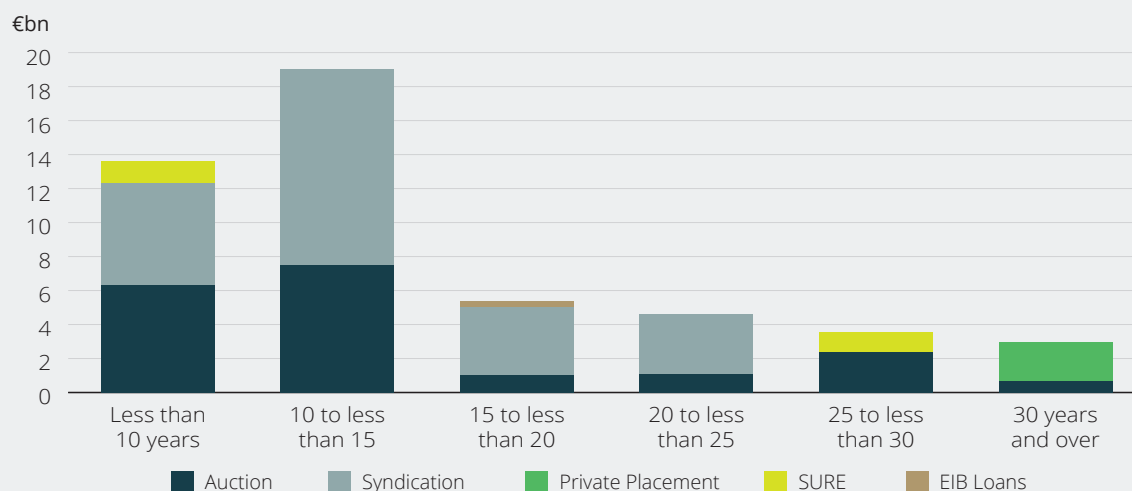
NTMA Bond Auctions 2021

Bond Name		Auction Size (€m)	Non-Competitive auction (€m)	Yield (%)	Bid-Cover Ratio
11 March					
0%	Treasury Bond 2031	1,050	97	0.013	1.83
1.5%	Treasury Bond 2050	450	8	0.667	1.58
13 May					
0%	Treasury Bond 2031	800	96	0.300	1.48
1.3%	Treasury Bond 2033	400	60	0.401	1.50
1.5%	Treasury Bond 2050	300	45	1.031	1.68
10 June					
1.1%	Treasury Bond 2029	600	90	-0.094	2.20
1.7%	Treasury Bond 2037	325	49	0.477	2.06
2%	Treasury Bond 2045	325	49	0.717	1.67
8 July					
1%	Treasury Bond 2026	450	0	-0.494	2.55
0%	Treasury Bond 2031	500	0	0.040	2.29
0.4%	Treasury Bond 2035	550	0	0.267	1.59
9 September					
0%	Treasury Bond 2031	700	0	0.020	2.43
0.55%	Treasury Bond 2041	550	83	0.550	2.11
14 October					
0%	Treasury Bond 2031	450	0	0.184	2.73
2%	Treasury Bond 2045	650	87	0.716	1.23
1.5%	Treasury Bond 2050	400	60	0.885	1.92
11 November					
0.9%	Treasury Bond 2028	350	11	-0.203	2.47
1.35%	Treasury Bond 2031	650	98	0.039	1.74

Funding Through the Pandemic

The COVID-19 pandemic that began in 2020 led to the introduction of large-scale fiscal supports from the Government to support the Irish economy. Much of this was funded through debt issuance by the NTMA with the focus on issuing long-term debt at low yields, supported by ECB policy. Across 2020 and 2021 the NTMA issued €44bn nominal in benchmark Government bonds (including non-competitive auctions). This was done at a weighted average yield of just below 0.2% and a weighted average maturity close to 13 years.

Long-term Pandemic Funding 2020/2021



There was also increased activity in private placements with very long-maturities. More than €2.3bn was issued across 2020 and 2021. This consisted of fifteen fixed rate notes with maturities ranging from 58 years to 100 years and yields ranging from 0.75% to 1.27%. There was also one 30-year inflation linked bond issued as a private placement in 2021. Additionally, Ireland, through the NTMA, borrowed €2.5bn from the EU's SURE Programme. The aim of this programme was to provide funding to help Member States mitigate the negative economic and social impacts of the pandemic. Lastly, there was €0.4bn of EIB loans drawn down over the two year period. This brought long-term borrowing to just over €49bn across 2020 and 2021.

Short term issuance also increased notably over the two years, particularly in the initial phase of the pandemic response. €53.5bn was issued in Treasury-Bills and Euro Commercial Paper; €36.9bn in 2020 and €16.6bn in 2021. This compares to €8.7bn in 2019. Much of this short-term issuance was subsequently termed out over the course of 2020 and 2021 given the attractiveness of longer-term rates and the ongoing strategy of issuing longer-term debt in the favourable rate environment.

Adding other funding sources such as State Savings (page 16) and reflecting large debt maturities, including two bonds in 2020, gross public debt at end-2021 was more than €30bn higher than it was at end-2019, pre-pandemic. Around two-thirds of this increase reflected the funding of the fiscal deficit while the remainder reflected an increase in cash balances. These increased to €27.5bn at end-2021, from €16.5bn at end-2019.

The NTMA has taken advantage of the favourable market conditions brought on by the ECB's asset purchase programmes to continue with its strategy of issuing long-term debt at low yields and pre-funding future liabilities. While gross public debt has increased by more than €30bn compared to its pre-pandemic level, the NTMA has flexibility with regards to issuance in the coming years given the relatively limited refinancing needs and large cash balances at its disposal.

Funding and Debt Management (continued)

Floating Rate Bond buybacks

A total of €2bn nominal of Floating Rate Bonds held by the Central Bank of Ireland were bought back and cancelled during 2021. These were replaced with medium to long-term fixed rate market funding. By end-2021, a total of €19.5bn of Floating Rate Bonds had been bought back and cancelled by the NTMA, leaving an outstanding balance of €5.5bn. This was ahead of the minimum disposal schedule, a strategy driven by the low interest rate environment of recent times. When replacing Floating Rate Bonds with fixed rate bonds the NTMA is protecting the State against future interest rate rises.

Short-Term Funding

In 2021, the NTMA held monthly Treasury Bill auctions from January to November, each with an issuance size of €0.75bn. In total €8.25bn was issued at a weighted average yield of -0.6% and a weighted average life of almost six months. At year-end 2021, €3bn nominal of Treasury Bills were outstanding, down from €3.75bn at end-2020.

The NTMA issued €8.4bn from Ireland's Euro Commercial Paper (ECP) programme, a reduction from just over €29bn issued in 2020, but above 2019 levels of €6.7bn. The 2021 ECP issuance was at a weighted average, euro equivalent yield of -0.6% and a weighted average tenor of over five months. The balance of ECP outstanding at year-end was €1.9bn, down from €4.9bn at end-2020.

Short-term debt was also issued in the form of Exchequer Notes and Central Treasury Notes. Most of these notes are held by domestic public sector entities. The total outstanding at end-2021 was €4.9bn, compared to €5.4bn at end-2020.

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 2021, there were net inflows of €1.3bn into State Savings products reflecting the continued increase in savings across the Irish market as large parts of the economy were operating at reduced capacity for periods due to COVID-19 restrictions. At year end-2021, the total amount outstanding in fixed rate products and Prize Bonds was €19.6bn. When variable rate deposit accounts are included, this brings the year-end total outstanding to €24.1bn.

State Savings - Ongoing Transformation Programme

In 2021, State Savings Online was launched, a digital platform for customers. Customers can view their holdings and transactions online, view Prize Bond winnings and download statements. In addition, customers can choose to withdraw savings online direct to their bank account or reinvest in other State Savings products.

The launch of State Savings Online was a major milestone in the State Savings transformation as it continues its change programme. In recent years, a new State Savings website was introduced and the State Savings Customer Number (SSCN) was launched allowing customers to use their unique QR code to purchase both online and at Post Office Counters, without having to complete an application form. Enhancements were also made to the way Prize Bond winnings were issued. Customers whose Prize Bonds are selected for prizes in the draw can either have prizes paid directly to their bank accounts or automatically reinvested into new Prize Bonds.

Future developments in State Savings will focus on the expansion of State Savings Online and the enhancement of the offline experience including discontinuing paper certificates and bonds and the expansion of customer payments by electronic funds transfer (EFT).

State Savings Products

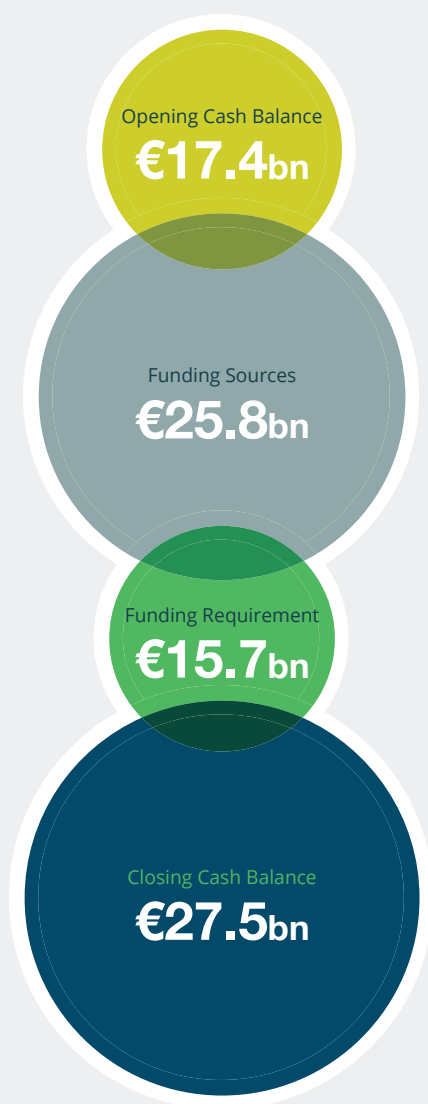
	Total Outstanding at End-2021 €m	Net Inflow/ (Outflow) in 2021 €m
Savings Bonds	2,383	(19)
4 Year Solidarity Bonds	1,466	240
10 Year Solidarity Bonds	4,722	390
Savings Certificates	6,087	(150)
Instalment Savings/Savings Stamps	545	15
Prize Bonds	4,440	339
Deposit Accounts	4,420	501
Total	24,063	1,316

Figures may not total due to rounding.

Exchequer Funding Sources and Requirements 2021

The Exchequer had cash balances of €27.5bn at year-end 2021. This was an increase of €10.1bn on the previous year-end. The end-2021 balance was higher than had been expected, due primarily to the lower than projected Exchequer Borrowing Requirement (EBR). The cash proceeds from long-term issuance (bonds, including non-competitive auctions, and private placements) totalled more than €21bn. Net State Savings inflows were €1.3bn, while other funding sources brought in €3.3bn, most of which was from the EU SURE Programme loans totalling €2.5bn.

This funding was applied to meet an EBR of €7.4bn, the redemption of the remaining UK bilateral loan totalling €0.5bn, as well as the purchase of €2bn nominal (€3.3bn cash price) of Floating Rate Bonds from the Central Bank of Ireland. There was also net short term paper outflows of €4.2bn.



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 – that is the National Debt before netting off cash and financial assets – is the primary component of General Government Debt (GGD). While the NTMA's debt management responsibilities relate to the National Debt, the focus of this section is on GGD given it is the more widely recognised measure of sovereign debt across the EU.

Composition of National Debt and General Government Debt¹ at End-2021

	€bn
Government Bonds	
<i>Fixed Rate Treasury</i>	147.1
<i>Floating Rate</i>	5.5
<i>Amortising</i>	0.4
<i>Inflation-Linked</i>	1.1
Total	154.1
EU Loans	40.9
SURE	2.5
Other Medium and Long-term Debt	5.2
State Savings Schemes*	19.6
Short-Term Paper	9.8
Borrowing from Ministerial Funds	5.1
Gross National Debt	237.2
Less Exchequer Cash	27.5
Less Other Financial Assets	1.7
Net National Debt	208.0
Gross National Debt	237.2
General Government Debt Adjustments	-1.3
General Government Debt	235.9

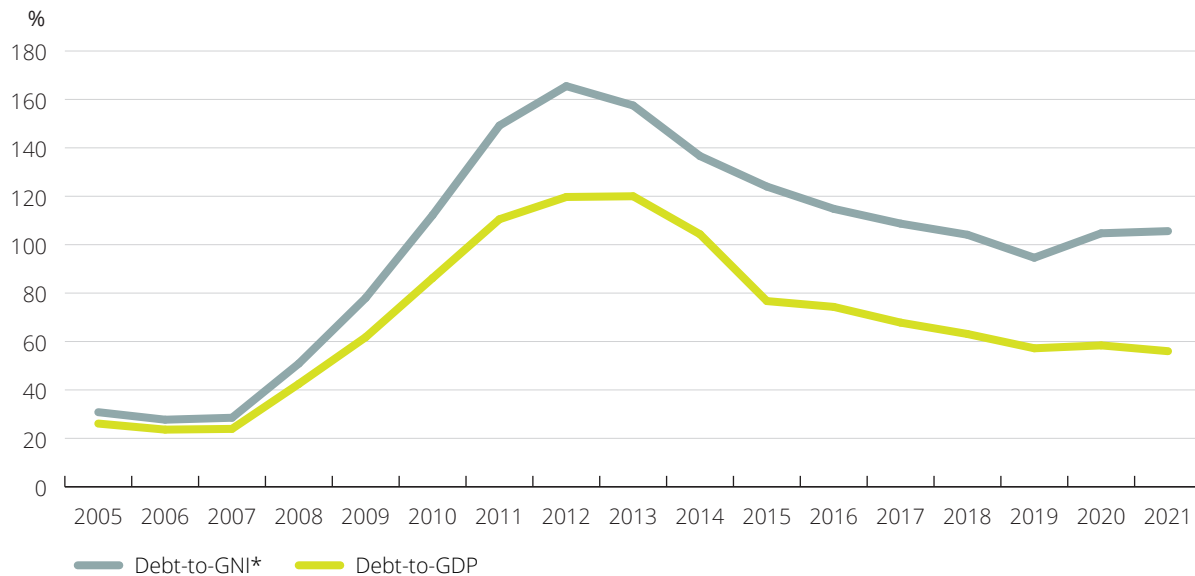
* State Savings Schemes also include Post Office Savings Bank (POSB) deposits. While not an explicit component of the National Debt, these funds are mainly lent to the Exchequer as a ways and means of funding short-term Exchequer requirements. Taking into account the POSB Deposits, total State Savings outstanding were €24.1bn at end-2021. Figures may not total due to rounding.

Source: NTMA and Central Statistics Office (CSO)

¹ General Government Debt (GGD) is a measure of the total gross consolidated debt of the State. It is the standard measure used for comparative purposes across the EU.

Funding and Debt Management (continued)

General Government Debt Ratios 2005-2021



Source: NTMA and CSO

At 56%, Ireland's GGD/GDP ratio at end-2021 was less than half its peak level of 120% at end-2012 and end-2013. Following the slight increase in the ratio in 2020, last year it reverted to the downward trajectory evident for much of the last decade. This was despite the absolute level of gross debt increasing by c. €18bn last year and by c. €32bn since end-2019.

This growth is largely attributable to the borrowing required to fund the deficits in the public finances brought on by the Government's counter-cyclical response to the COVID-19 pandemic.

While the numerator has increased sharply, the nominal GDP denominator has also shown strong growth, increasing by 13% in 2021. This is due in large part to the performance of the multinational sector which was largely unaffected by the pandemic - it is this sector which was largely responsible for the dramatic increase in GDP from 2015 onwards.

Ireland's General Government revenue has also proved remarkably resilient to the worst effects of the pandemic, growing by 17% in 2021 following a fall of 6% the previous year. Ireland's progressive income tax system and the buoyancy of corporate tax - aided by the multinational sector - have been notable features of the revenue system since the onset of the pandemic.

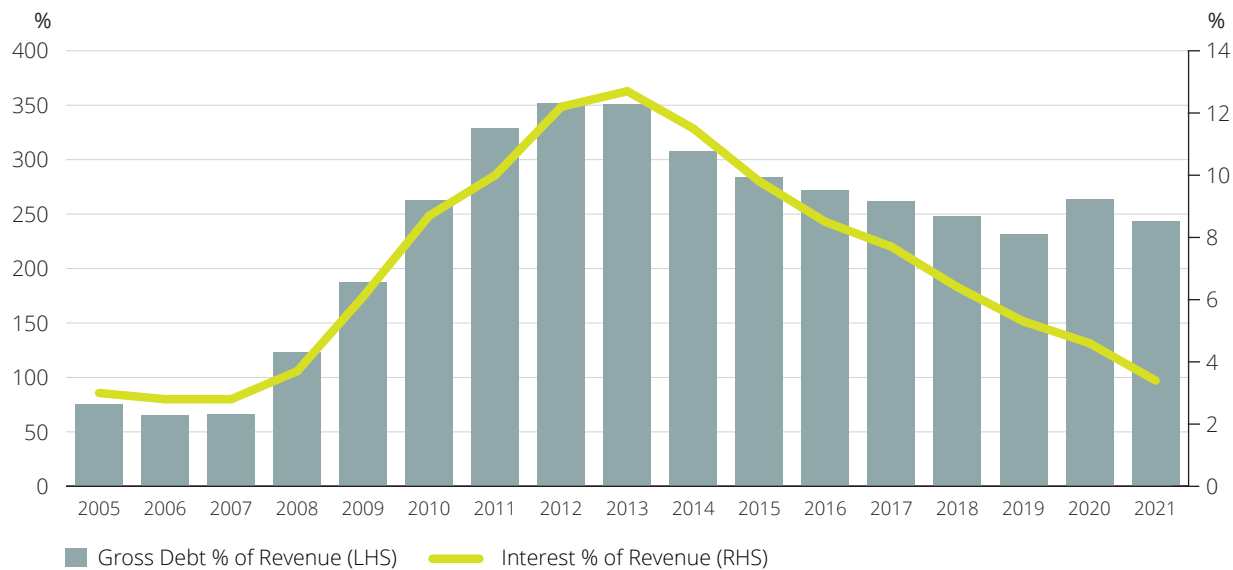
Of course, it is widely accepted that the debt to GDP ratio is a less reliable indicator of sustainability for Ireland. In that context, it is necessary to focus on other metrics to obtain a clearer picture of Ireland's debt burden.

One alternative metric is GGD as a percentage of Modified Gross National Income, or GNI*. This metric strips out the impact of certain multinationals' activities from GDP. GNI* is considered the best, although still an imperfect, guide to the size of Ireland's economy. Like the trend in the GGD/GDP ratio, the GGD/GNI* ratio had also declined sharply from a peak of 166% at end-2012 to 95% at end-2019. In 2020, that trend was reversed, and the ratio increased sharply to 105% at year-end. This reversal continued into 2021, with the ratio again increasing, albeit marginally, to reach 106% at year-end. This reflects the much more pronounced impact of the pandemic on the domestic economy.

Other important metrics looking at the burden of public debt include both debt and interest as a percentage of General Government revenue. At end-2021, the GGD/revenue ratio was at 243%, reducing twenty percentage points on the previous year end. While this is still above the end-2019 level of 232% it is far below the 2012 peak of 352%.

The General Government interest/revenue ratio continued its downward trend in 2021. It is discussed in more detail on page 20.

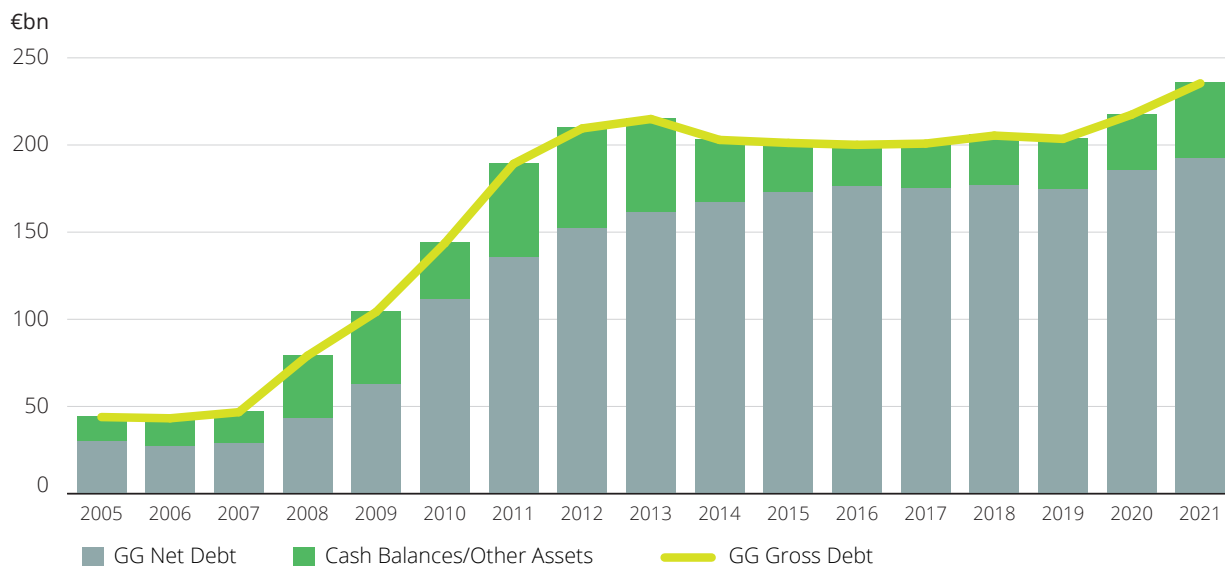
General Government Debt Metrics 2005-2021



Source: NTMA and CSO

GGD is a gross measure of debt. It does not allow for the netting off of cash balances and other financial assets. However, the CSO produces an estimate of General Government Net Debt. At end-2021, it stood at €193bn, giving General Government assets of some €43bn. The main asset netted off for the purpose of calculating Net Debt is the Exchequer cash balance; this was €27.5bn at end-2021. Other assets include 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 2005-2021



Source: NTMA and CSO

Funding and Debt Management (continued)

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.

Recent years have seen a sharp decline in the interest bill and that trend continued in 2021. This is despite gross debt remaining relatively stable at around €200bn for much of the last decade; before increasing over the last two years, largely because of the pandemic, to reach €236bn.

In 2021, General Government interest expenditure fell to €3.3bn, from €3.8bn in 2020. The interest bill is back to a level last seen in 2009 – despite debt more than doubling in that time – and is almost 60% below the 2013 peak of €7.8bn.

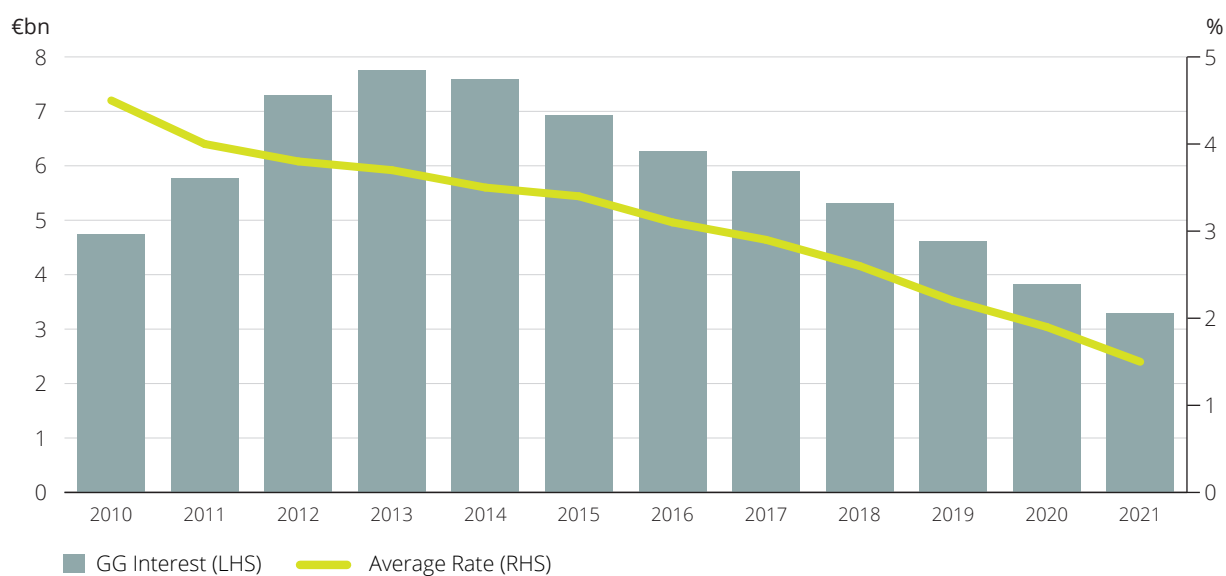
The compression of sovereign bond yields brought on by the ECB's QE Programmes is a significant factor behind the sharp reduction in the interest bill.

In 2021, a 10-year benchmark and a 20-year benchmark were added to the Irish bond curve with coupons of 0% and 0.55% respectively.

The average interest rate on the debt has also fallen significantly over the last decade, from 4% in 2011 to 1.5% in 2021.

In terms of resources required to fund the interest payments on public debt, the interest/General Government revenue ratio fell further in 2021, to 3.4% from 4.6% in 2020. By contrast, this ratio was almost 13% as recently as 2013.

General Government Interest and Average Rate 2010-2021



Source: NTMA and CSO

Irish Government Bond Market

Bond	Maturity Date	Outstanding End-2020 €m*	Outstanding End-2021 €m*	Change in 2021 €m*
0.8% Treasury Bond 2022	15 March 2022	6,788	6,788	0
0.0% Treasury Bond 2022	18 October 2022	5,040	5,040	0
3.9% Treasury Bond 2023	20 March 2023	7,006	7,006	0
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	11,189	11,639	450
0.2% Treasury Bond 2027	15 May 2027	7,248	7,251	3
0.9% Treasury Bond 2028	15 May 2028	8,097	8,458	361
1.1% Treasury Bond 2029	15 May 2029	9,538	10,228	690
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	6,101	6,848	747
0% Treasury Bond 2031	18 October 2031		9,193	9,193
1.3% Treasury Bond 2033	15 May 2033	4,625	5,085	460
0.4% Treasury Bond 2035	15 May 2035	4,816	5,366	550
1.7% Treasury Bond 2037	15 May 2037	5,763	6,137	374
0.55% Treasury Bond 2041	22 April 2041		4,133	4,133
2.0% Treasury Bond 2045	18 February 2045	8,596	9,707	1,111
1.5% Treasury Bond 2050	15 May 2050	5,863	7,125	1,262

*excluding repos.

Figures may not total due to rounding.

At end-2021, Ireland's benchmark bond curve consisted of 19 fixed rate bonds with a range of maturities extending to 2050. The total outstanding balance stood at just over €147bn.

The Irish Government bond market has a strong primary dealer group, mainly consisting of international investment banks with a global reach. The 14 primary dealers have exclusive access to Irish Government bond auctions and are required to quote continuous buy and sell prices in Irish benchmark bonds.

Maturity Profile

The maturity profile of Ireland's €202.7bn medium-long term (MLT) debt portfolio, as at end-2021, is shown in the graph on page 22. The only maturity of note in 2021 was the final €0.4bn tranche of the UK bilateral loan, which was repaid in March. Four of the six EU-IMF Programme loan facilities have now been fully repaid. While there were no benchmark bond maturities in 2021, there are two in 2022. The first – in March – was for €6.8bn of the 0.8% 2022 bond. The second in October is for €5bn of the 0% 2022 bond.

Funding and Debt Management (continued)

Maturity Profile of Ireland's Medium & Long-Term Debt at End-2021



Source: NTMA

Notes:

*Reflects NTMA repo activity.

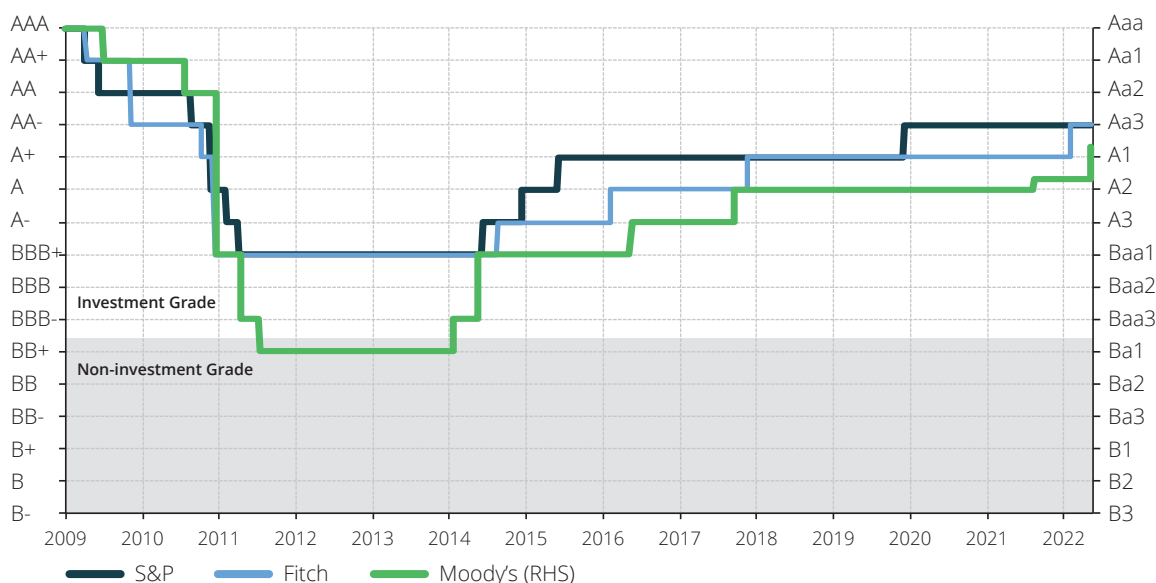
**EFSF loans reflect the maturity extensions agreed in June 2013.

***EFSM loans are also subject to extension, such that their original aggregated weighted average maturity will be a maximum of 19.5 years.

Credit Ratings

The ratings of the three main agencies remained stable during 2021. However Moody's upgraded the outlook on Ireland's rating to positive in August.

In early 2022, there were some positive movements in Ireland's credit ratings. In January, Fitch upgraded Ireland's rating by one notch to AA-, with a stable outlook. In May, Moody's also upgraded Ireland's rating by one notch, to A1, and maintained the positive outlook. The upgrade is the first from Moody's since 2017 and the new rating is the highest from Moody's since 2010. This was the first upgrade from Fitch since 2017 and returns Ireland to Fitch's AA rating category for the first time since 2010. The graph below charts Ireland's historical ratings for the three main rating agencies.



DBRS Morningstar and R&I also upgraded Ireland's rating, to AA (low) and AA- respectively in the early months of 2022.

In their assessments, the rating agencies noted the resilience of the Irish economy, the strong revenue performance, and the improved debt sustainability metrics.

Ireland's Sovereign Credit Ratings – as at May 2022

Rating Agency	Long-Term rating	Short-Term rating	Outlook/Trend
Standard & Poor's	AA-	A-1+	Stable
Moody's	A1	P-1	Positive
Fitch Ratings	AA-	F1+	Stable
DBRS Morningstar	AA (low)	R-1 (middle)	Stable
R&I	AA-	a-1+	Stable
KBRA	AA-	K1+	Stable
Scope Ratings	AA-	S-1+	Stable

Investor Relations

The NTMA's investor relations programme continued to evolve in 2021. The goal of this 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.

In light of the ongoing pandemic, the NTMA conducted all investor relations meetings in a virtual setting in 2021. "Virtual roadshows" took place with investors based in all major financial centres as well as secondary centres such as Spain, Portugal, Greece and Austria. The flexibility of virtual roadshows meant a larger number of meetings could take place, reaching new and current investors in the process.

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 Apple Sales International Limited and Apple Operations Europe Limited, 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 2021.

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 investment strategy for the Fund, can be found in the NTMA Annual Report 2020.