Ireland: Economic strength amid uncertain times

NTMA Investor Presentation
May 2025

Gníomhaireacht Bainistíochta an Chisteáin Náisiúnta
National Treasury Management Agency

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CONTENTS

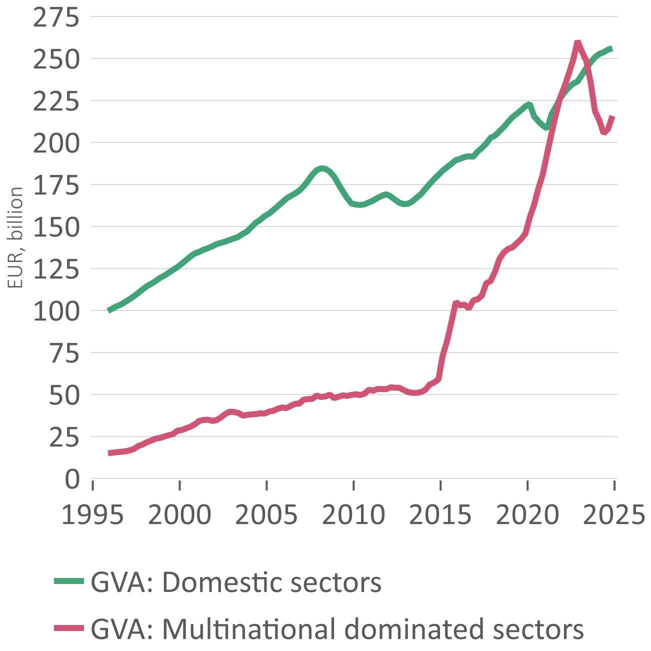
Summary

Economic position is resilient but global uncertainty could impact growth in Ireland

Real economic growth forecasted around 2-2.5%

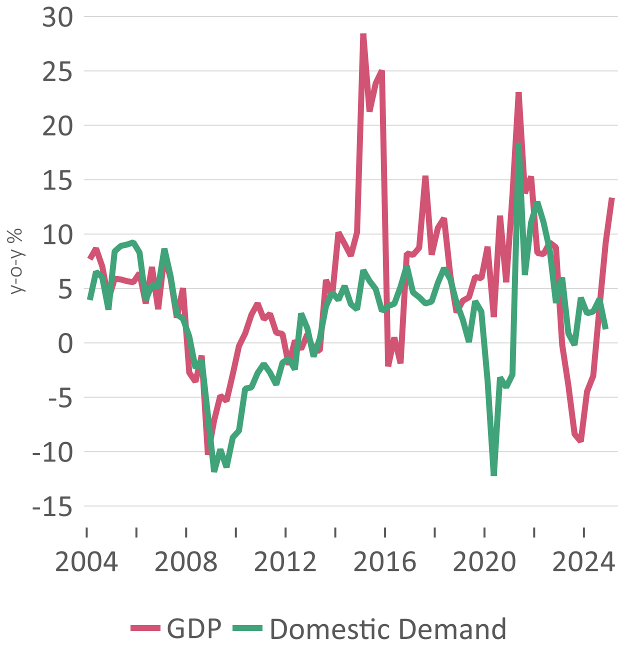
Full employment + fiscal policy + monetary policy will help dampen external headwinds

Value added from ICT & pharma strong in recent years but can distort figures



Source: CSO

MDD gives better picture of growth: Government forecasts of 2-2.5% for 2025



Source: CSO

Unemployment rate around 4% - full employment for two/three years

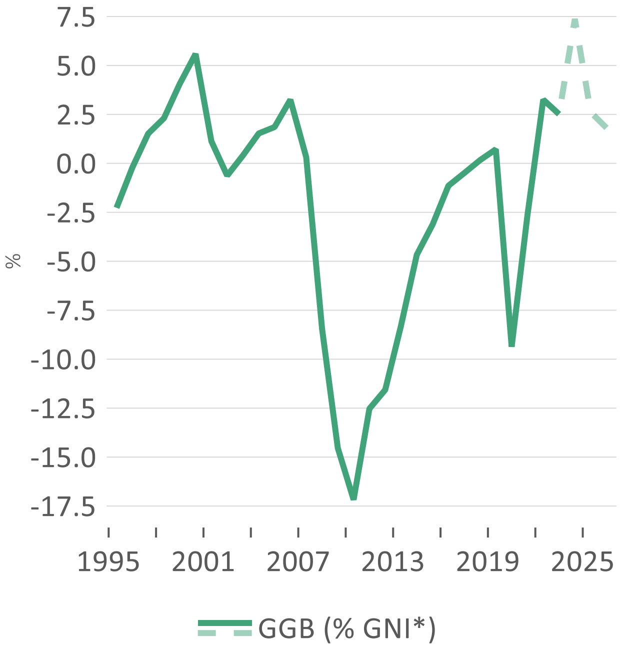
Source: CSO

* Modified Domestic Demand series accounts for multinational activity (technically modified final domestic demand (excl. inventories))
Note: RHS uses the standard unemployment rate during the Covid period. The Covid adjusted unemployment rate was as high as 31.5% at times between March 2020 and Feb 2022.

Government surplus expected in 2025

Debt metrics all improved in 2024; two long term funds–FIF/ICNF established with €10bn AUM

Forecasted 2025 GG surplus of 2.6% GNI*, similar to 2023 & 2024 (excl. CJEU)



Source: CSO

Debt metrics continue to trend in positive direction

Debt-to-GNI*

(65.3% 2025f; 70% in 2024)

Debt-to-GG Revenue^

(153% 2025f; 147% in 2024)

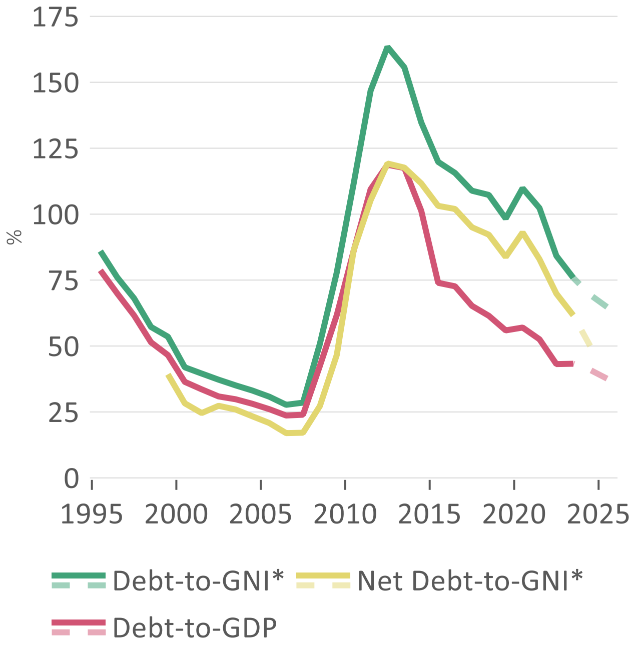
Average interest rate

(1.5% 2025f, 1.5% in 2024)

Debt-to-GDP^^

(38% 2025f; 41% in 2024)

Debt to GNI* falling with solid growth, surpluses and limited issuance



Source: CSO, Eurostat

^ GG revenue falls back in 2025 as CJEU proceeds in 2024 are one-off; ^^ Debt to GDP is not an appropriate metric to use for Ireland

External environment - heightened uncertainty

Potential downside risks to strong growth outlook

Growth

Slower global growth is a potential headwind. In short term, impact from tariff uncertainty comes into play.

Labour market strength in early 2025 underpins consumption. Healthy domestic balance sheets, lower inflation and easing policy likely to help also.

FDI Model

Risks surrounding geo-politics, deglobalisation, and corporate taxation are short/medium term concerns for a small open economy like Ireland. Especially given the linkages to the US.

Ireland being adaptive to global events is critical.

FIF/ICNF

Large surplus expected in 2025 (2.6% of GNI*) via strong tax receipts.

€10bn in new funds, after first transfers made. Intention is to save c. €6bn p.a. of tax receipts and partially alleviate future challenges.

NTMA funding range for 2025: €6bn to €10bn

€5.25bn issued so far; cash balance is elevated but expected to fall

Cash

Tax strength alongside Apple proceeds means Ireland in strong cash position.

The cash balance was €34bn at end 2024 but expected to fall through 2025

WAM

Weighted average maturity of debt one of longest in Europe.

NTMA issuance since start of 2022 of €25.25bn at WAM of 16.4 years and average interest rate of 2.46%.

AA

Ireland rated in the AA category with all major rating agencies.

Fitch and DBRS upgraded to AA in 2024 while S&P is at AA (positive). Moody's remains at Aa3 but with a positive outlook.

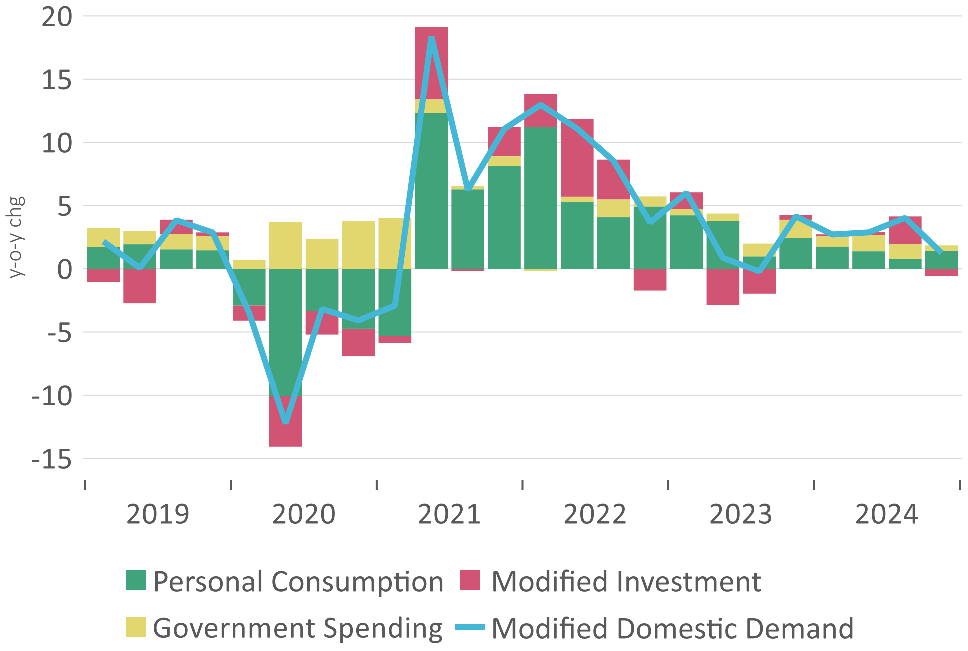
Macro

Economic growth in 2024 2.7% by MDD. Forecasts are for slower growth in 2025

Irish economic growth expected to continue in 2025

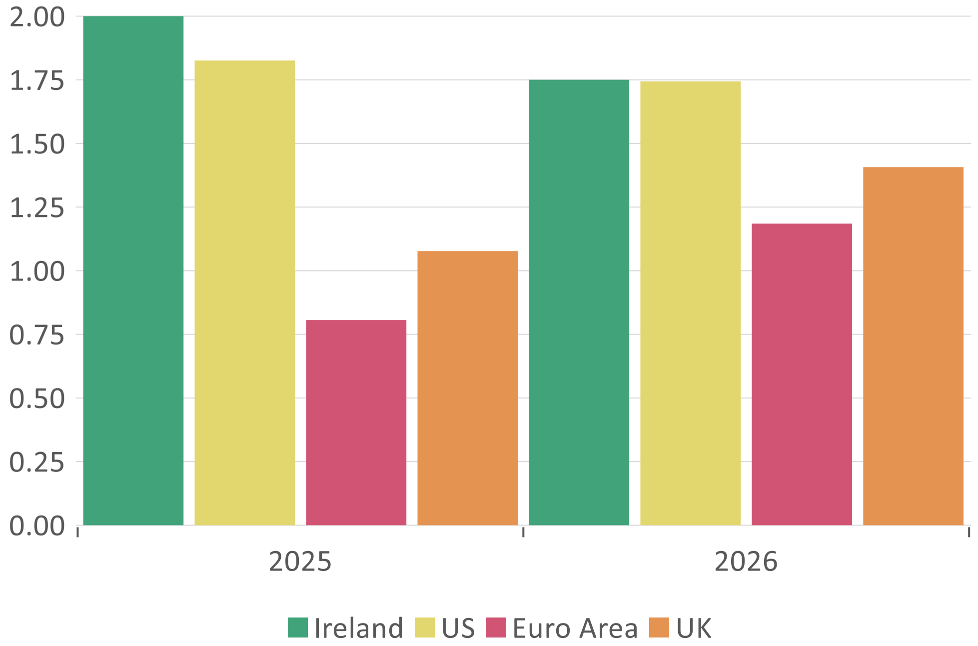
Global uncertainty may slow Irish growth

Modified Domestic Demand, our preferred measure, increased by 2.7% in 2024, with consumption growing by 2.3%



Source: CSO

Irish economic activity expected to see growth despite slowing global environment

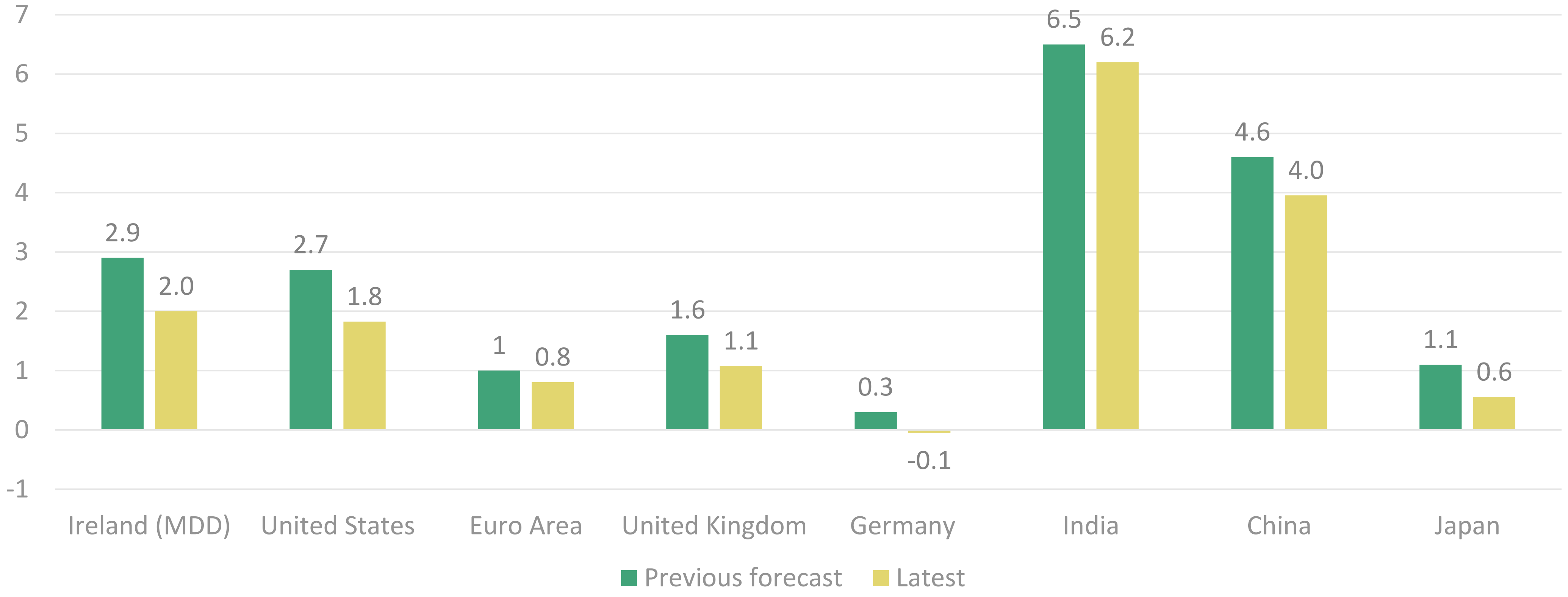


Source: IMF, CSO, Irish Department of Finance

Note: MDD for Ireland is modified for multinational activity by Ireland's Central Statistics Office (CSO). MDD = Consumption + Government (current) spending + Modified Investment. Seasonal adjustment mean contributions do not always add up to MDD growth rate.
* RHS chart uses MDD for Ireland (APR alternative growth scenario used) and GDP for all other countries.

Global growth forecasts for 2025 revised down

Impact may be outsized for Ireland versus others in Europe but still expecting 2% growth



Source: Ireland forecast is MDD forecasted by Department of Finance (Budget 2025 versus alternative scenario in APR 2025); Other countries compare the IMF WEO forecasts for Jan 2025 to the latest in April 2025

Overview: Ireland’s trading partners

2023 Exports amount to €600bn per annum; €200bn goods; €400bn services

Ireland main trade flows: Goods exports to EU and US, Goods & Services export to EU, Service imports from US

% of	**Goods**		**Services**		**Total**	
total	**2023**		**2023**		**2023**	
	Exports	Imports	Exports	Imports	Exports	Imports
US	28	16	13	48	18	40
UK	11	19	12	8	12	11
EU-27	41	35	30	16	34	21
China	5	8	3	1	3	3

Ireland’s main trade flows

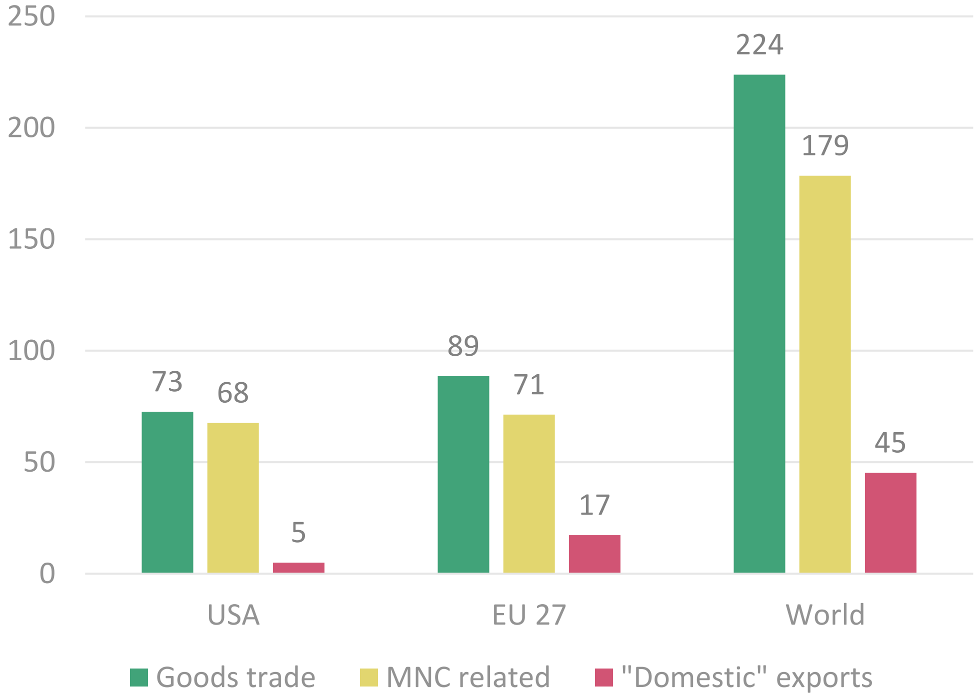
- Service imports from US of Intellectual Property/R&D assets
- Multinational then uses those assets and employment in Ireland to produce goods & services to be sold on.
- This leads to goods exports all over the world. EU and US most important. Pharma is main sector.
- Also leads to services exports to EU and UK. This is tech firms selling into European markets.
- The result of exports is significant income flowing back into Ireland (via profits and wages). This is then spent on goods imports from EU/UK.
- “Domestic” exports more focused on food and agri products.

Note: Figures exclude contract manufacturing impact on exports. Data is based on external trade data from CSO rather than national account data on exports/imports

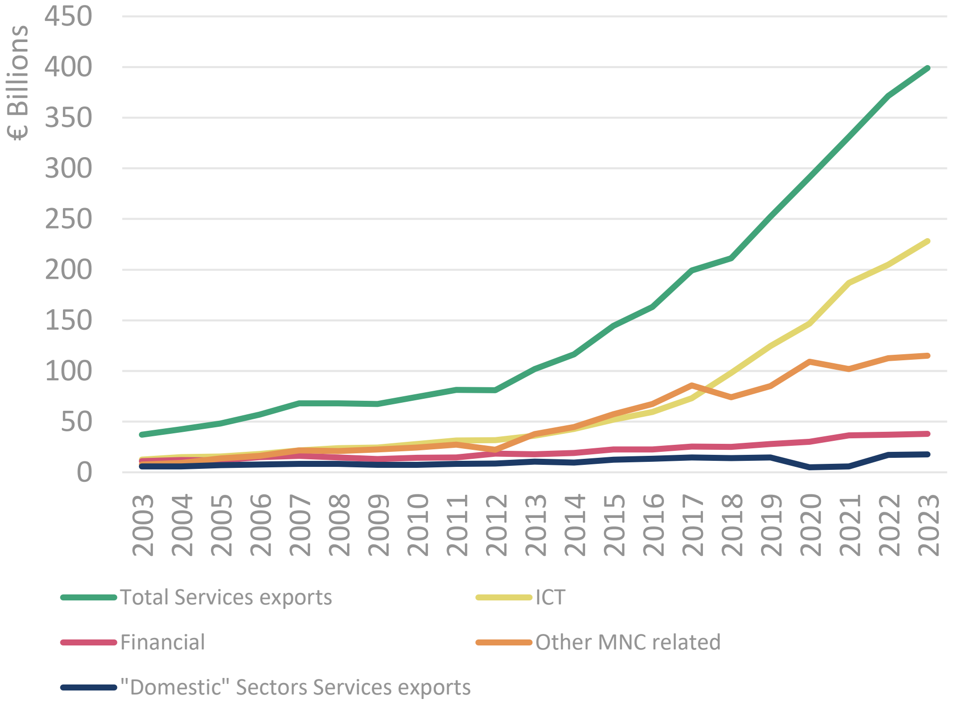
Exports by goods and services

Multinational sectors dominate Irish exports

Goods exports – USA is key exports sector for MNCs and domestic sector



Services exports are dominated by ICT, Finance and IP/R&D/royalties; ICT exports > than all goods exports

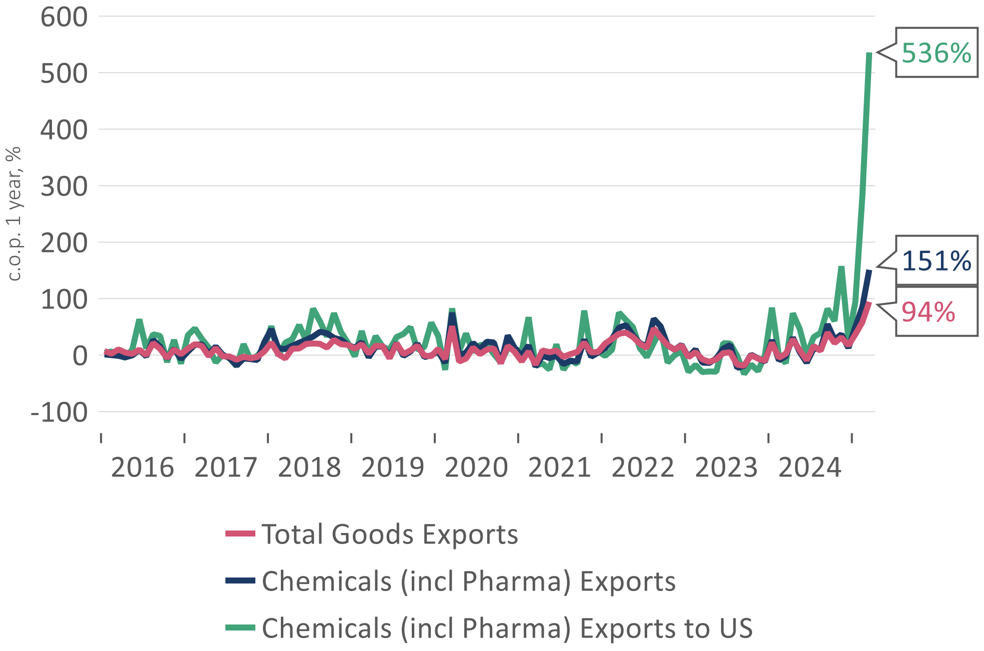


Source: CSO. Goods balance includes 2024 data, services data up to 2023

Clear signs of frontloading of exports in 2025

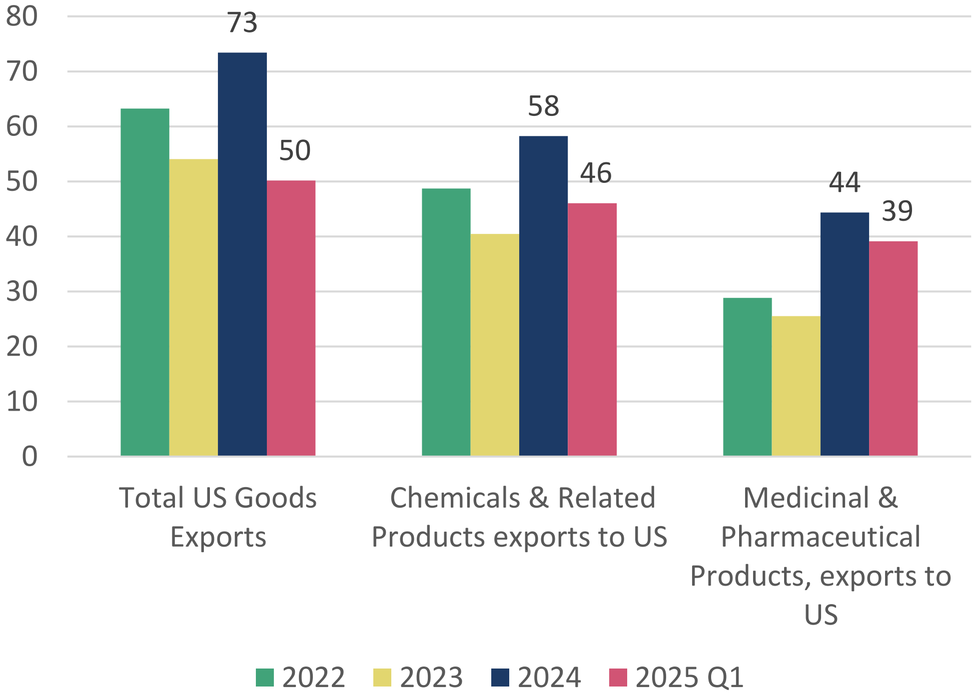
Q1 data show exceptional y-o-y growth

Total goods exports shot up at beginning of year in large part due to pharma exports to the US



Source: CSO

In Q1, Medicinal & Pharma exports to US were equivalent to 88% of last year's figure



Source: CSO

Potential for tariffs to impact Irish economy

Cyclical impacts are likely manageable

- ESRI and Department of Finance estimate the short-term impact for Ireland as negative but of a size that would be relatively manageable.
- However the Annual Progress Report 2025 acknowledges that;
    - the external environment is in a state of extreme flux;
    - it is difficult to project how demand in Ireland's main export markets will evolve;
    - the fragmentation of the global economy could impact supply chains/ industrial policies;
    - potential implications for inward investment;
    - thus the longer-term impact may be larger than econometric models can appropriately estimate.

ESRI/DOF paper models the impacts of various tariff changes:
One scenario - 10% tariffs imposed by US, reciprocated by EU

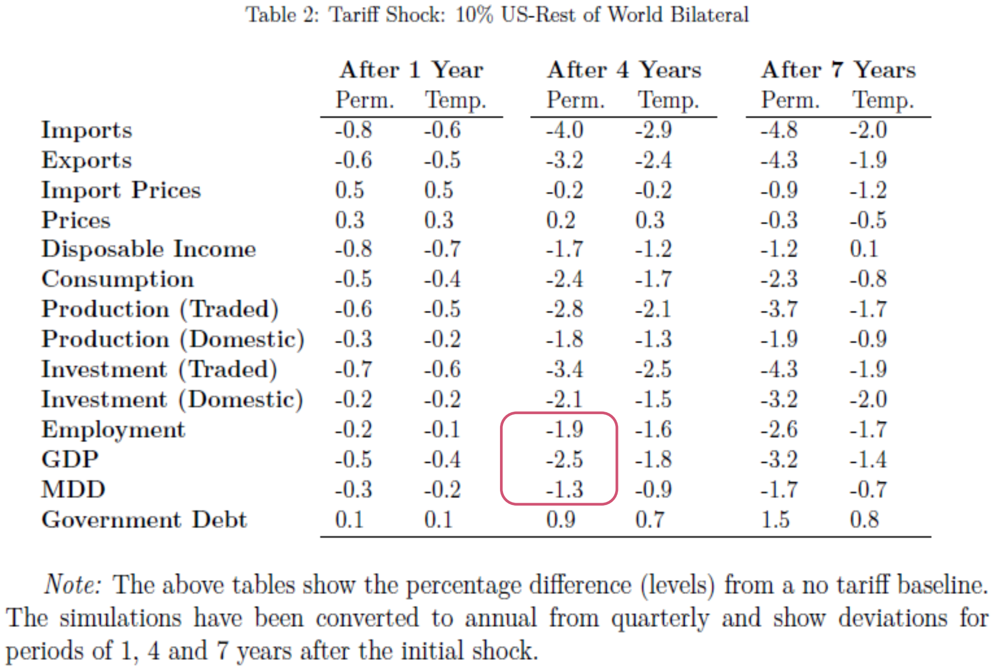


Table 2: Tariff Shock: 10% US-Rest of World Bilateral

	After 1 Year		After 4 Years		After 7 Years	
	Perm.	Temp.	Perm.	Temp.	Perm.	Temp.
Imports	-0.8	-0.6	-4.0	-2.9	-4.8	-2.0
Exports	-0.6	-0.5	-3.2	-2.4	-4.3	-1.9
Import Prices	0.5	0.5	-0.2	-0.2	-0.9	-1.2
Prices	0.3	0.3	0.2	0.3	-0.3	-0.5
Disposable Income	-0.8	-0.7	-1.7	-1.2	-1.2	0.1
Consumption	-0.5	-0.4	-2.4	-1.7	-2.3	-0.8
Production (Traded)	-0.6	-0.5	-2.8	-2.1	-3.7	-1.7
Production (Domestic)	-0.3	-0.2	-1.8	-1.3	-1.9	-0.9
Investment (Traded)	-0.7	-0.6	-3.4	-2.5	-4.3	-1.9
Investment (Domestic)	-0.2	-0.2	-2.1	-1.5	-3.2	-2.0
Employment	-0.2	-0.1	-1.9	-1.6	-2.6	-1.7
GDP	-0.5	-0.4	-2.5	-1.8	-3.2	-1.4
MDD	-0.3	-0.2	-1.3	-0.9	-1.7	-0.7
Government Debt	0.1	0.1	0.9	0.7	1.5	0.8

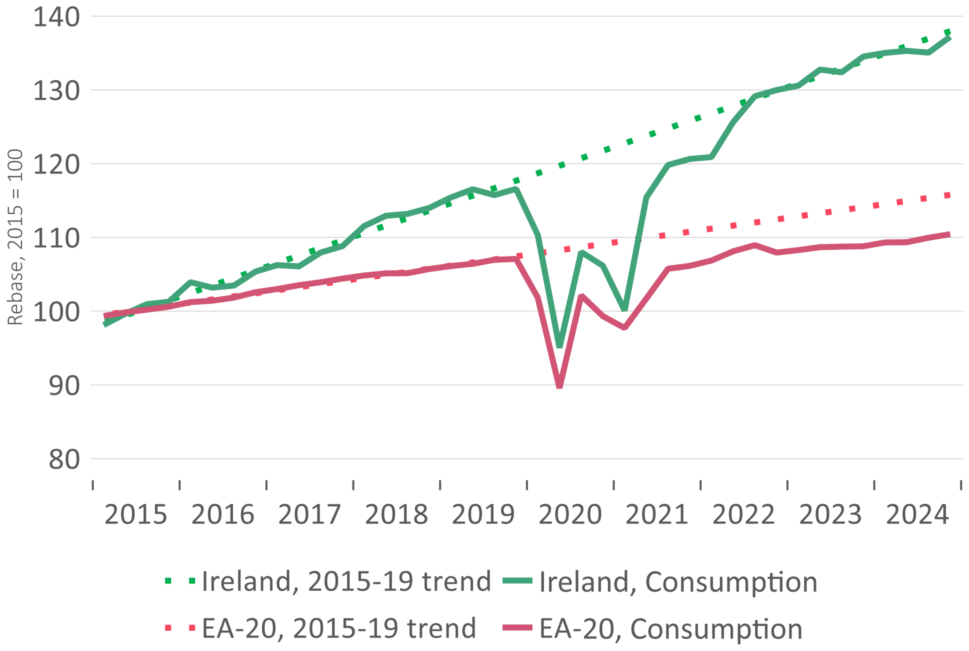
Note: The above tables show the percentage difference (levels) from a no tariff baseline. The simulations have been converted to annual from quarterly and show deviations for periods of 1, 4 and 7 years after the initial shock.

Source: Annual Progress Report 2025; ESRI https://www.esri.ie/system/files/publications/WP798_1.pdf

Real spending main driver of economy

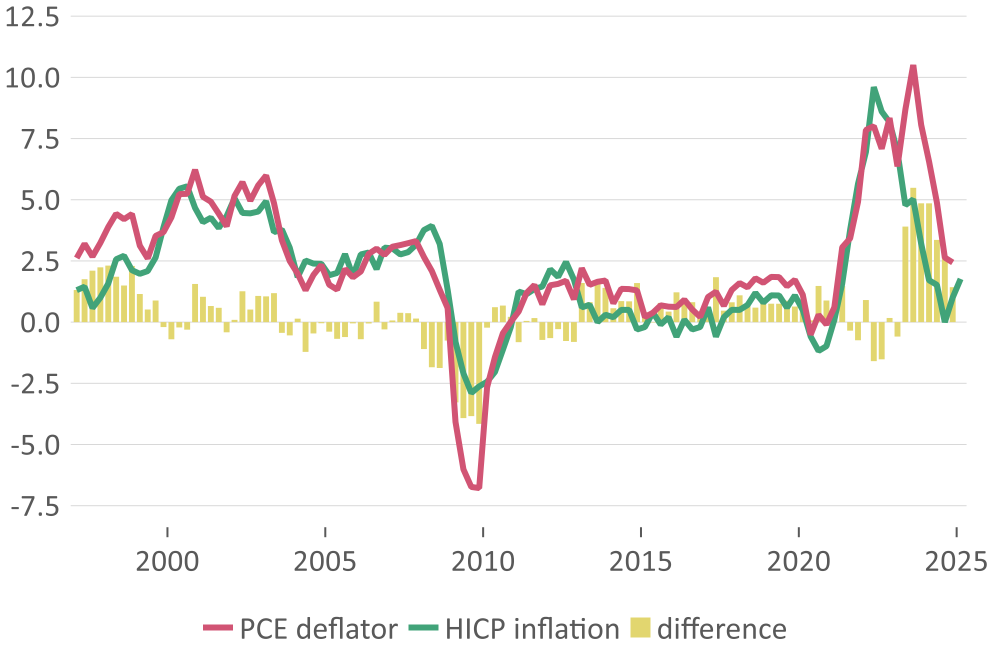
Consumption strong over last several years

Real personal consumption back at pre-pandemic trend. Performance outstrips euro area average



Source: CSO, Eurostat

Gap between PCE deflator & HICP apparent in recent data: real consumption may be higher than estimated at present

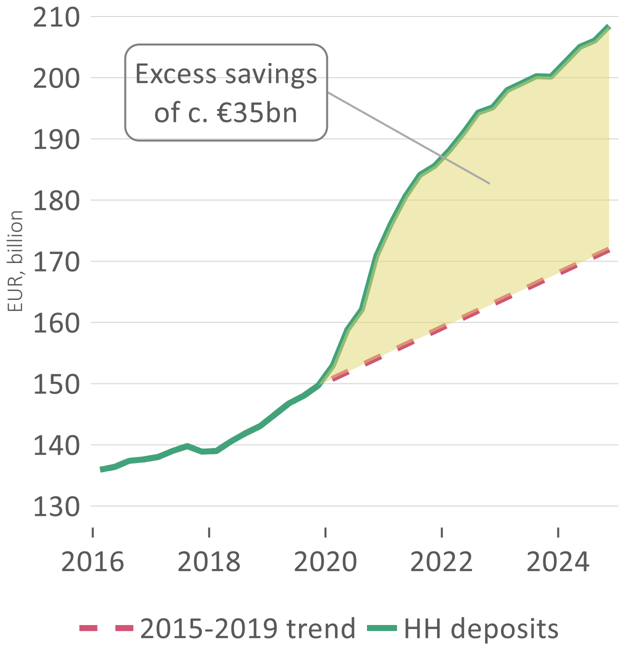


Source: CSO, Eurostat

Basis for household consumption growth

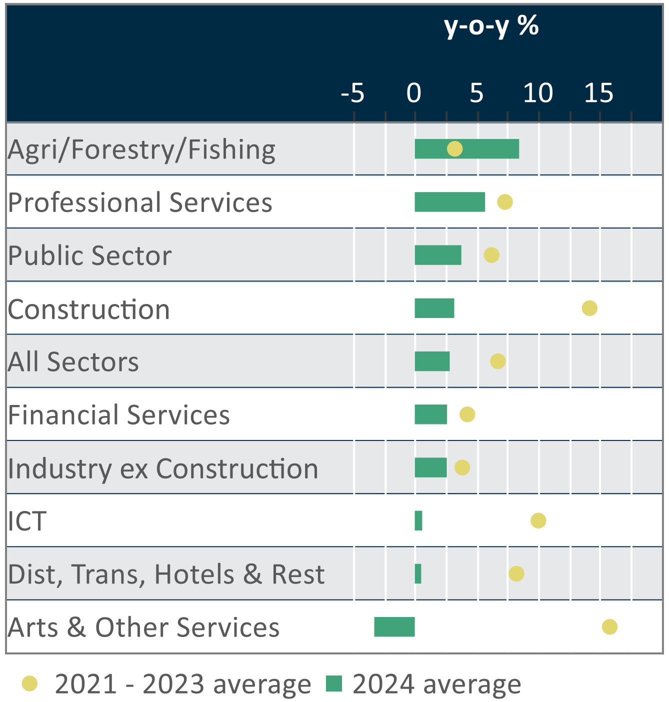
Spending comes from savings, incomes or borrowing; Ireland in good shape across all three

Large excess savings: pandemic savings remain in HH deposit. accounts



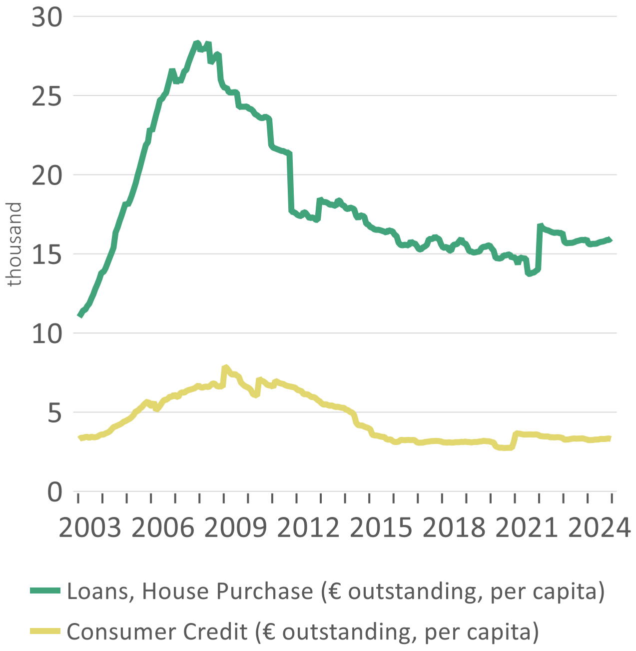
Source: Central Bank of Ireland, CSO

Income growth: Real compensation of employee growth still healthy



Source: CSO

Borrowing: deleveraged position means current spending growth isn't debt fuelled



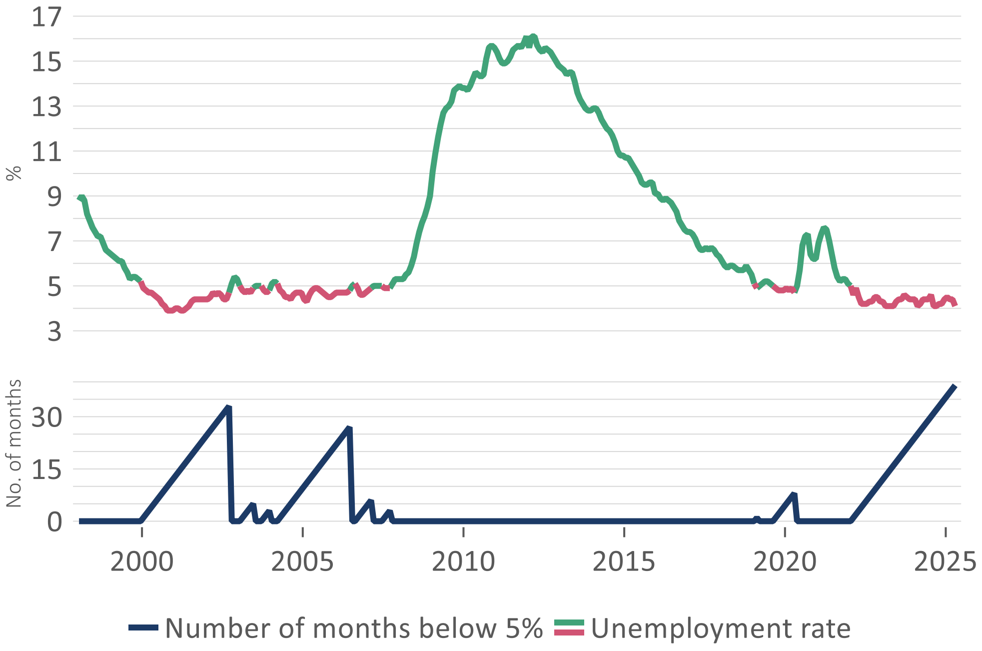
Source: Central Bank of Ireland, CSO

Source: CSO, Central Bank of Ireland

Labour market remains strong

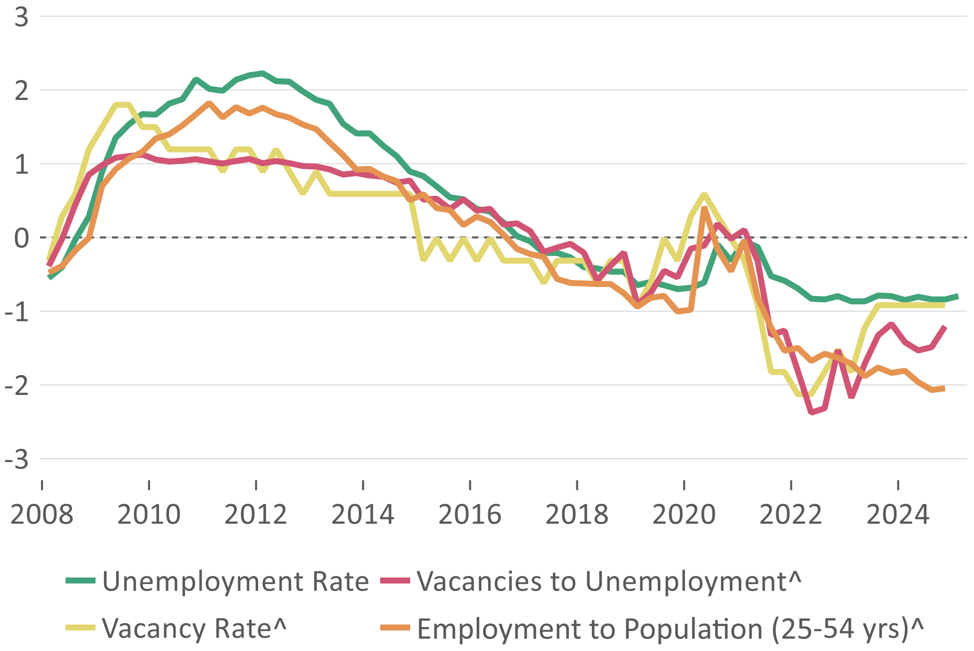
Unemployment rate low despite measurement volatility

Unemployment rate at 4.1% in April – has been below 5% for three years



Source: CSO

Labour market indicators suggest continued tightness, although some easing in vacancies in recent quarters



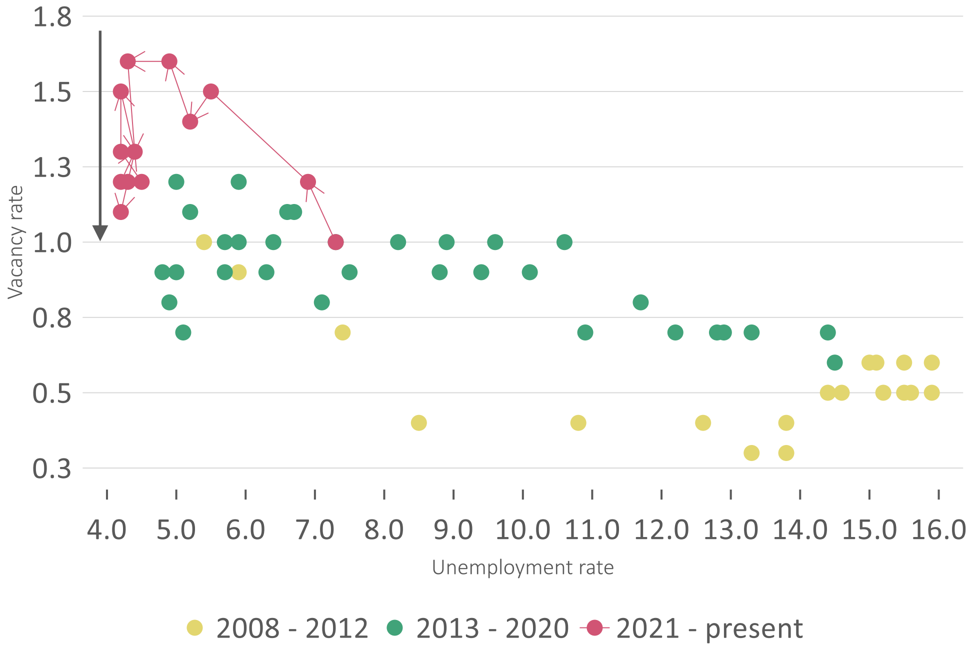
Source: CSO, Eurostat

Note: LHS uses the standard unemployment rate during the Covid period and red indicates when below 5%. The Covid adjusted unemployment rate reached a peak of 31.5% between March 2020 and Feb 2022. RHS chart shows standardised (Z-score) indicators; series denoted with ^ are inverted.

Labour market tightness has eased

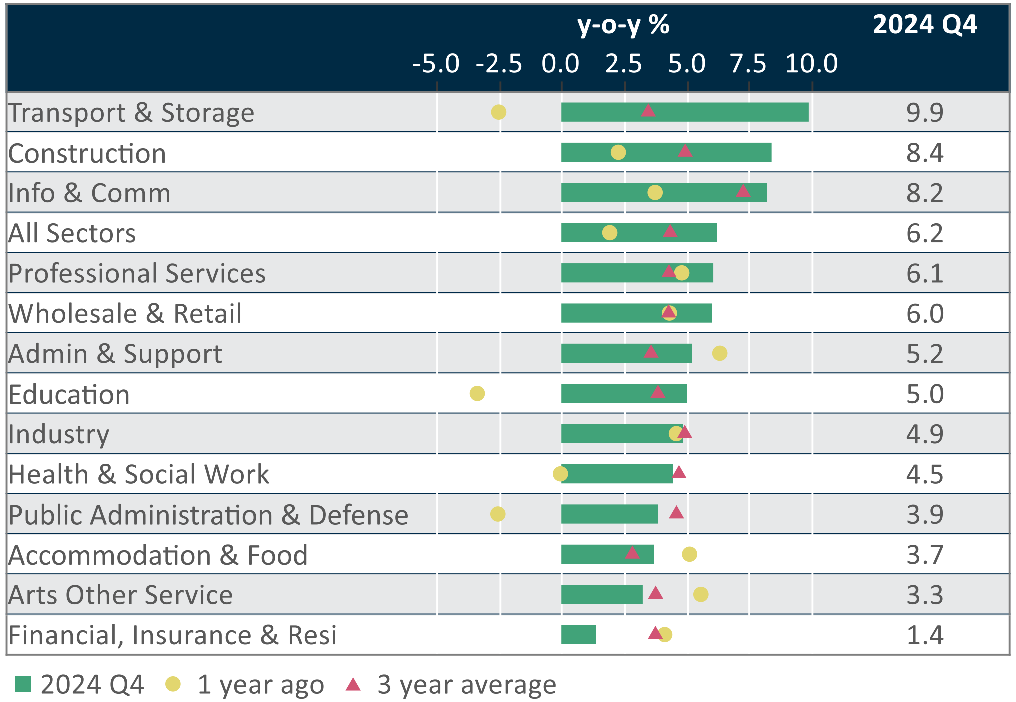
Wages are outstripping inflation currently

Beveridge curve suggests a tight labour market that has been loosening in recent months



Source: Eurostat, CSO

Latest wage data showing real wage growth has returned as inflation has been stymied



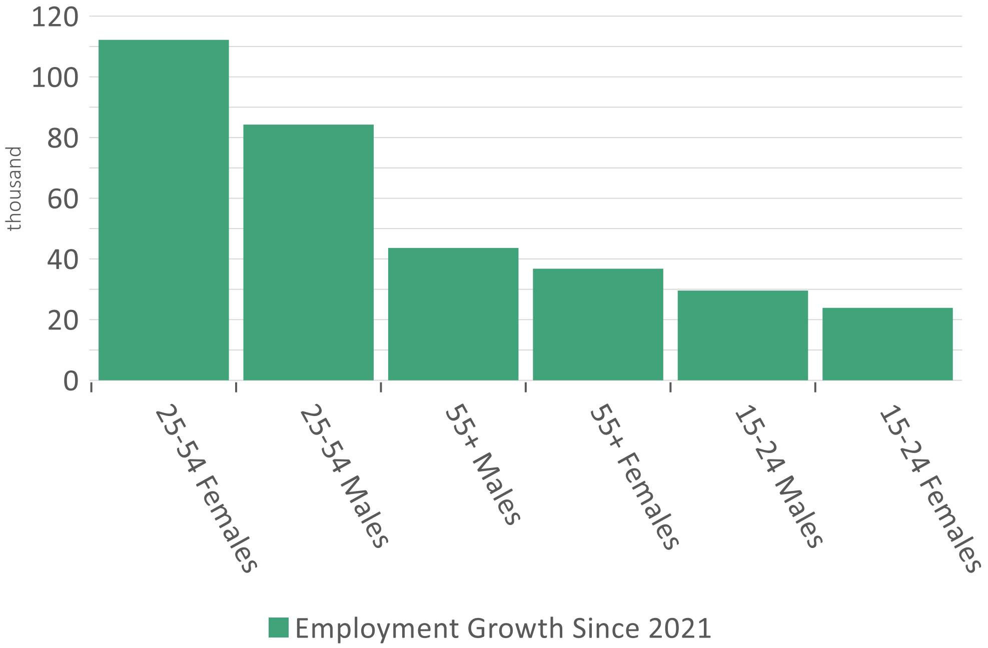
	2024 Q4
Transport & Storage	9.9
Construction	8.4
Info & Comm	8.2
All Sectors	6.2
Professional Services	6.1
Wholesale & Retail	6.0
Admin & Support	5.2
Education	5.0
Industry	4.9
Health & Social Work	4.5
Public Administration & Defense	3.9
Accommodation & Food	3.7
Arts Other Service	3.3
Financial, Insurance & Resi	1.4

Source: CSO

Employment growth broad-based

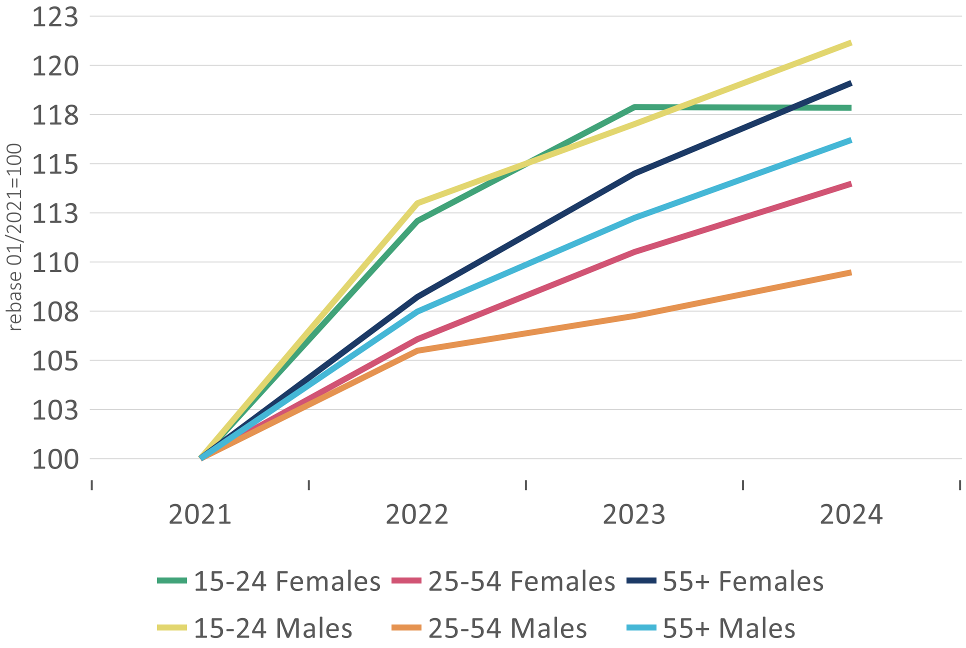
Participation rates up across the board

“Prime age” employees comprise the bulk of jobs created in Ireland since 2021



Source: CSO

Employment up by 14% since 2021 with notable growth rates in younger and older age brackets

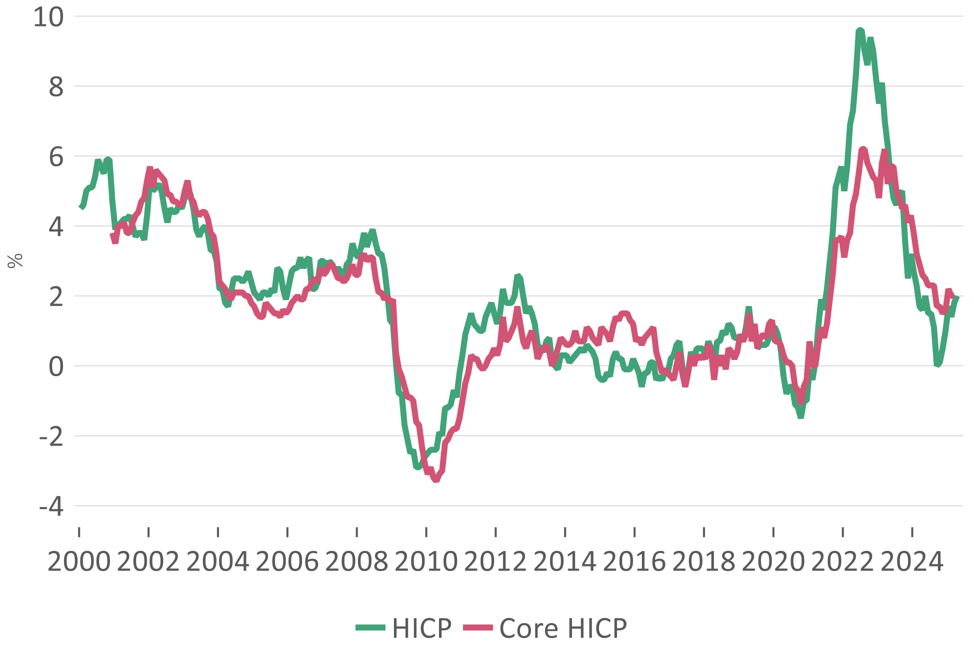


Source: CSO

Harmonised inflation at 2.0% in April

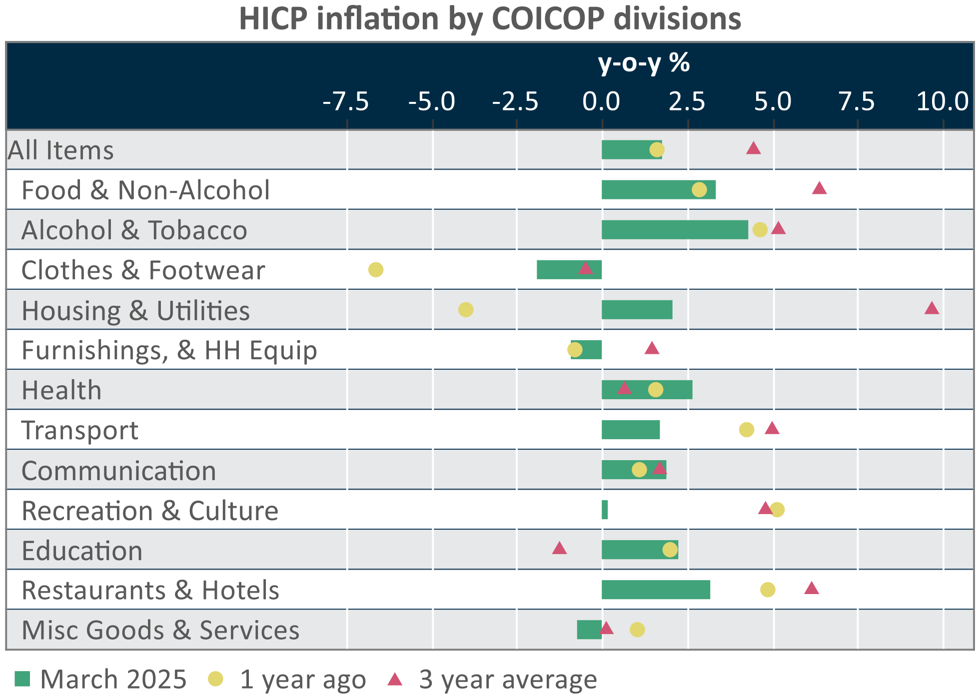
Disinflation trend ran ahead of EA average - recent prints close to target

Headline inflation reverting back up to 2% in time. Core inflation at 2.0%



Source: CSO, Eurostat

Disinflation broad-based with energy base effects evident in utilities and transport

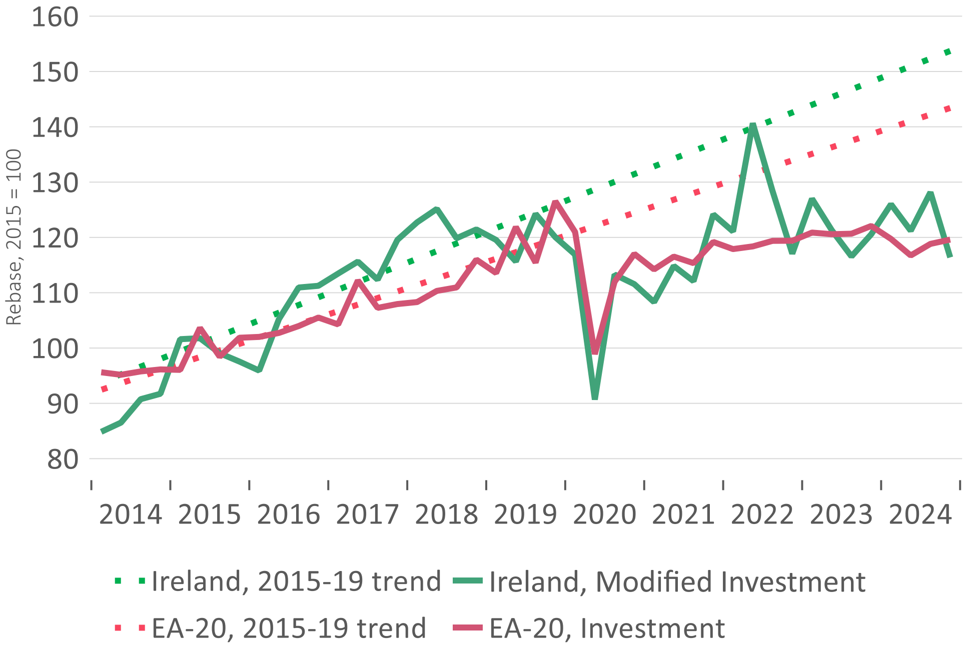


Source: CSO

Investment weakness in recent years

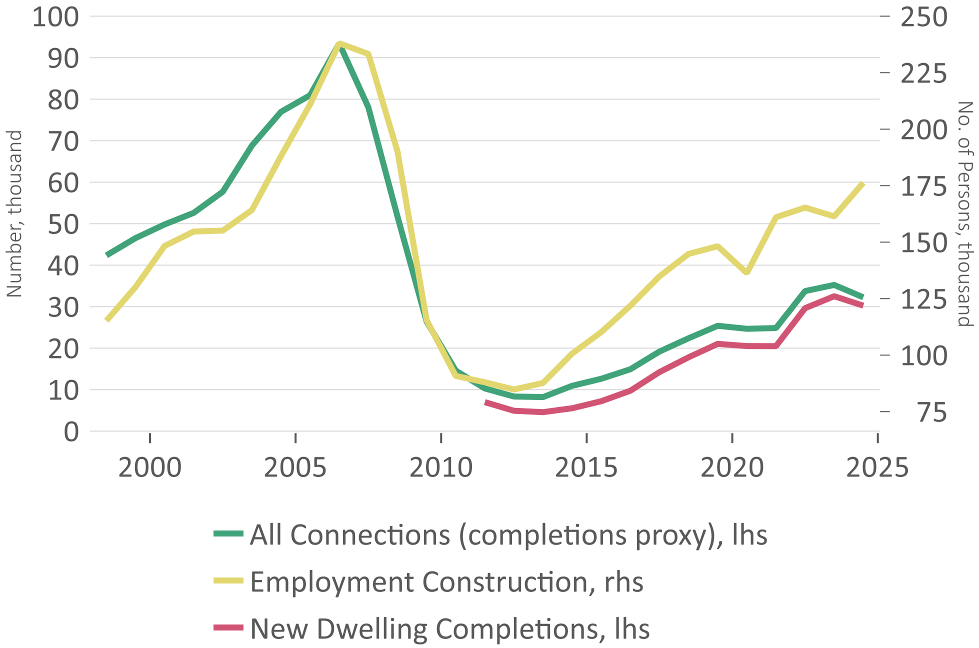
Interest rate environment has slowed investment, though 2024 better than 2023

Modified Investment up 2.2% in 2024 but there is weakness versus pre-pandemic trends



Source: CSO, Eurostat

In housing, productivity an issue as increased employment is not leading to same increase in completions



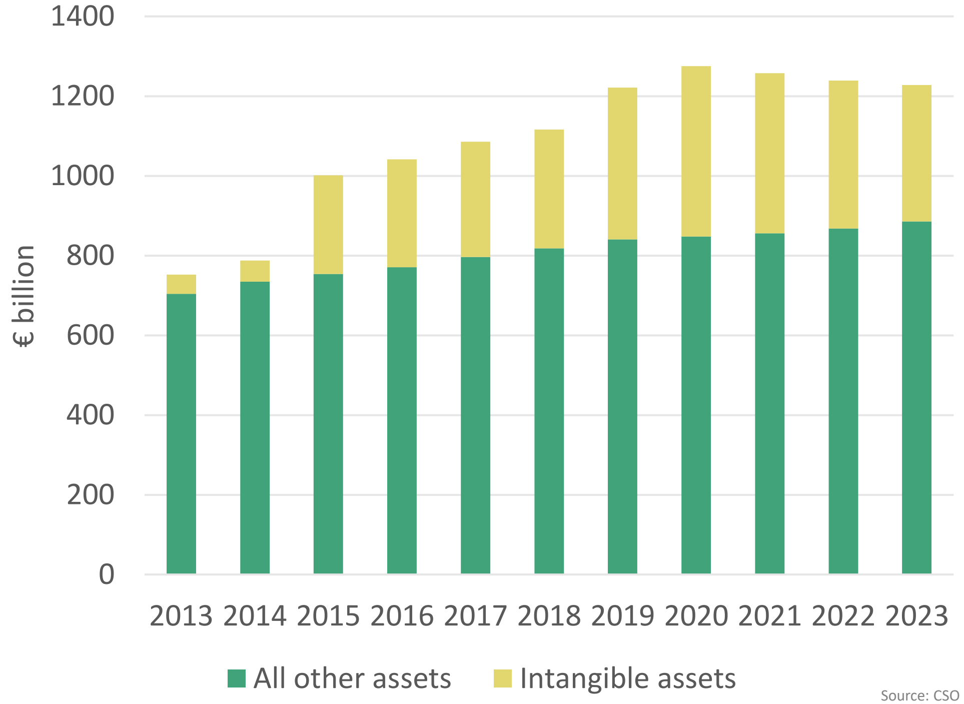
Source: CSO

Note: Ireland's metric is modified investment, which strips out multinational activity.

Continued need for infrastructure investment

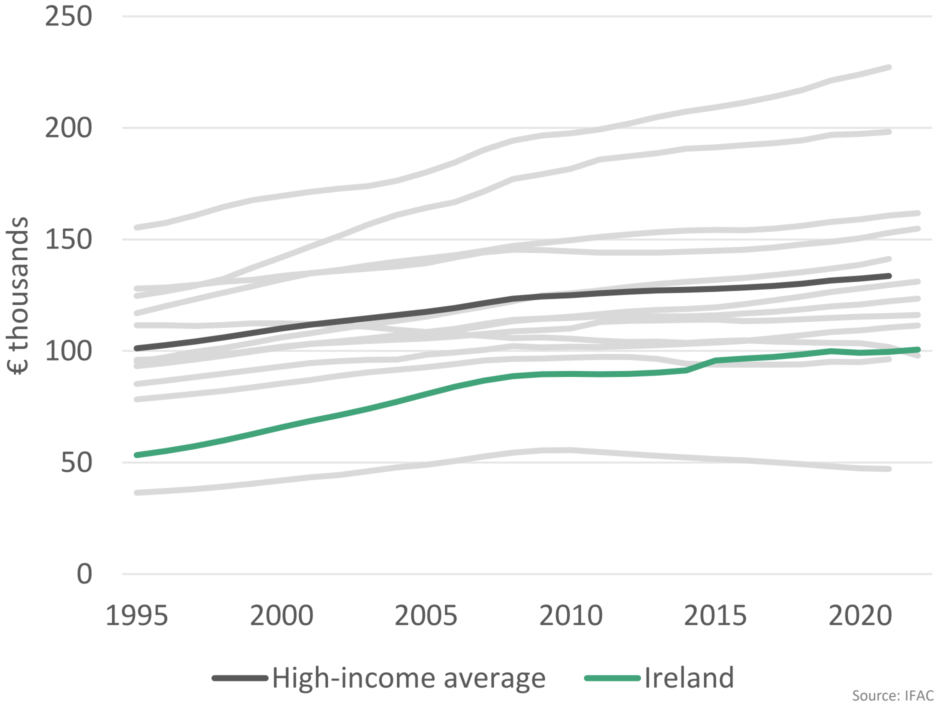
Physical capital stock in Ireland has not met the demand for infrastructure; below high-income average

The proportion of fixed assets that are intangible increased from 6.5% in 2013 to a peak of 33.5% in 2020



Source: CSO

Real net capital stock per capita below average for European high-income countries (after accounting for multinational distortions)



Source: IFAC

Note: Intangible fixed assets include computer software, R&D, works of art and mineral exploration. High income countries include Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Luxembourg, Netherlands, Norway and Sweden.

Uncertainty surrounding OECD's BEPS process

Pillar Two implemented in EU in 2024, US administration withdrawal means path is unclear

Pillar One: Proposal to re-allocate taxing rights on non-routine profits

- The first pillar seeks to address taxing rights. It reallocates 25% of MNE's excess profit* from jurisdictions where companies reside to the markets where user/consumers are based.
- This is to keep pace with digitalisation of the economy where sales can take place without taxable presence in market jurisdiction.
- Pillar 1 will reduce Ireland's corporation tax base.
- Ireland has always been fully supportive of Pillar One despite the implied cost to the Exchequer.
- Pillar 1 may not materialise with several countries struggling to agree, the US withdrawal adds further uncertainty. If Pillar 1 was stalled, unilateral tax reforms by countries may be the result.

Pillar Two: 15% minimum effective global tax rate

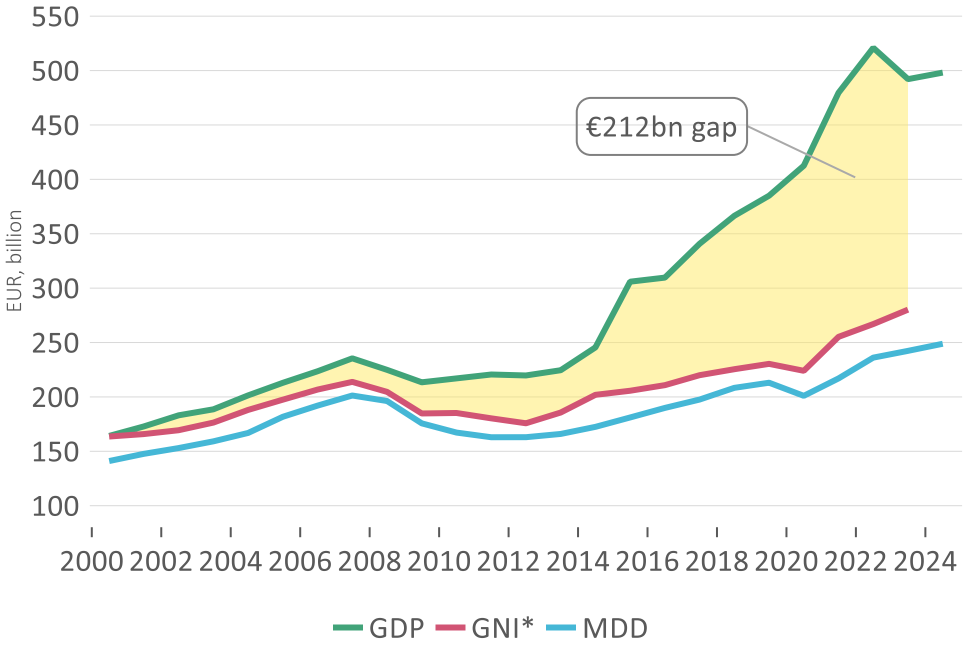
- Countries will introduce a minimum effective tax rate with the aim of reducing incentives to shift profits.
- Where income is not taxed to the minimum level, there will be a 'top-up' to achieve the minimum rate of tax.
- The EU have agreed a directive to implement the 15% rate in 2024. The impact on tax will not be seen until 2026, however.
- US administration has raised issues about the Undertaxed Profits Rule amid their withdrawal from process.
- Ireland's rate will remain one of the lowest in EU and will continue to be competitive. The R&D tax credit enhanced in Budget 2024 to maintain net benefit for businesses.
- Ireland can lean on other positives; educated and young workforce, English speaking, EU access, and ease of doing business.

* Excess profit is defined as a group profit in excess of 10% of its revenue

Real GDP grew by 1.2% in 2024, but level still below 2022

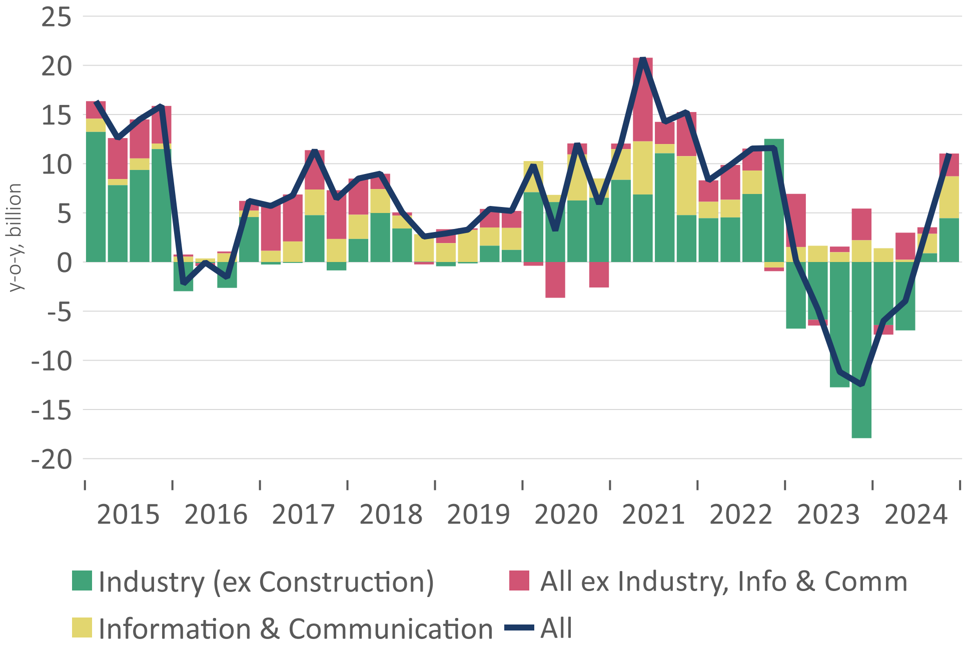
GDP isn't a reliable metric for Ireland, sharp drop recently due to Industry sector

Real GDP declined in 2023 and grew modestly in 2024 while measures that strip out MNE activity continued to grow



Source: CSO

Real GVA rebounded in H2 2024 largely due to pick-up in Industry and Information and Communication

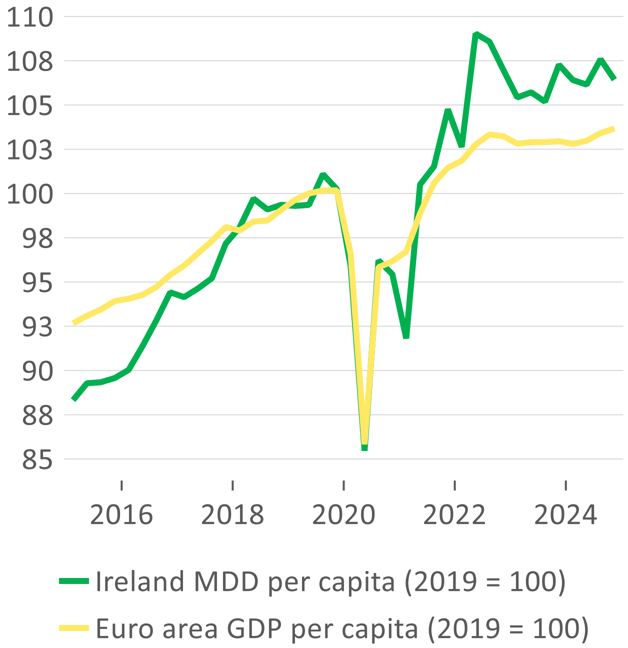


Source: CSO

Ireland vs Euro Area performance

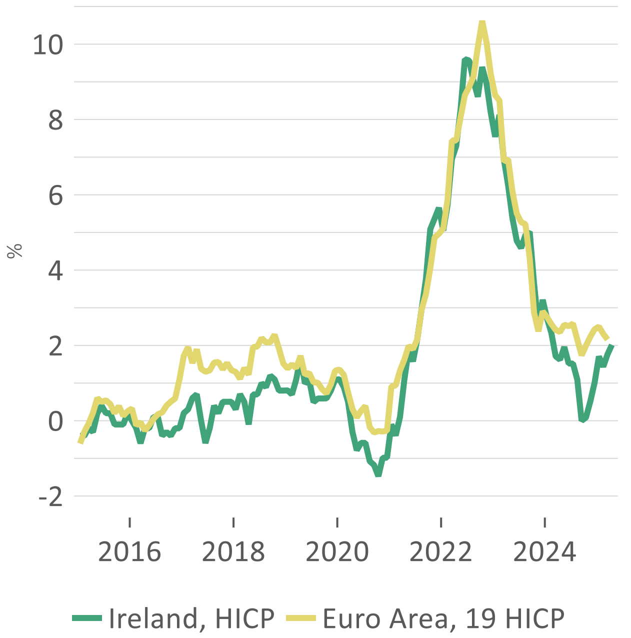
Greater growth in Ireland with a similar inflation path aided by labour force

Ireland has grown on a higher path post Covid than EA average



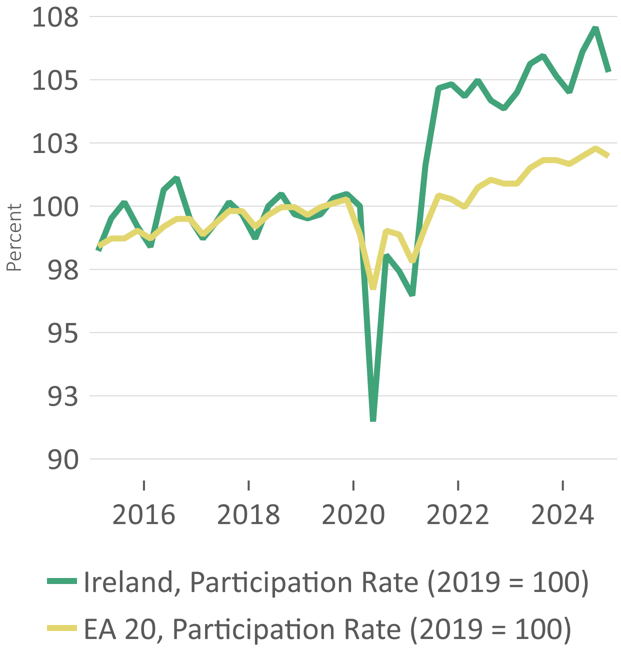
Source: CSO, Eurostat, ECB

Inflation in Ireland similar but below Euro Area HICP



Source: CSO, Eurostat, ECB

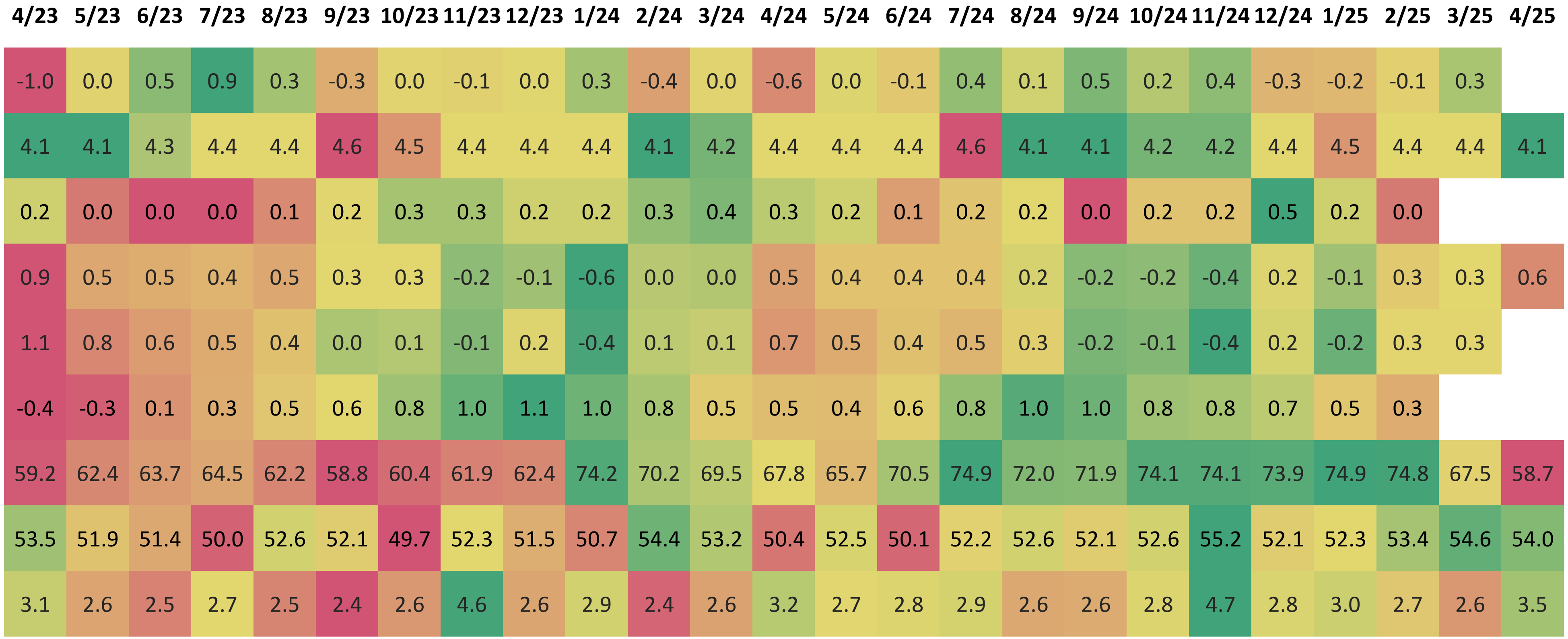
Increased labour force, especially female p. rate driven growth with less inflation



Source: CSO, Eurostat, ECB

High frequency data mixed but not slowing

Consumer confidence has been hit but PMI and unemployment giving positive signals



	4/23	5/23	6/23	7/23	8/23	9/23	10/23	11/23	12/23	1/24	2/24	3/24	4/24	5/24	6/24	7/24	8/24	9/24	10/24	11/24	12/24	1/25	2/25	3/25	4/25
Retail sales (ex motor)	-1.0	0.0	0.5	0.9	0.3	-0.3	0.0	-0.1	0.0	0.3	-0.4	0.0	-0.6	0.0	-0.1	0.4	0.1	0.5	0.2	0.4	-0.3	-0.2	-0.1	0.3	
Unemployment rate	4.1	4.1	4.3	4.4	4.4	4.6	4.5	4.4	4.4	4.4	4.1	4.2	4.4	4.4	4.4	4.6	4.1	4.1	4.2	4.2	4.4	4.5	4.4	4.4	4.1
Payroll employees	0.2	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.2	0.2	0.3	0.4	0.3	0.2	0.1	0.2	0.2	0.0	0.2	0.2	0.5	0.2	0.0		
Headline HICP	0.9	0.5	0.5	0.4	0.5	0.3	0.3	-0.2	-0.1	-0.6	0.0	0.0	0.5	0.4	0.4	0.4	0.2	-0.2	-0.2	-0.4	0.2	-0.1	0.3	0.3	0.6
Core HICP	1.1	0.8	0.6	0.5	0.4	0.0	0.1	-0.1	0.2	-0.4	0.1	0.1	0.7	0.5	0.4	0.5	0.3	-0.2	-0.1	-0.4	0.2	-0.2	0.3	0.3	
House prices	-0.4	-0.3	0.1	0.3	0.5	0.6	0.8	1.0	1.1	1.0	0.8	0.5	0.5	0.4	0.6	0.8	1.0	1.0	0.8	0.8	0.7	0.5	0.3		
Consumer confidence	59.2	62.4	63.7	64.5	62.2	58.8	60.4	61.9	62.4	74.2	70.2	69.5	67.8	65.7	70.5	74.9	72.0	71.9	74.1	74.1	73.9	74.9	74.8	67.5	58.7
Composite PMI	53.5	51.9	51.4	50.0	52.6	52.1	49.7	52.3	51.5	50.7	54.4	53.2	50.4	52.5	50.1	52.2	52.6	52.1	52.6	55.2	52.1	52.3	53.4	54.6	54.0
Income Tax	3.1	2.6	2.5	2.7	2.5	2.4	2.6	4.6	2.6	2.9	2.4	2.6	3.2	2.7	2.8	2.9	2.6	2.6	2.8	4.7	2.8	3.0	2.7	2.6	3.5

Source: CSO, Eurostat, ILCU, SPDJI, Irish Department of Finance

Note: Retail sales, payroll employees, HICP and house prices are calculated as m-o-m% 3mma. Income tax is the monthly tax revenue; November includes income tax for those who are self-employed.

Fiscal

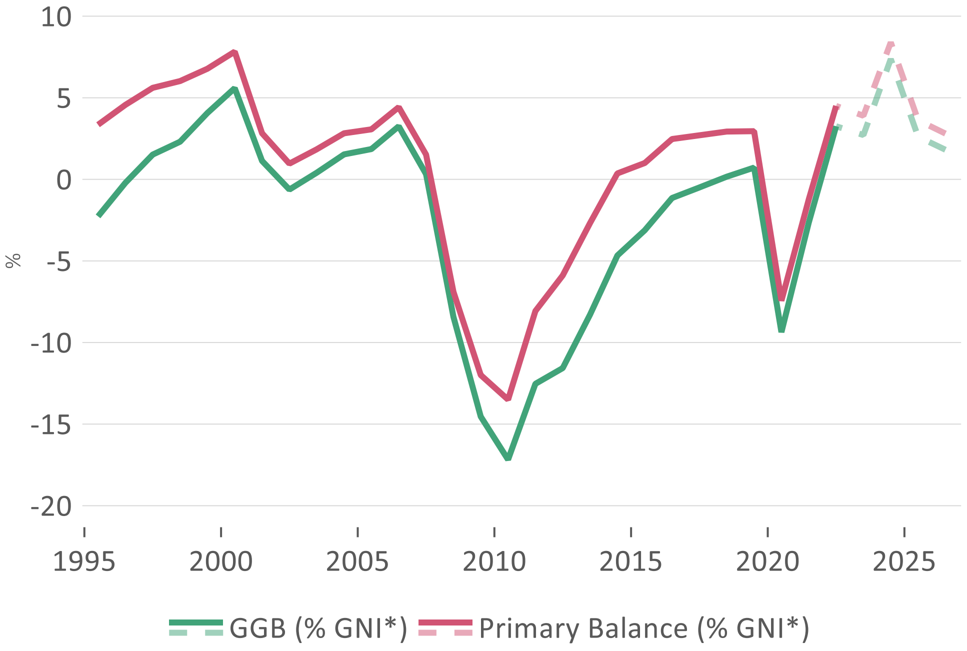
Large surplus in 2024 due to CJEU/Apple proceeds and continued corporate tax strength

Sovereign Funds established

Fiscal surplus in Ireland – €9bn in 2024 (excl. CJEU case)

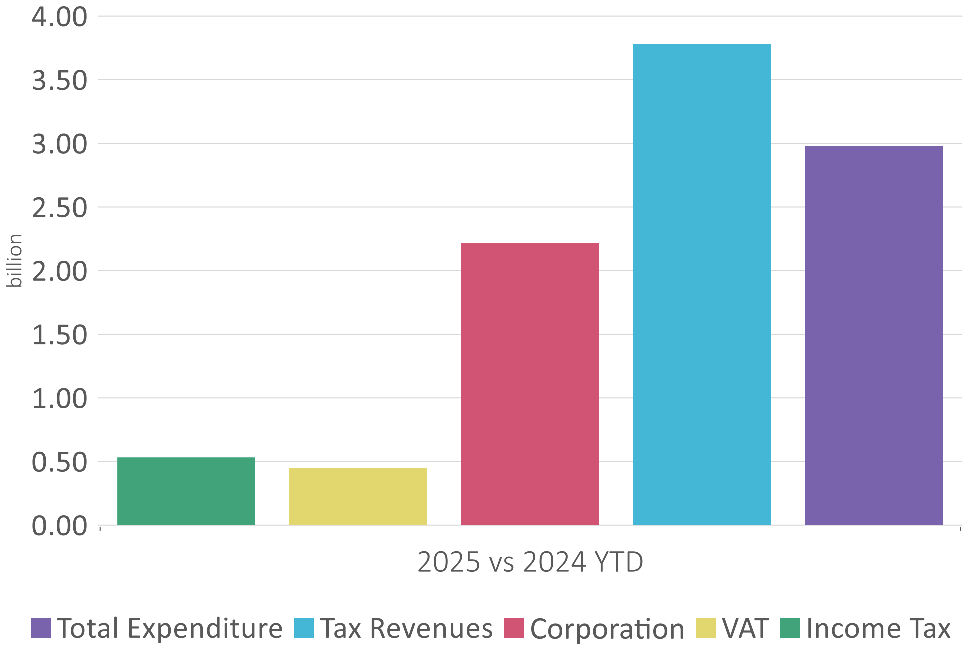
CJEU Apple case proceeds + CT revenues meant €23.2bn General Government surplus last year

2025 GG surplus expected to be €8.7bn or 2.6% of GNI* after GGB increased to 7.5% in 2024 on CJEU case one off



Source: CSO

Early 2025 saw jumps in CT and expenditure – no sign yet of global uncertainty impact

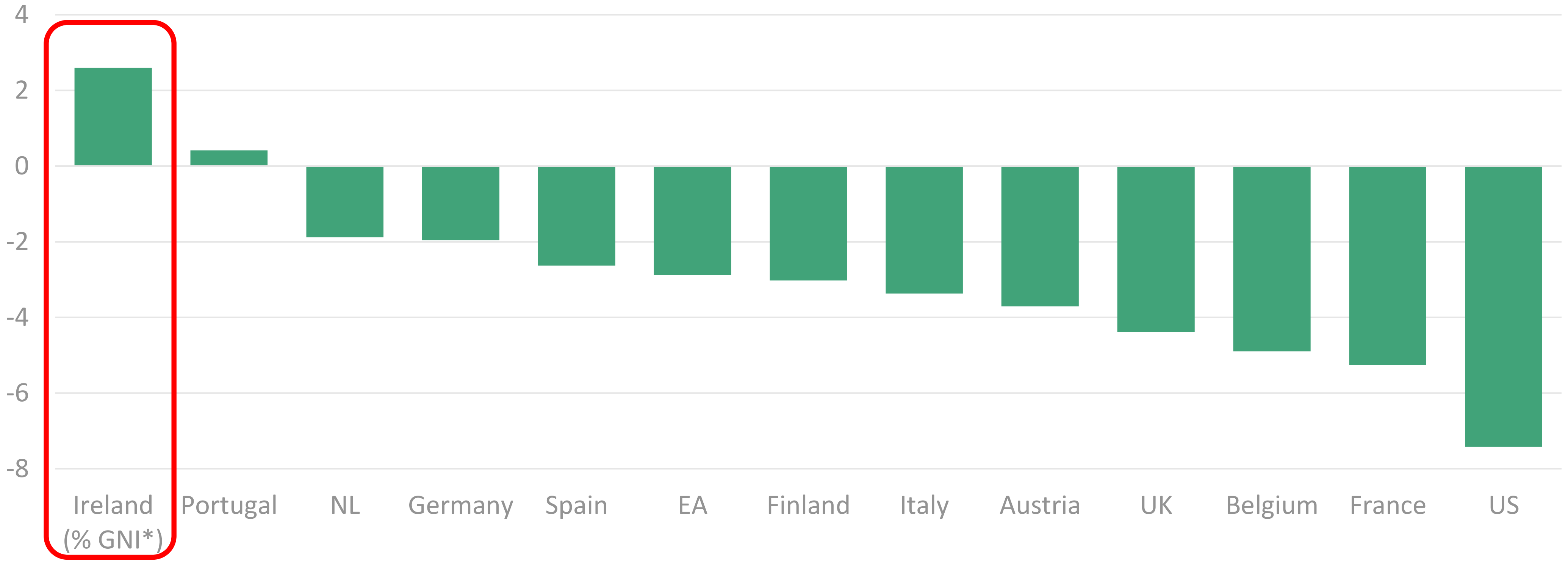


Source: Irish Department of Finance

LHS chart: GG and primary balance numbers used exclude banking recapitalisations during GFC. For General Government statistics, the €14.1bn Apple case proceeds was recognised immediately in 2024. RHS chart: Expenditure is Total Gross Voted Expenditure

Surplus expected in 2025 prior to global uncertainty

Fiscal position points to question of how to prudently manage such surpluses

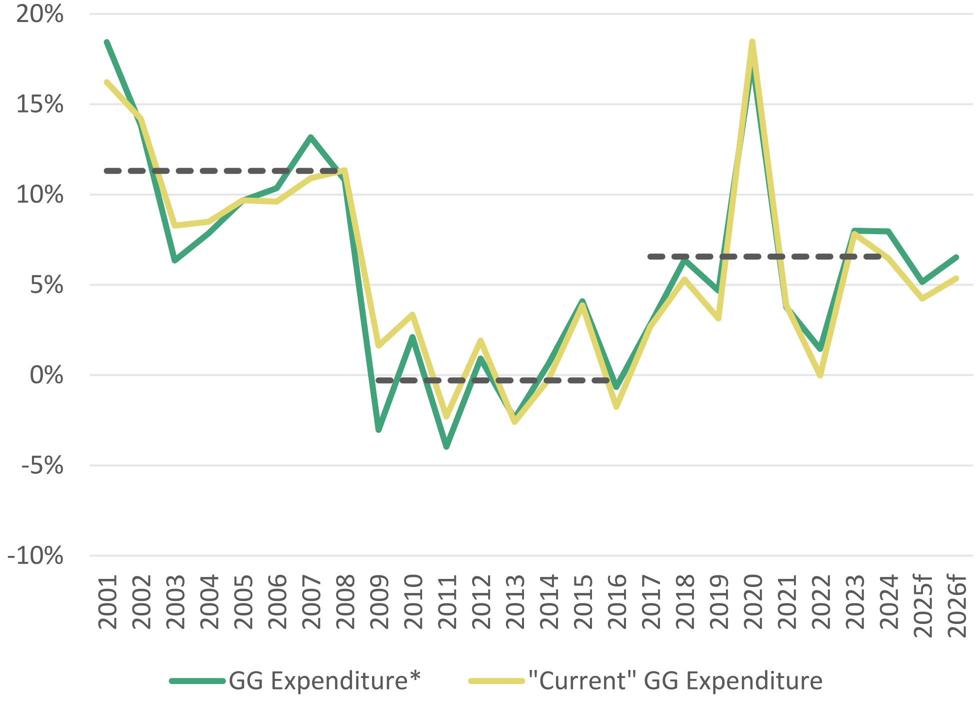


Note: Irish forecast based on Department of Finance APR 2025 forecasts. Forecasts for other countries taken from the European Commission.

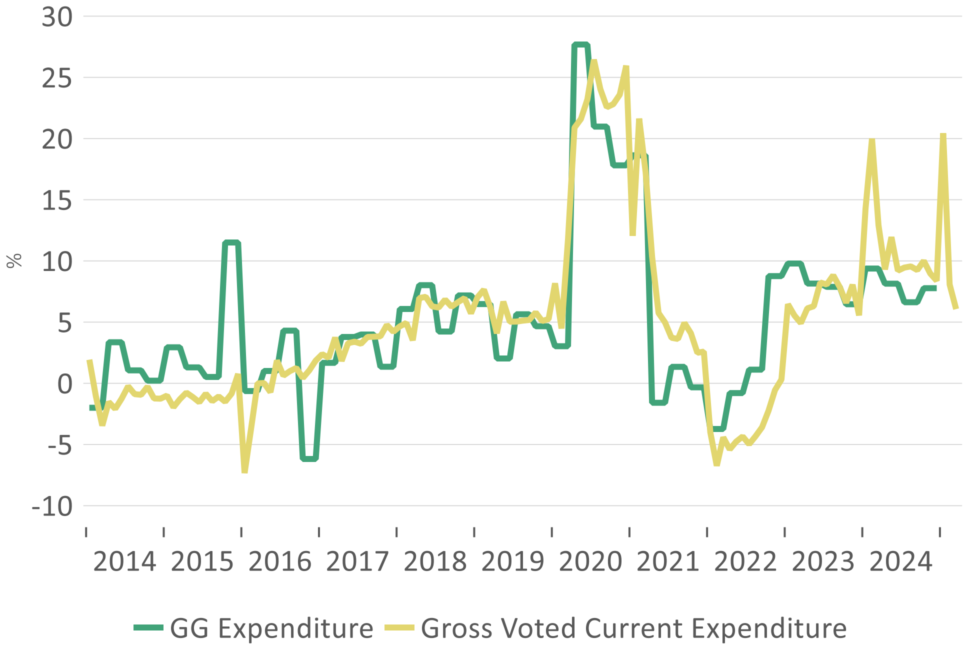
Expenditure growth remains high

Latest forecasts expect spending growth to be above 5% spending rule in 2025/26

Recent trend on expenditure growth in between loose 2000-2008 period and austere 2009-2017 period but…



…clear spike in gross current voted expenditure in 2024 and early 2025 (annual growth rates)



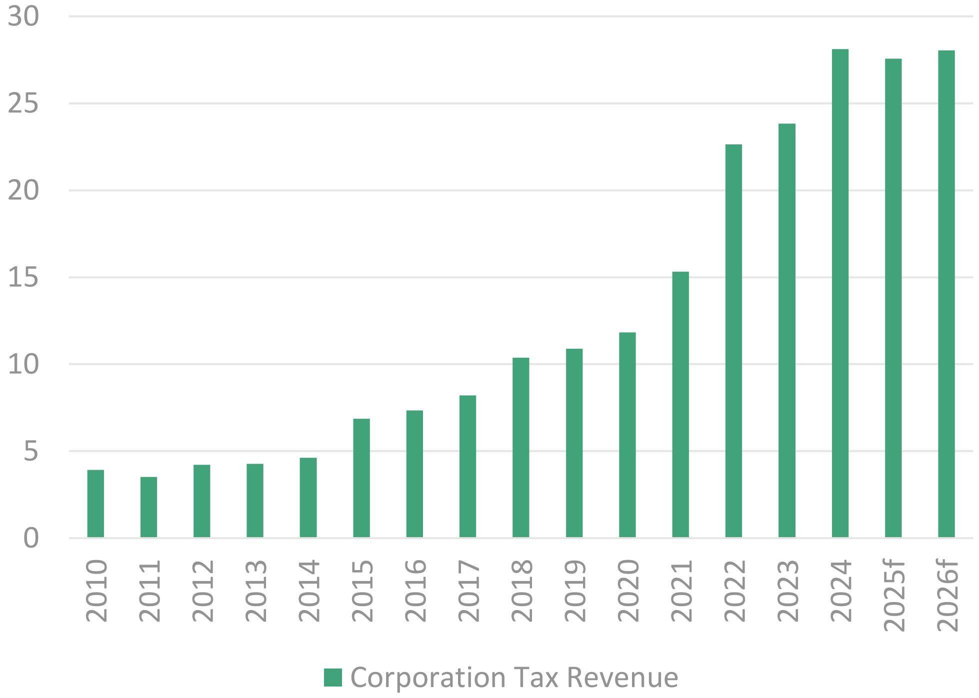
Source: Irish Department of Finance, CSO

Source: Department of Finance, CSO, Forecasts from Budget 2025
LHS: * GG expenditure excludes banking recapitalisation costs. "Current" GG exp = GG exp minus govt. GFCF. RHS: 3 month-on-3month growth used.

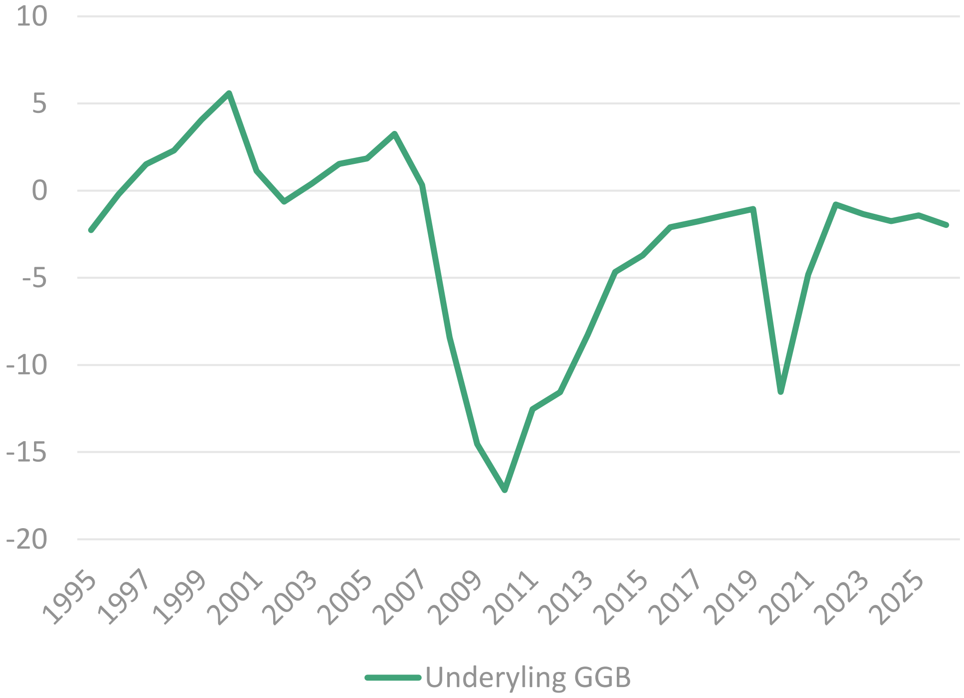
Corporate tax – strong growth but obvious concentration risk

Two new sovereign investment funds (FIF/ICNF) help to safeguard portion of CT receipts

CT revenue €28.2bn in 2024 – forecasts are for minimal growth in near term; BEPS outcome could change this



Underlying GGB suggests Ireland would be in deficit in 2024 if excess CT and CJEU ruling windfalls excluded (-1.8% of GNI*)



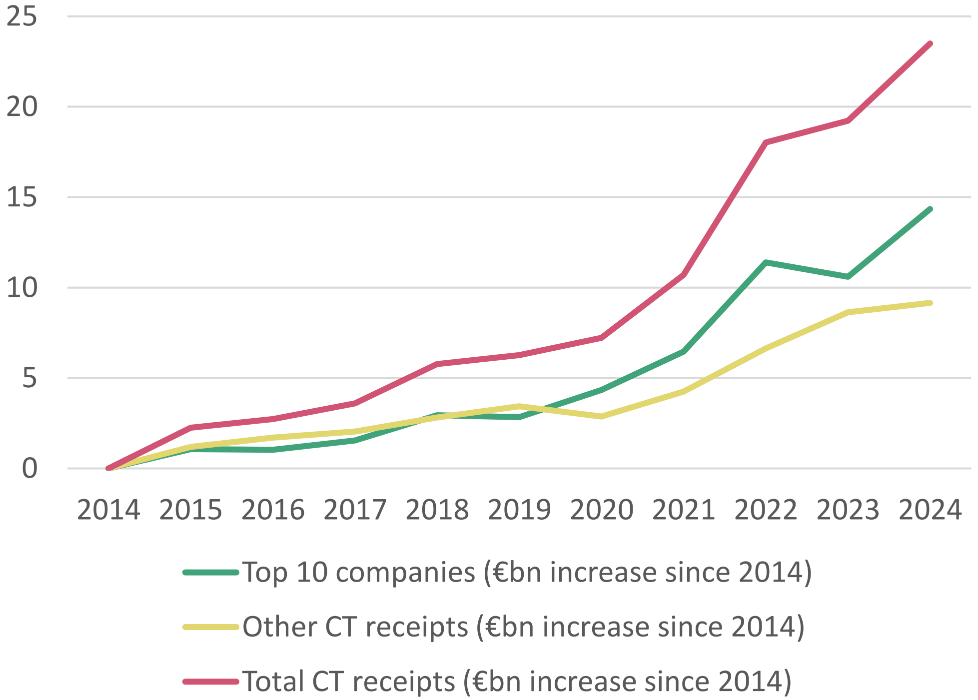
Note: The Department of Finance's underlying general government balance is the GGB excluding the Government's estimated windfall corporation tax receipts (windfall estimated at €13.3bn for 2025) and the Apple case proceeds.

Multinationals at core of CT payments

Manufacturing the top driver in CT, tech sector CT jumped by 50% in 2024

CT paid (€m)	2024	vs. 2023
Manufacturing	9,491*	+419
ICT (tech sector services)	6,223	+2,093
Fin and Insurance	4,026	+434
Wholesale, retail	3,685	+985
Admin and Support	1,910	+301
Prof, Sci, Tech	937	+92
Construction	643	+99
Mining, Quarry, Utilities	295	-26
Other	904	-124

Top 10 account for 57% of CT paid; likely top 3 companies pay c. 40% of all CT receipts (Fiscal Council analysis)

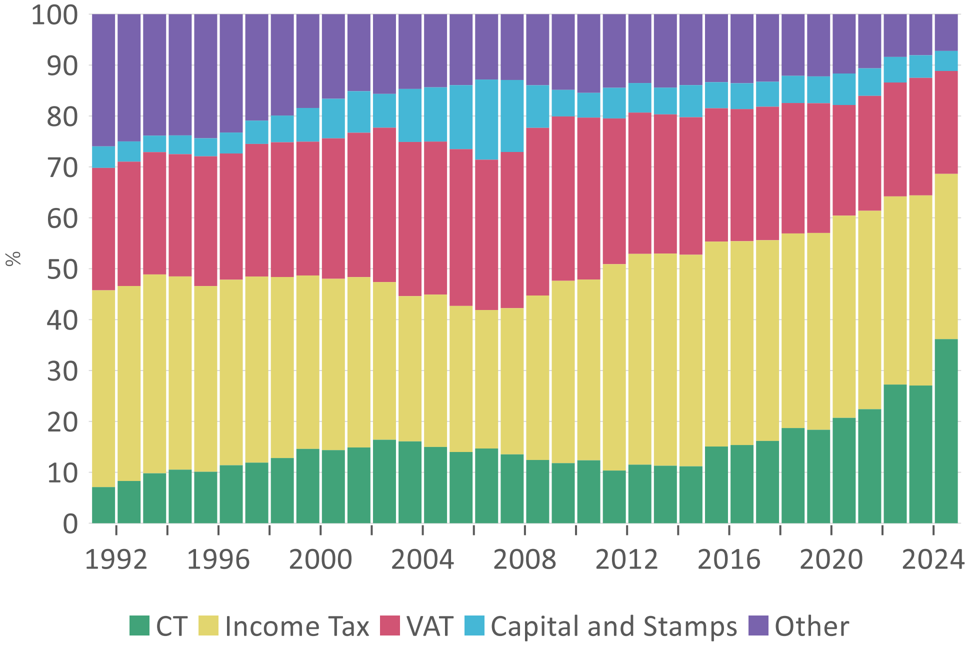


Source: Revenue Report 2025. *€4,088m chemical and pharma manufacturing (€204m increase on 2023), €4,284m Manufacture of Computers (+ €36m on 2023), €1,119m other Manufacturing (+ €179m on 2023).

Corporate tax – critical revenue source

CT accounts for 36% of tax receipts, it was 11% a decade ago

CT = 36% of tax receipts including CJEU ruling; will revert back in 2025; Pillar II of BEPS 2.0 impact likely to concentrate tax more



Source: Irish Department of Finance

Income tax base was narrowed massively in early 2000s; In recent years we have seen no such narrowing

Source: CSO, Irish Department of Finance

FIF/ICNF funds established; first transfers have been made

New funds help to mitigate to excess CT risk

Future Ireland Fund (FIF) - €8bn AUM

- The FIF is a long-term savings fund which intends to contribute to exchequer expenditures in 2040s onwards (e.g., for population ageing, the digital & climate transitions).
- Legislation sets out that 0.8% of GDP (c. €4-6bn per annum) to be transferred to the FIF each year out to 2035.
- Just over €8bn now sits in the FIF. To start, €4bn of €6bn in the National Reserve Fund (NRF, or Rainy Day Fund) was transferred to FIF. The transfer of 2024's 0.8% of GDP contribution brought the FIF to €8bn.
- In time, the Government suggest as much as €100bn could reside in the FIF.
- The Funds are to be managed and controlled within the NTMA.

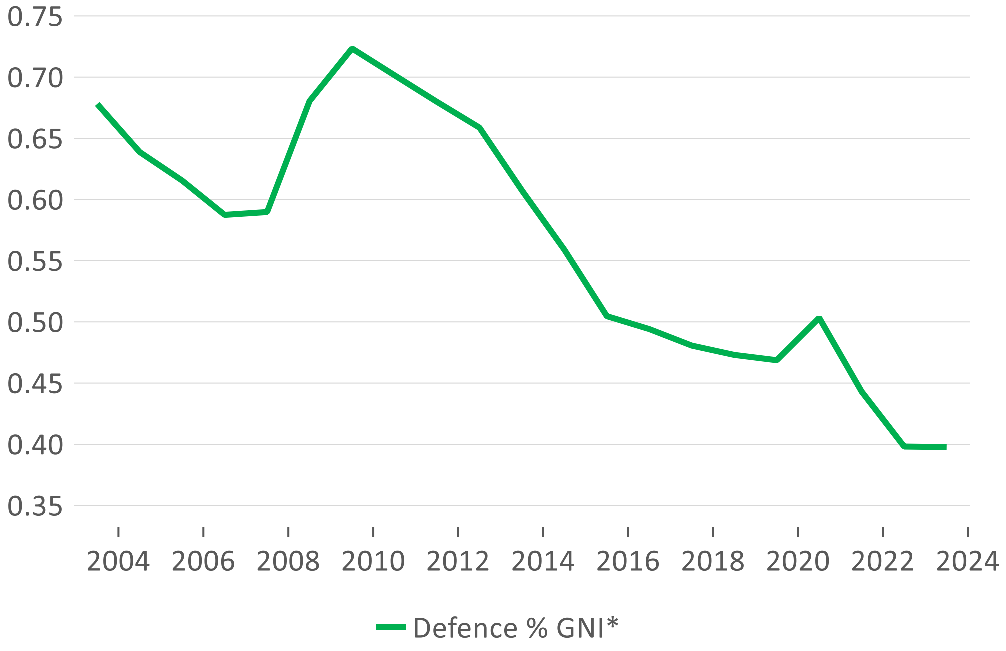
Infrastructure, Climate and Nature Fund (ICNF) - €2bn AUM

- The ICNF's mandate is to help the state meet its considerable infrastructure and green climate needs.
- In the past, Ireland has fallen into the trap of cutting capital investment in downturns. This fund will act as a reserve to be drawn on for capital expenditure if a downturn arises.
- To start the fund off, the remaining €2bn in the NRF has been transferred into the ICNF. From 2025 to 2030, €2bn a year will be transferred into the ICNF from the Exchequer.
- There are clear rules on how money can be drawn down with Irish Fiscal Advisory Council to play a role.
- A portion of the ICNF can be drawn down if needed to help meet climate and nature targets.

Ireland’s limited defence spending

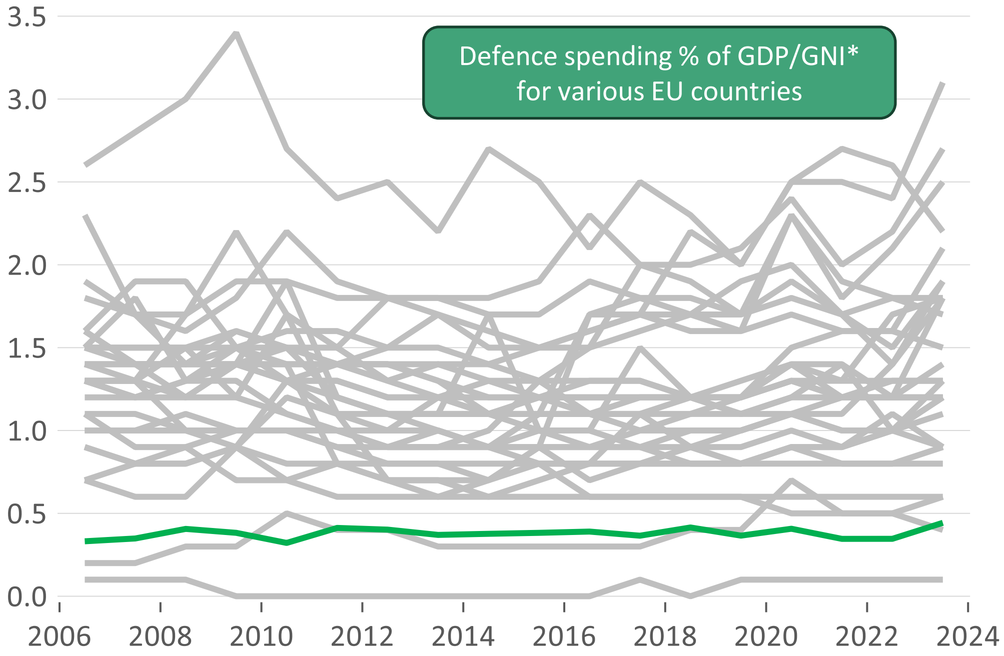
Despite a record €1.35 bn for defence in Budget 2025, Ireland lags behind European peers

From a peak 0.72% of GNI* in 2009, spending on defence as a proportion of national income has broadly declined



Source: Irish Department of Finance, CSO

One of few EU countries not in NATO. Ireland’s expenditure is expected to increase in coming years

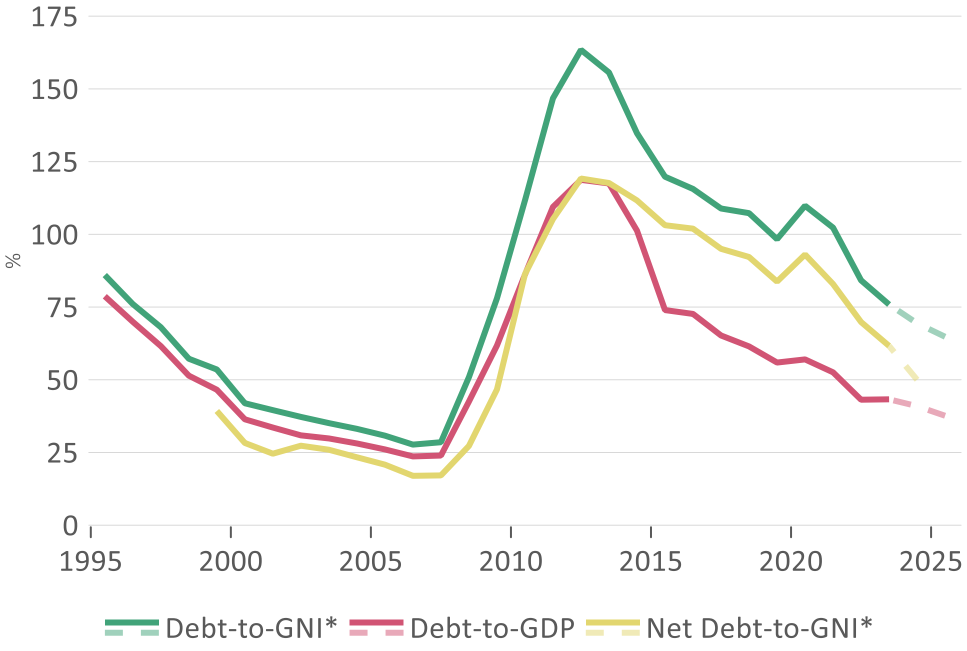


Source: Eurostat, CSO

Debt to GNI* likely at 70% in 2024

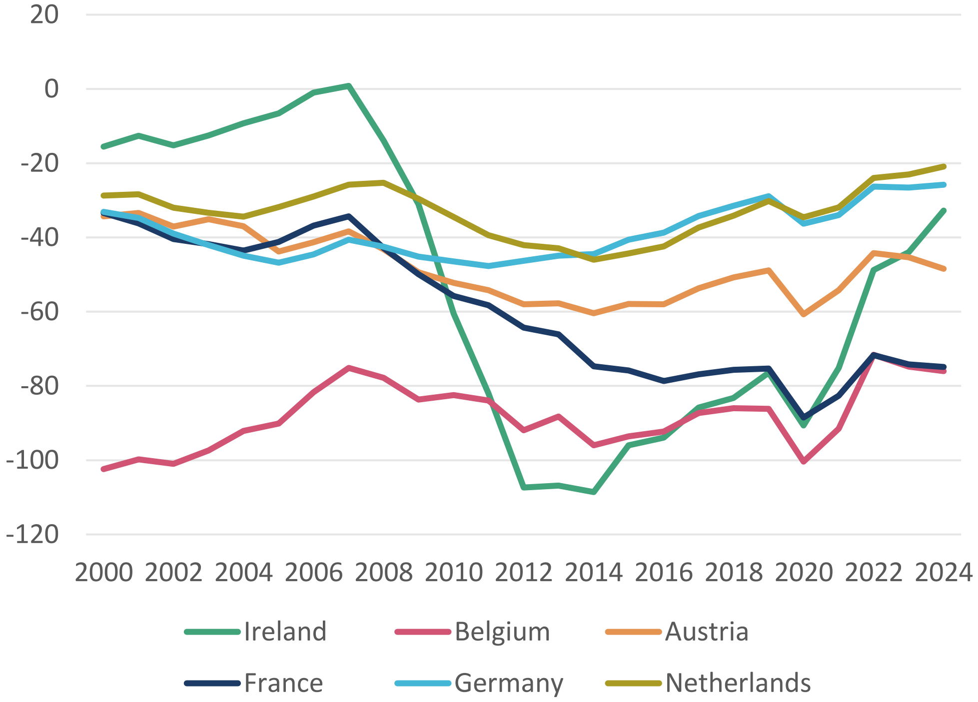
Net debt as % of GNI* at 50% as surpluses and CJEU case increases financial assets held by State

Debt to GNI* at 70% in 2024 and at 65% in 2025f;



Source: CSO, Eurostat

Ireland’s GG Net Financial Worth* have moved firmly into “core” space in recent years



* Net financial worth for General Government = GG Financial Assets minus GG Financial Liabilities

Debt metrics

2025

	GG debt to GDP %	GG debt to GG revenue %	GG interest to GG revenue %
Greece	147	309	6.2
Italy	138	290	8.2
France	115	221	4.8
Belgium	105	215	4.6
UK	103	243	6.9
Spain	101	237	5.9
Portugal	93	214	4.9
EA 19	90	192	4.3
EU 27	83	179	4.2
Austria	81	159	2.9
Ireland	**38 (65 GNI*)**	**153**	**2.3**
Slovenia	64	142	3.0
Germany	63	134	2.3
Cyprus	61	142	2.5
Slovakia	60	138	3.4
Netherlands	44	104	1.9

Source: DG ECFIN, Irish Department of Finance

NTMA Funding

2025 funding range €6bn - €10bn

Gníomhaireacht Bainistíochta an Chisteáin Náisiúnta
National Treasury Management Agency

NTMA funding range for 2025: €6bn to €10bn

€5.25bn issued so far; cash balance is elevated but expected to fall

Cash

Tax strength alongside Apple proceeds means Ireland in strong cash position.

The cash balance was €34bn at end 2024 but expected to fall through 2025

WAM

Weighted average maturity of debt one of longest in Europe.

NTMA issuance since start of 2022 of €25.25bn at WAM of 16.4 years and average interest rate of 2.46%.

AA

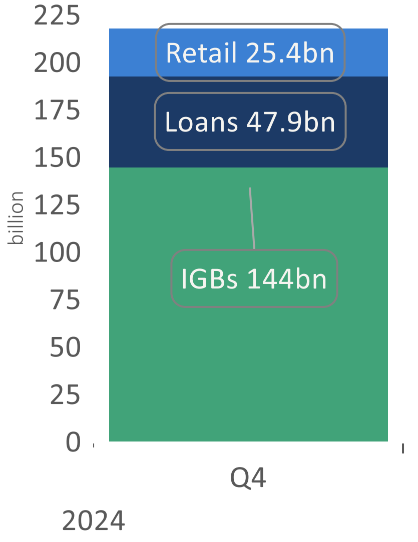
Ireland rated in the AA category with all major rating agencies.

Fitch and DBRS upgraded to AA in 2024 while S&P is at AA (positive). Moody's remains at Aa3 but with a positive outlook.

Smooth maturity profile

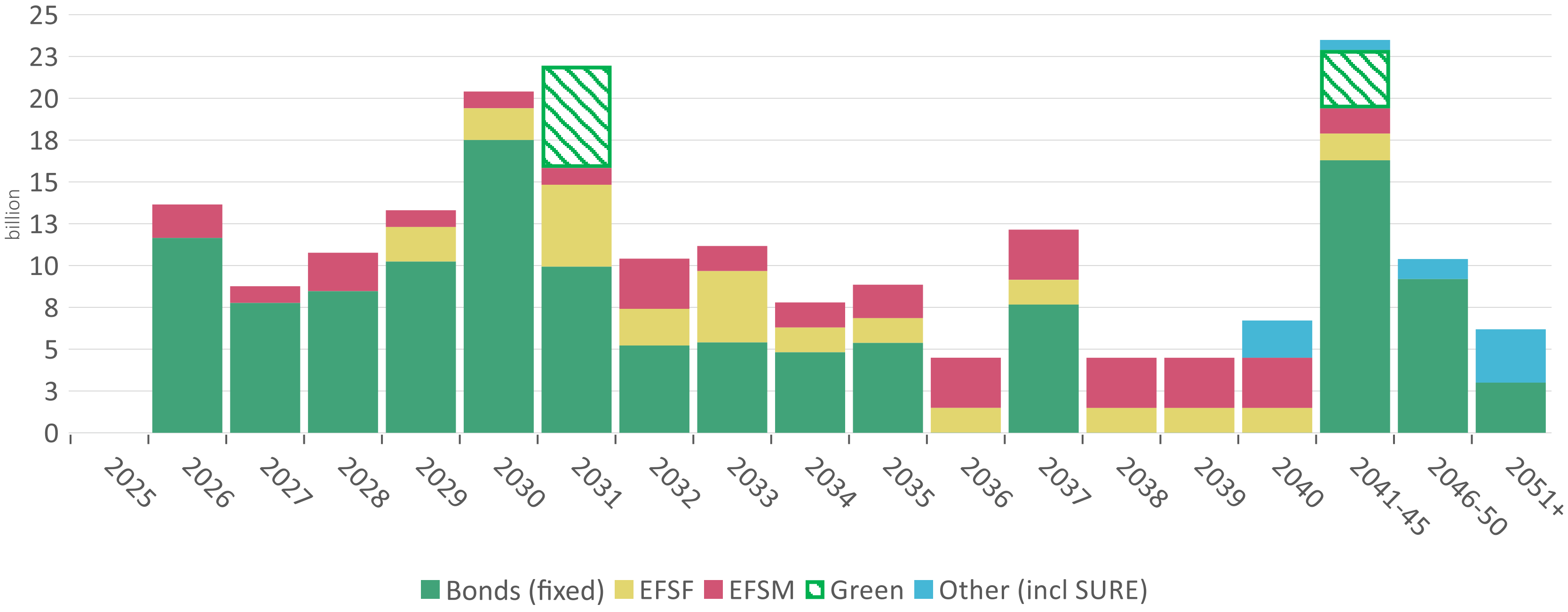
Redemptions are modest in coming years

GG debt of €218bn (Q4 2024)



Source: Eurostat

Marketable debt profile

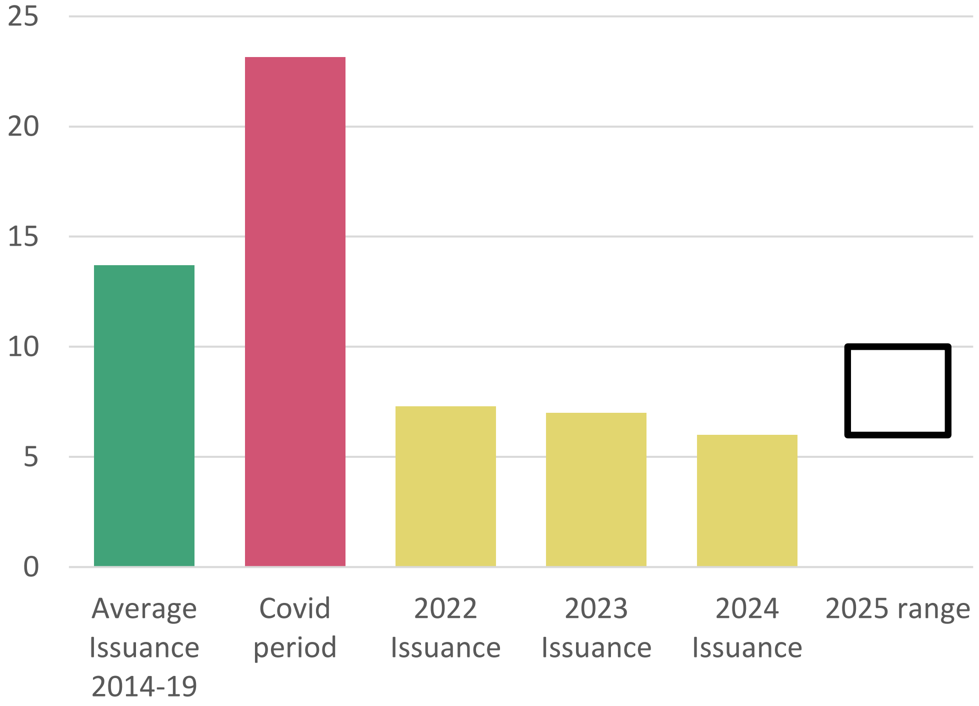


Source: NTMA

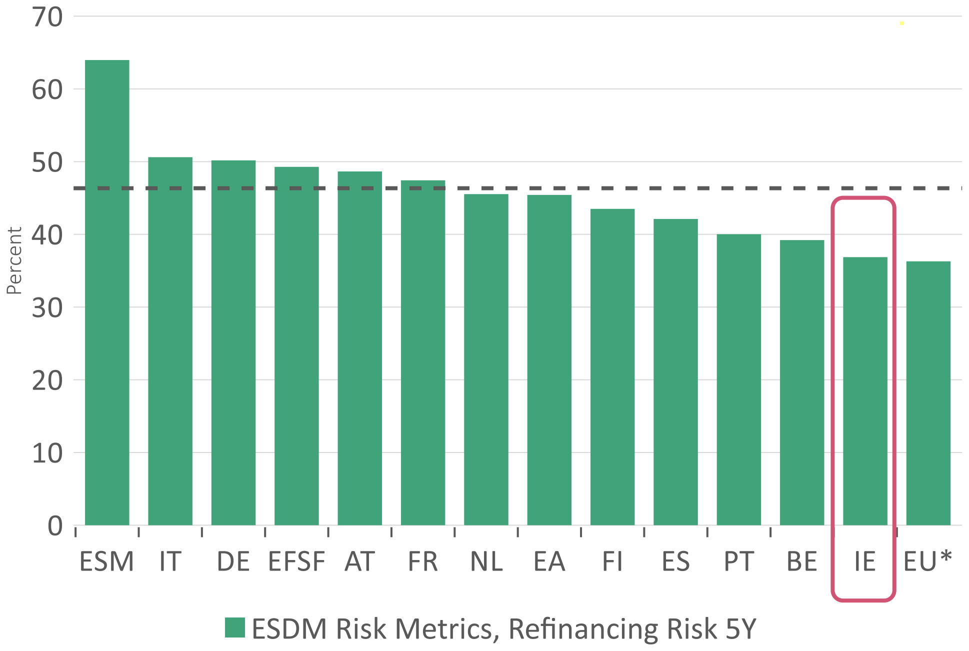
Low supply expected given strong surpluses

Redemptions in next 5 years are modest compared to rest of Europe

Current borrowing requirements suggest NTMA issuance will be similar to recent years (€bns)



Ireland's refinancing risk is low – Ireland below euro area in what is to mature in the next five years



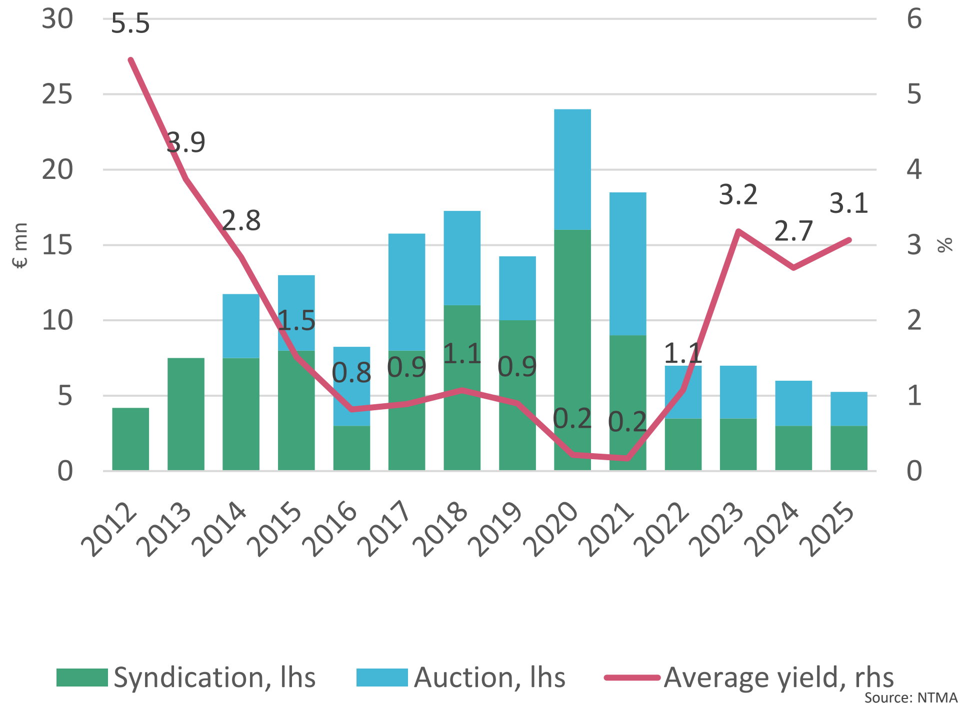
Source: ESDM

Refinancing rate defined as debt maturing within five years divided by total debt outstanding, Q1 data from ESDM.
* EU data is EU as an issuer

Borrowing costs anchored

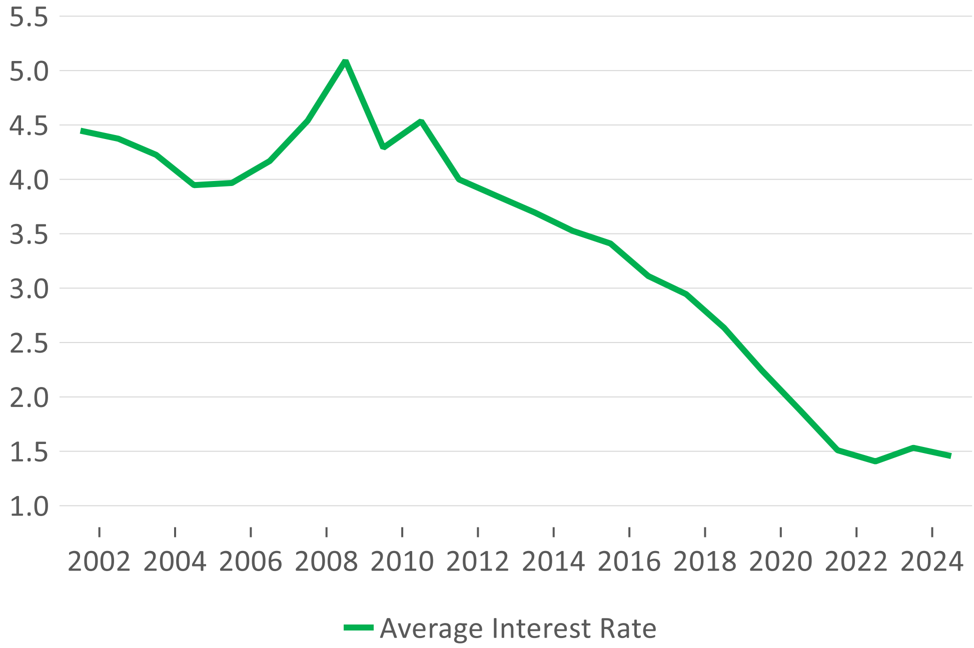
Ultra-low rate era well in rearview mirror but Ireland used that period well

Modest issuance in 2022-25 at “normalised” rates - issued at c. 3.0%



Source: NTMA

Vast majority of Irish debt is fixed rate at average cost of 1.5%



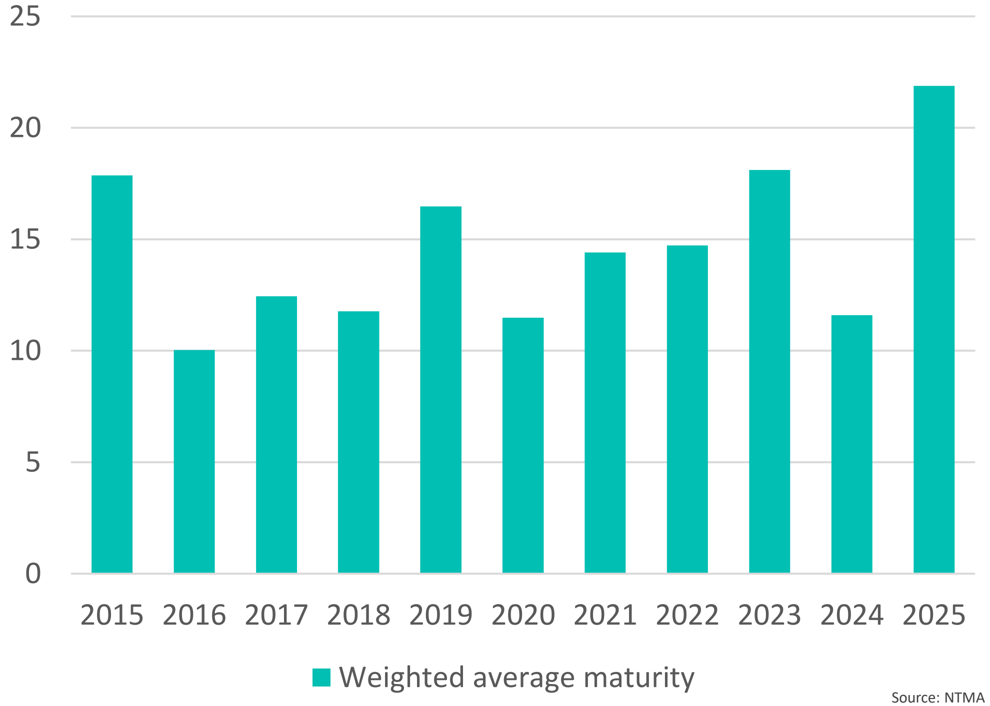
Source: CSO

Note: LHS chart includes only auctions and syndication

NTMA weighted maturity longer than most

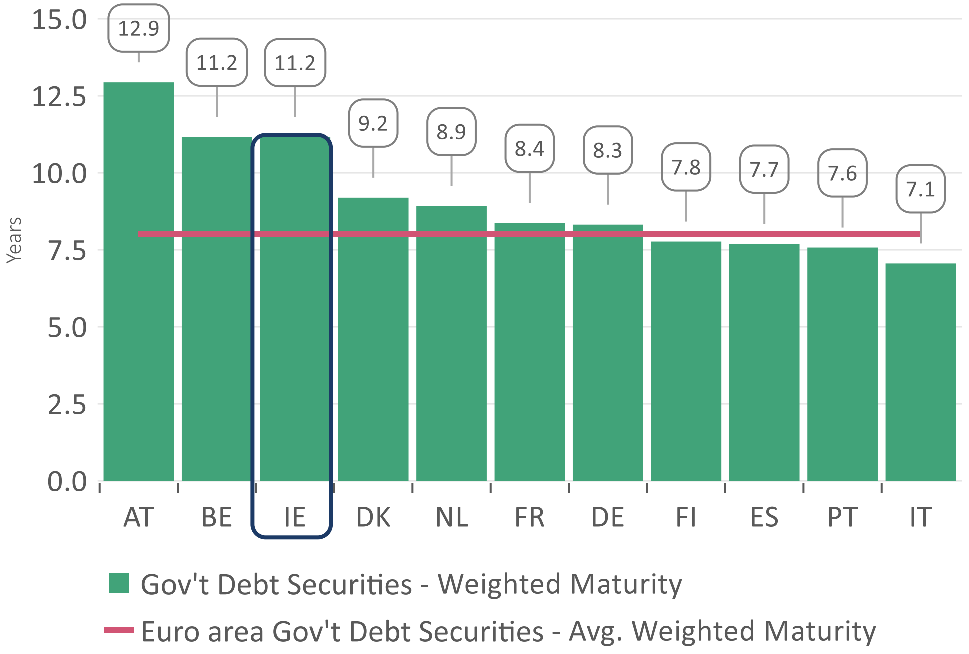
Debt management strategy has extended debt profile

Benchmark issuance has extended the maturity of Government debt since 2015



Source: NTMA

Ireland's debt securities (in years) compares favourably to other EU countries



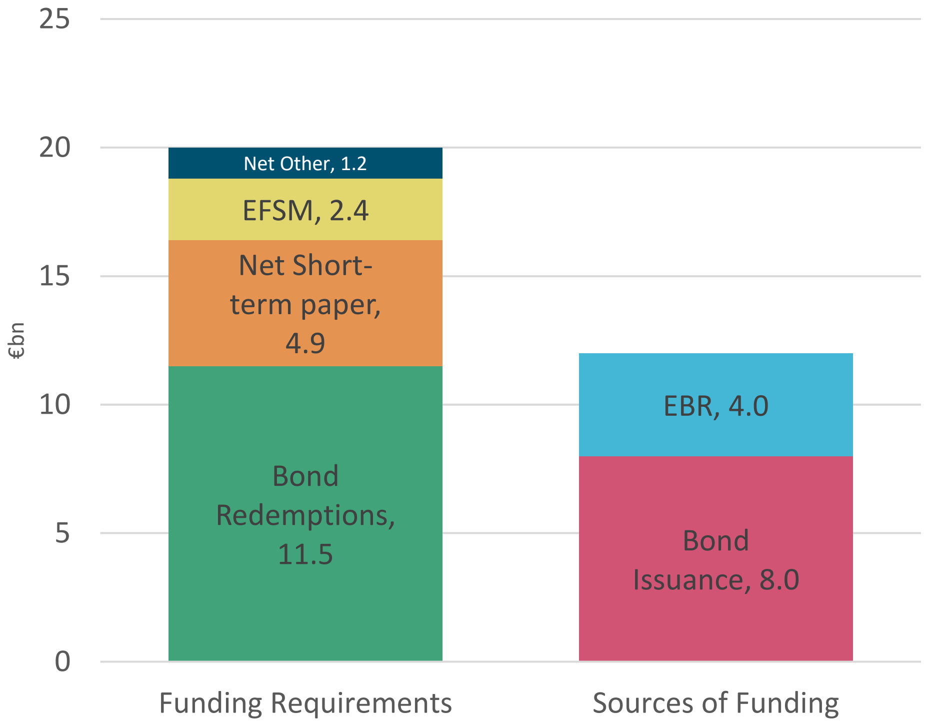
Source: ECB

Note: For RHS, weighted maturity for Ireland includes Fixed rate benchmark bonds, Amortising Bonds, Notes issued under EMTN programme, T-Bills and ECP Data. It excludes programme loans and retail.

Funding needs and sources for 2025

Tax receipts and CJEU/Apple proceeds means cash balance larger than expected

- There was a bond redemption of €11.5bn in March this year. There was also a EFSM repayment of €2.4bn due.
- The Exchequer Borrowing Requirement (EBR) for 2025 is expected to be a surplus (hence shown as funding source).
- The NTMA held significant cash & liquid asset balances throughout 2024. The balance at year-end was €34.3bn. We are currently forecasting the cash & liquid asset balance to be approx. €26bn for end-2025.



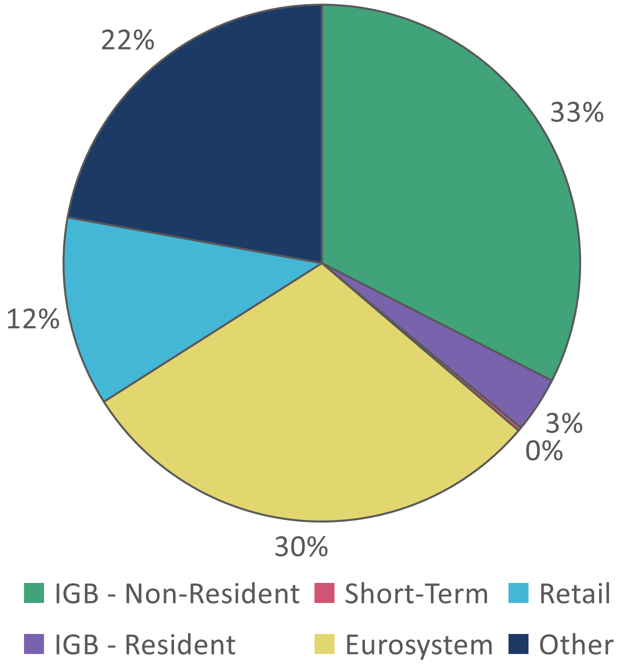
Source: NTMA

Rounding may affect totals.
1. In the funding sources column, €8bn is reflective of the midpoint of the €6-10bn funding range.
2. EBR is the Exchequer surplus per the Department of Finance's Annual Progress Report (May 2025) estimate.

Diverse holders of Irish debt

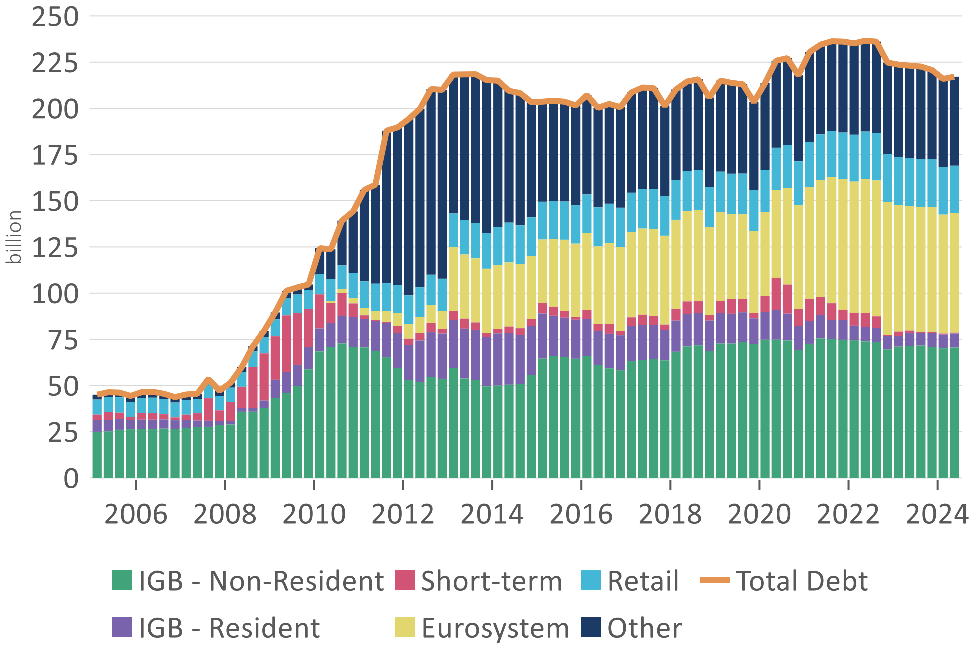
“Sticky” sources account for nearly two-thirds of debt

Ireland split roughly 85/15 on non-resident versus resident holdings



Source: Eurostat, ECB, Central Bank of Ireland

“Sticky” sources – official loans, Eurosystem, retail – make up c. 65% of Irish debt



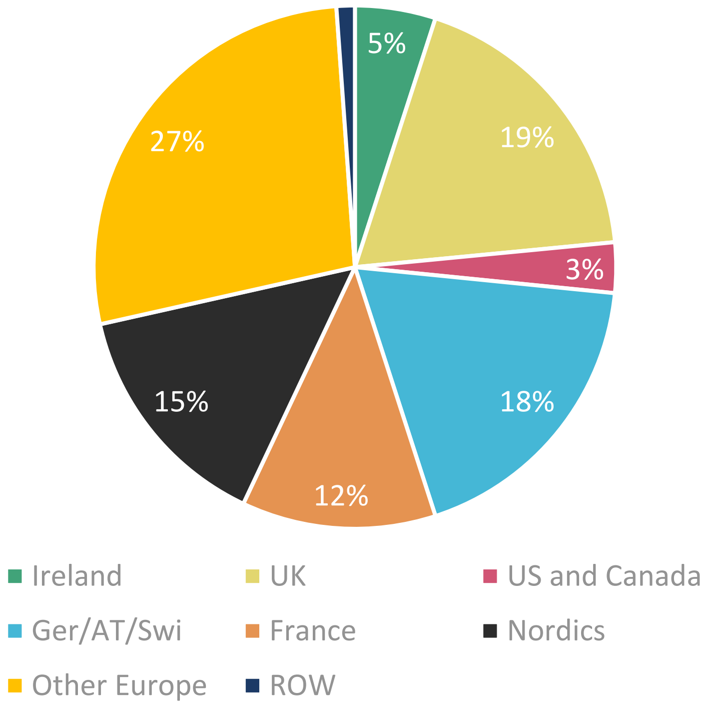
Source: Eurostat

Note: IGBs excludes those held by Eurosystem. Eurosystem holdings include SMP, PSPP, PEPP and CBI holdings of FRNs. Figures do not include ANFA. Other debt has included IMF, EFSF, EFSM, Bilateral as well as IBRC-related liabilities over time. Retail includes State Savings and other currency and deposits. The CSO series has been altered to exclude the impact of IBRC.

Investor base

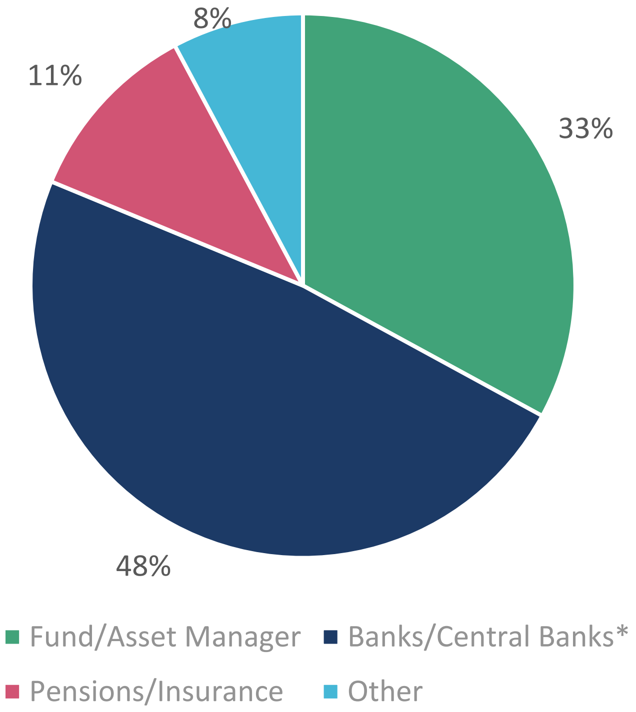
Demand for Government bonds is wide and varied

Country breakdown: Average over last five syndications



Source: NTMA

Investor breakdown: Average over last five syndications



Source: NTMA

* Does not include ECB.

Credit Ratings for Ireland

Three ratings agencies on positive outlook; Ireland rated in AA category by all

Rating Agency	Long-term	Short-term	Outlook/Trend	Date of last rating change	Date of next review
Standard & Poor’s	AA	A-1+	Positive	May 2023	19 September
Fitch Ratings	AA	F1+	Stable	May 2024	7 November
Moody’s	Aa3	P-1	Positive	Apr 2023	15 August
Morningstar DBRS	AA	R-1(high)	Stable	Sept 2024	12 September
R&I	AA	a-1+	Stable	May 2025	2026
KBRA	AA	K1+	Stable	May 2023	10 October
Scope	AA	S-1+	Stable	Aug 2024	25 July

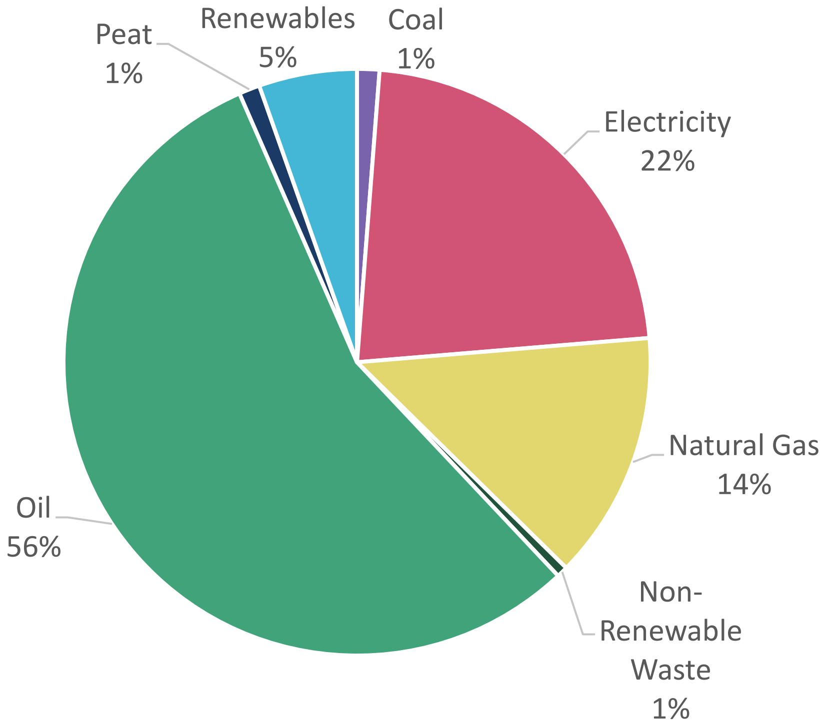
ESG Sustainability

Issuance & government policy demonstrate Ireland's green commitment

Ireland’s energy: fossil fuels prevalent

Ireland’s energy mix is reliant on fossil fuels but share of renewables to increase by 2030

Oil accounts for the largest share of Ireland’s energy mix (2023 data)

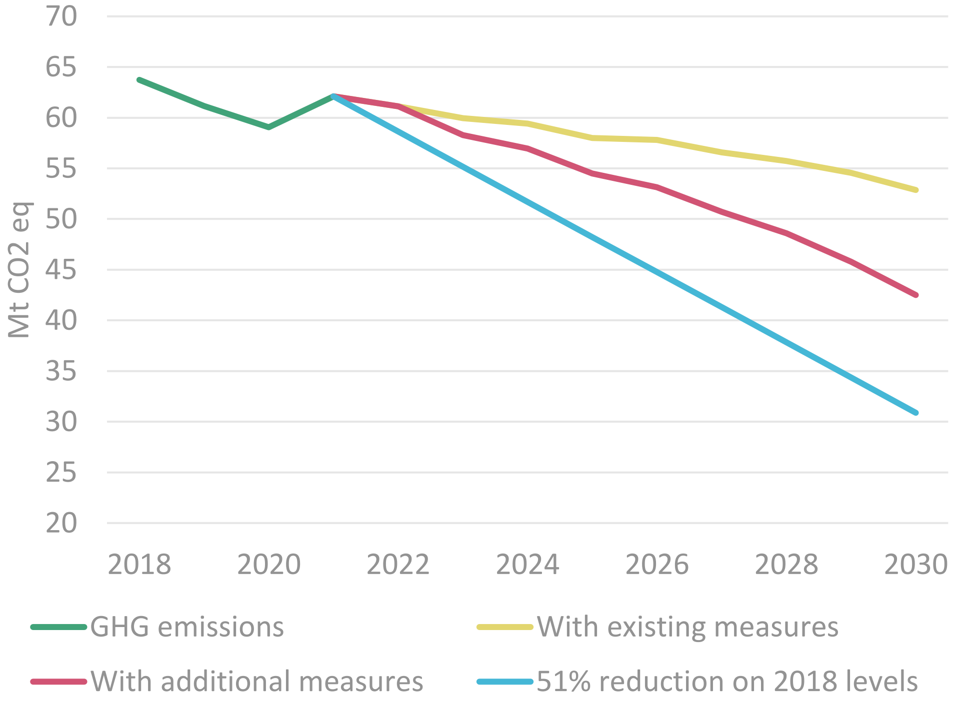


Electricity production has become more renewables based but still far from Climate Action Plan aim of 80% by 2030

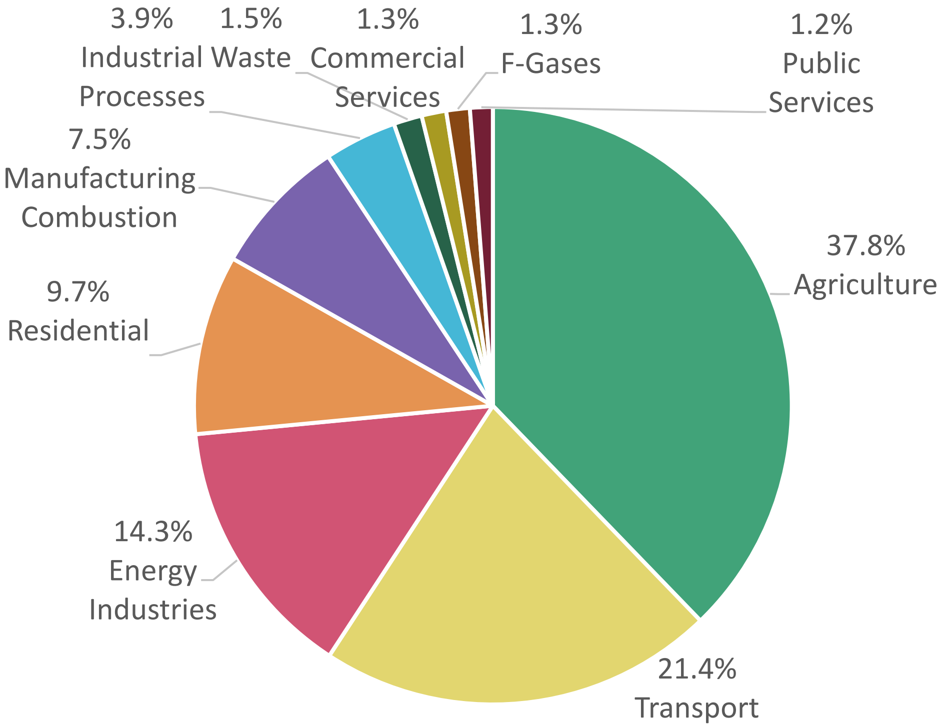
Ireland's greenhouse gas emissions

EPA report notes further measures needed to achieve emissions reduction target

EPA projections indicate Ireland will fall short of the 51% reduction target for 2030



Emissions from agriculture make up a significant portion of the total in Ireland



Source: Environment Protection Agency (Ireland). Note: Metric used is million tonnes carbon dioxide equivalent (Mt CO2eq). RHS is provisional 2023 data.

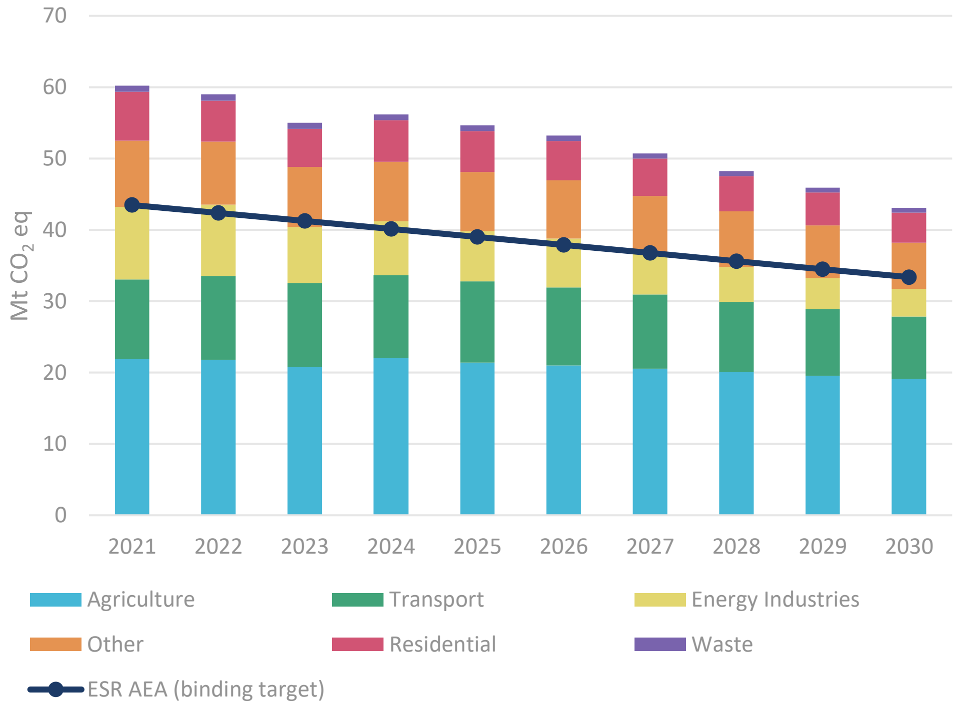
Climate Action Legislation

The Climate Action & Low Carbon Development Act 2021 aims for Net Zero by 2050

Climate Action & Low Carbon Act:

- Carbon Budgeting: The Act embeds the process of carbon budgeting into law. It requires Government to adopt a series of economy-wide-five-year carbon budgets.
- National Climate Objective: First carbon budgets will aim for a reduction of 51% of emissions by 2030.
- Climate Action Strategy: A national plan will be prepared every five years and actions for each sector will be updated annually.
- All of Government approach: Local authorities are required to prepare a Climate Action Plan and public bodies obliged to conduct their functions in line with the national plan
- Progress: At the end of 2023, Ireland was exactly 60% through the 2021-2025 carbon budget and is over-emitting against its CAP targets (SEAI analysis).

Greenhouse Gas Emissions and Effort Sharing Regulation Annual Emissions Allocations (ESR AEA) – Ireland above target



Source RHS: Environmental Protection Agency.

Projections are based on With Additional Measures (WAM) scenario

Climate Action Plan 2025

Pillars to tackle emissions reduction

Powering renewables

- 9GW onshore wind, 8GW solar and at least 5GW offshore wind by 2030
- Target 80% of electricity from renewable sources by 2030
- Transform flexibility of electricity system by improving system services and storage capacity

Building Better

- Retrofit 500,000 dwellings by 2030 (National Retrofit Plan)
- Ensure all new buildings are Nearly Energy Zero Buildings (NZEB) by 2025
- Put heat pumps into 600,000 homes by 2030
- Support the development and expansion of district heating networks

Transport

- Develop cycling and walking infrastructure
- Assess potential of alternative fuels measures
- Prioritise delivery of rail projects
- Rollout of EV Infrastructure Strategy
- Assess potential of shift to rail freight

Agriculture

- Launch a Nutrient Storage Scheme to support reduced reliance on chemical fertiliser
- National Biomethane Strategy
- Organic Farming Scheme
- Forestry Strategy
- Reduce use of chemical nitrogen as fertiliser

Develop an Action Plan on reducing age of slaughter

Industry

- Roadmap for the Decarbonisation of Industrial Heat
- Reduce embodied carbon in cement and concrete through Public Procurement in Ireland
- Increase the use of timber in construction
- Carbon Capture, Utilisation and Storage Task Force
- Support the scale-up of the hydrogen sector

Land Use

- Phase 2 of Land Use Review
- Increase uptake of measure in Teagasc Marginal Abetment Cost Curve
- Support continued afforestation in line with Forestry Programme 2023-2027
- 30,000ha of peatland rehabilitation
- Support of Peatland Finance Ireland

Irish Sovereign Green Bonds

Over 11bn issued in Green and allocated to green projects

Summary of Green Bond Issuance

- €11.38bn nominal outstanding across two bonds
- Cumulatively €11.3bn allocated
- Issuance through both syndicated sales and auctions
- Pipeline for eligible green expenditure remains strong
- Launched 2018 and based on ICMA Green Bond Principles – Use of proceeds model
- Governed by a Working Group of government departments chaired by the Department of Finance
- Compliance reviews by Sustainalytics
- Six annual allocation reports and five annual impact reports now published

Irish Sovereign Green Bond Impact Report 2022: Highlights*

Environmentally Sustainable Management of Living Natural Resources and Land Use

- Number of hectares of forest planted: 2,273
- Number of Landfill Remediation sites with funding drawn down: 67

Renewable Energy

- Number of companies (including public sector organisations) benefitting from SEAI Research & Innovation programmes as lead, partner or active collaborators: 23
- SEAI Research & Innovation awards: 41

Sustainable water and wastewater management

- Public side water savings (litres of water per day): 11 million
- New & upgraded water and wastewater treatment plants: 15
- Length of water main laid (total): 315km

*For a more detailed break-down please see the ISGB 2022 Impact Report

Irish Sovereign Green Bonds (ISGB)

Irish Sovereign Green Bond Impact Report 2022 & Allocation Report 2023: sample impacts

Some highlights from the report*

Built Environment/Energy Efficiency

- Non-residential energy saving (Gigawatt Hours): 151
- Number of homes renovated: 27,200

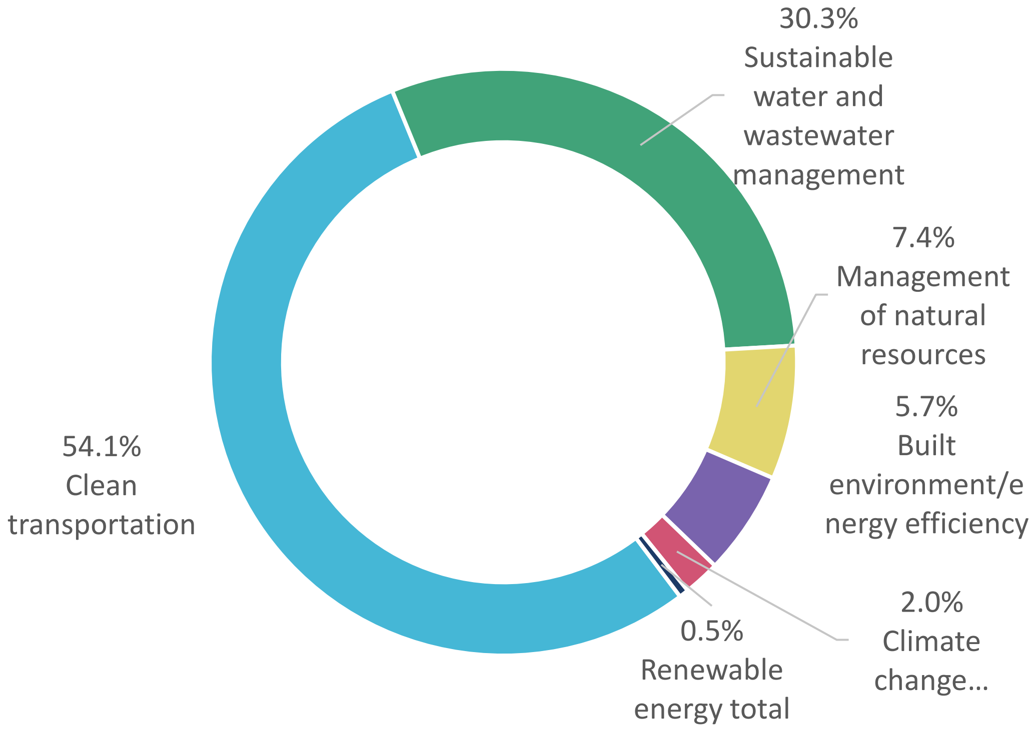
Clean Transportation

- Grant-aided EV home charging points installed: 16,299
- Number of public transport passenger journeys: 249.7 million
- Length of regional and national greenways constructed: 54km
- Take-up of Grant Schemes/Tax foregone provided (number of vehicles): 33,020

Climate Change Adaptation

- 16 major flood relief projects at planning, development or construction phase
- 8,913 properties protected on completion

Allocation in 2023 of ISGB funding has focused on Water/Waste management and transportation

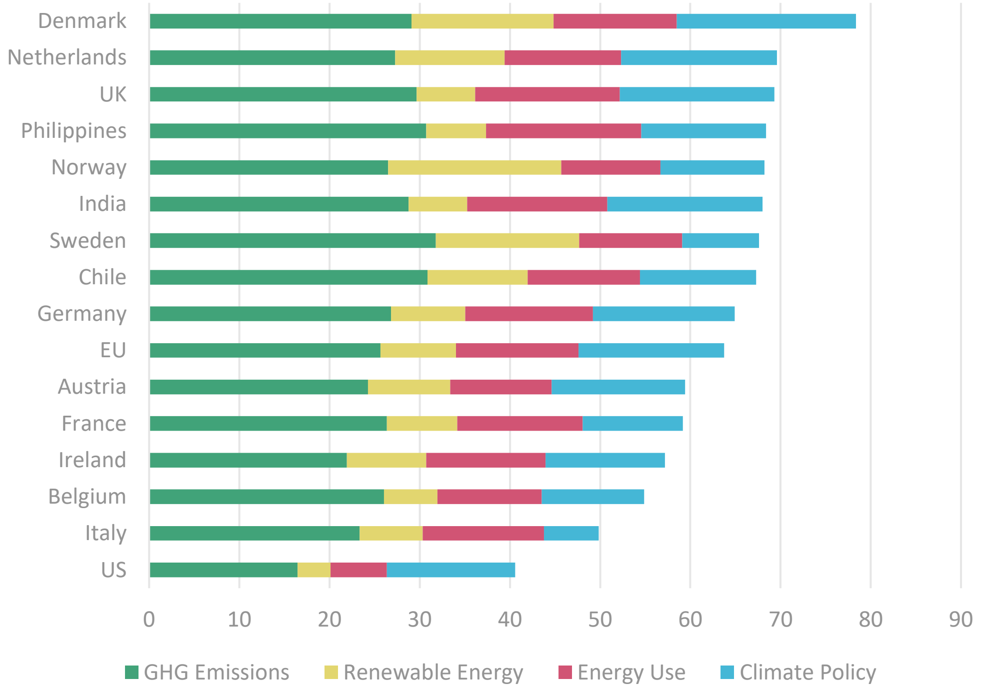


*For a more detailed break-down please see the Irish Sovereign Green Bond Allocation Report 2023

Further progress on 'E' and 'S' to be made

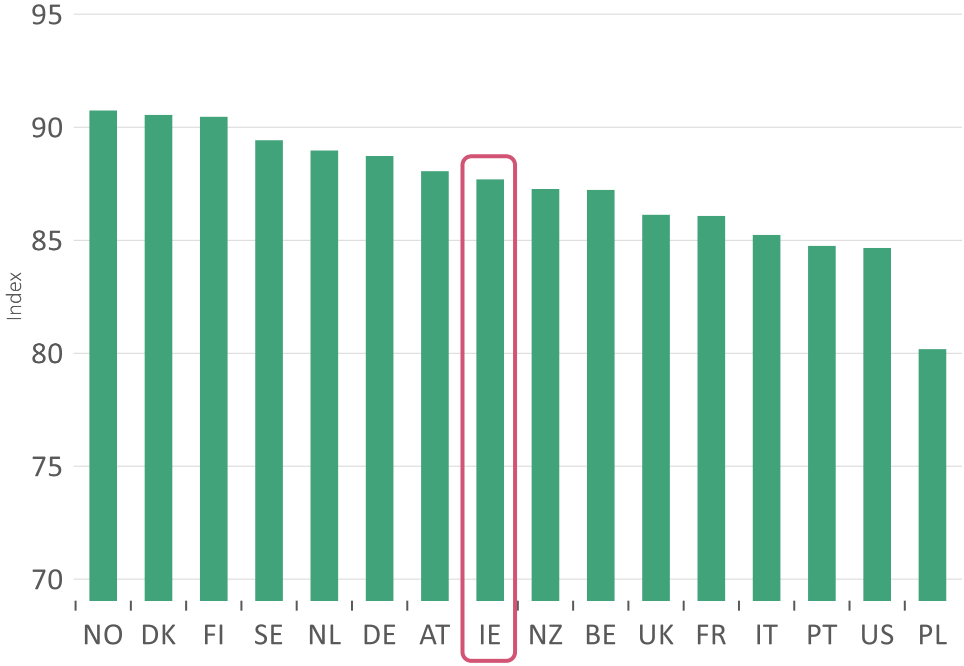
Action needed in sectors like energy and healthcare

Ireland's rank jumped from 43 to 29, though still falls behind leaders like Denmark in current environmental metrics



Source: CCPI

Ranked 13th out of 160 countries in the Social Progress Index but scores lower on healthcare and housing affordability



Source: SPI

Policy on Just Transition and Biodiversity

All of National Parks and Wildlife Service budget included in Green bond allocation

Just Transition

The importance of ensuring a just transition is explicitly recognised in the Climate Act 2021 and in the Climate Action Plans

- National Just Transition Fund 2020
  - €22.1m in grant funding provided to projects the contribute to the economic, social and environmental sustainability for the Wider Midlands region
- EU Just Transition Fund and Ireland’s Territorial Just Transition Plan
  - Includes up to €169m in investment for the economic transition for the Midlands region for 2021-2027
- Green Skills for Further Education and Training 2021-2030 Roadmap
- Skills for Zero Carbon
- Just Transition Commission set up

Biodiversity

Irish policies for biodiversity are primarily set by the National Biodiversity Action Plans

- 4th National Biodiversity Action Plan 2023-2030
  - Backed by legislation, the NBP sets the agenda for biodiversity conservation and supports Ireland’s international commitments
- Wildlife Amendment Act 2023
- International Commitments:
  - UN Convention on Biological Diversity
  - EU Nature Restoration Law
  - EU Biodiversity Strategy for 2030
  - Global Biodiversity Framework
- Peatlands Restoration
  - Bord na Móna Peatlands Restoration
  - EU supported The Living Bog Project 2016-2021

Source: 4th National Biodiversity Action Plan, Territorial Just Transition Plan

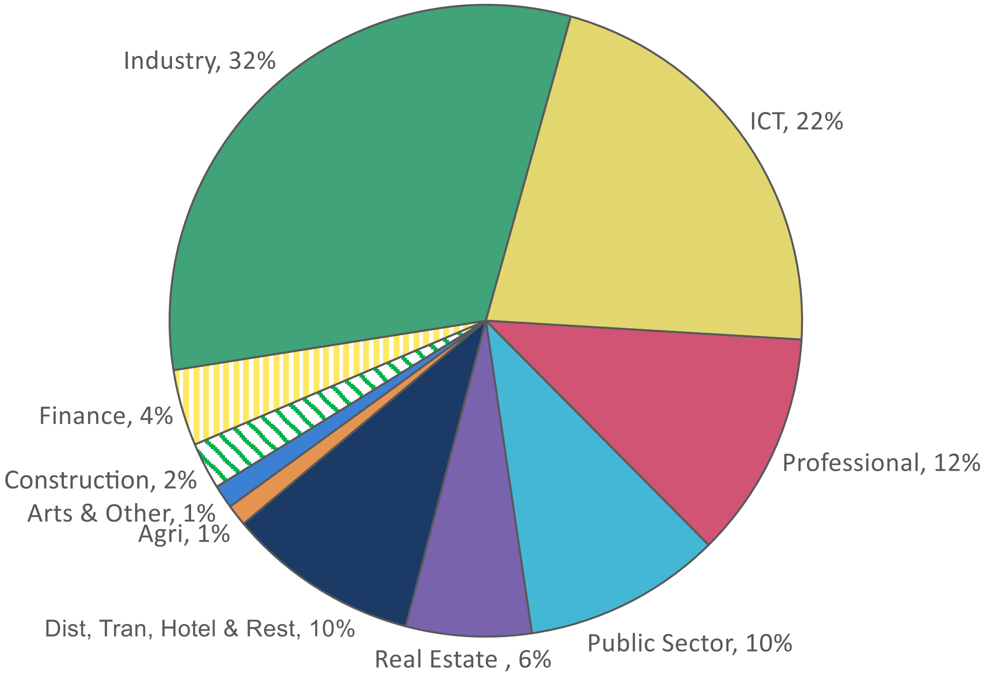
Structure of the Irish Economy

Multinationals overstate economic prosperity but offer clear benefits of jobs, income, taxes

Multinational activity distorts Ireland’s data

Notwithstanding those issues, MNCs have real positive impact

Multinationals dominate GVA: profits are booked here but overstate Irish wealth generation



Source: Eurostat

Domestic side of economy adds jobs; MNCs add GVA/high wages

Percentage of Total

	Employment	Compensation of Employees	Real GVA
Industry (incl Pharma)	13	13	32
ICT (Tech)	7	10	22
Professional	10	14	12
Public Sector	31	28	10
Dist, Tran, Hotel & Rest	24	18	10
Real Estate	0	1	6
Financial	5	8	4
Construction	5	5	2
Arts & Other	4	2	1
Agriculture	1	1	1

Source: Eurostat

Note: Based on calendar-adjusted seasonally-adjusted data as of 2024 Q4

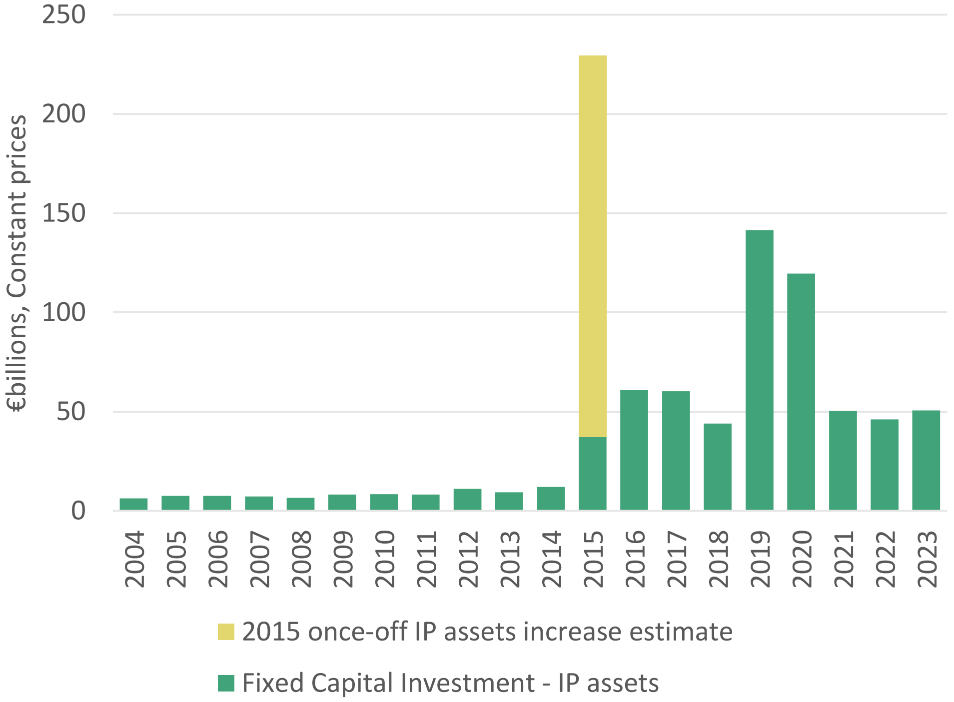
€0.8trn of intellectual property into Ireland

Assets brought here by tech. & pharma. in recent years

Ireland is now a leader in Computer Services; Exports up from €50bn to €170bn since 2015

Source: CSO, WTO

Enormous inflows (c. €800bn) of IP assets into Ireland since 2015 on the back of BEPS 1.0 and other tax reforms

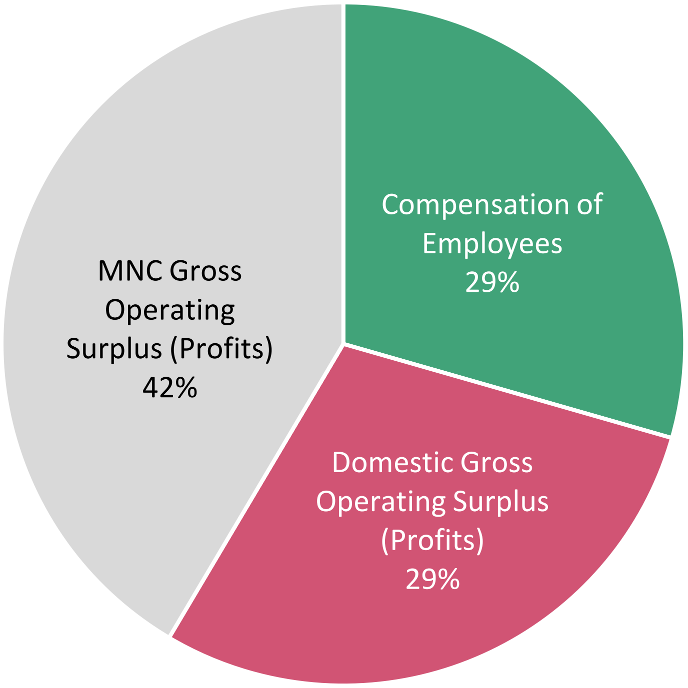


Source: CSO and NTMA analysis – Gross Fixed capital formation and Gross capital stock figures used in RHS chart

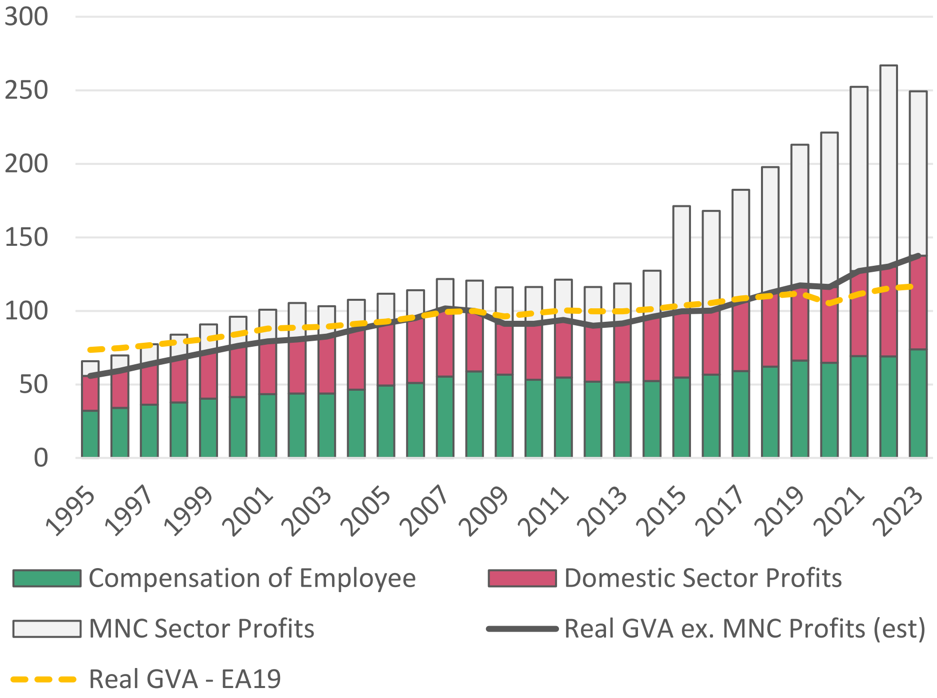
Underlying economy above EA average

MNCs add real substance to Irish economy as wage bill filters out to domestic sectors

Ireland's income = wages (all sectors) + domestic sectors profits + tax on MNC profits



Ireland, on an underlying basis, growing faster than euro area average in recent years (2008 = 100)

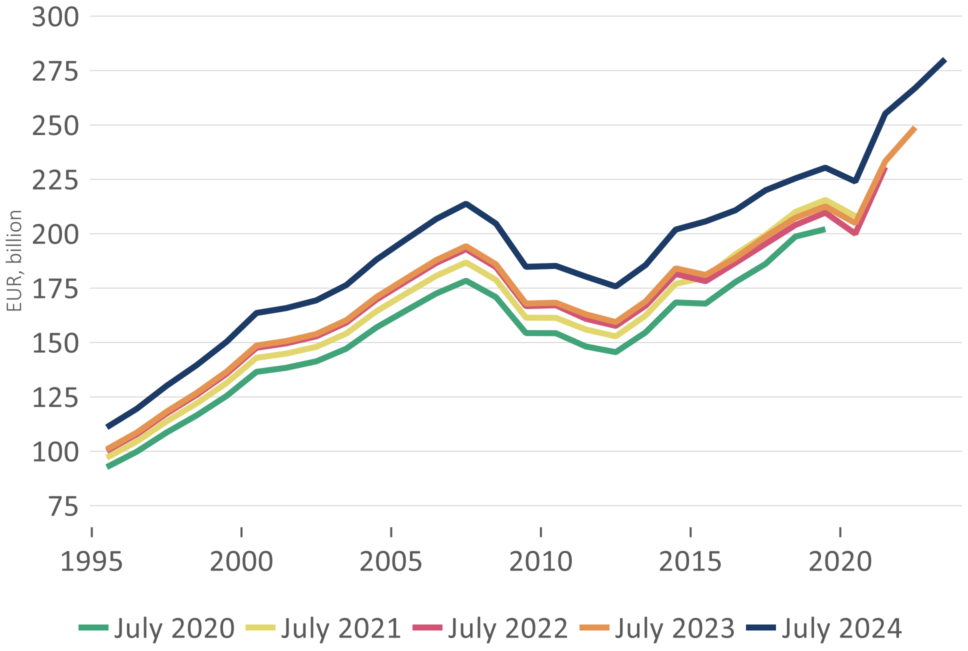


Source: CSO, NTMA calculations. LHS shows nominal 2023 data. Foreign-owned MNE dominated includes Nace sectors 19, 20, 21, 26, 31, 32, 58, 61, 62, 63 and 77. Ireland's GVA data has been adjusted to strip out the distortionary effects of some of the multinational activity that occurs in Ireland. Specifically, a profit proxy is estimated for the sectors in which MNCs dominate.

National accounts data regularly revised

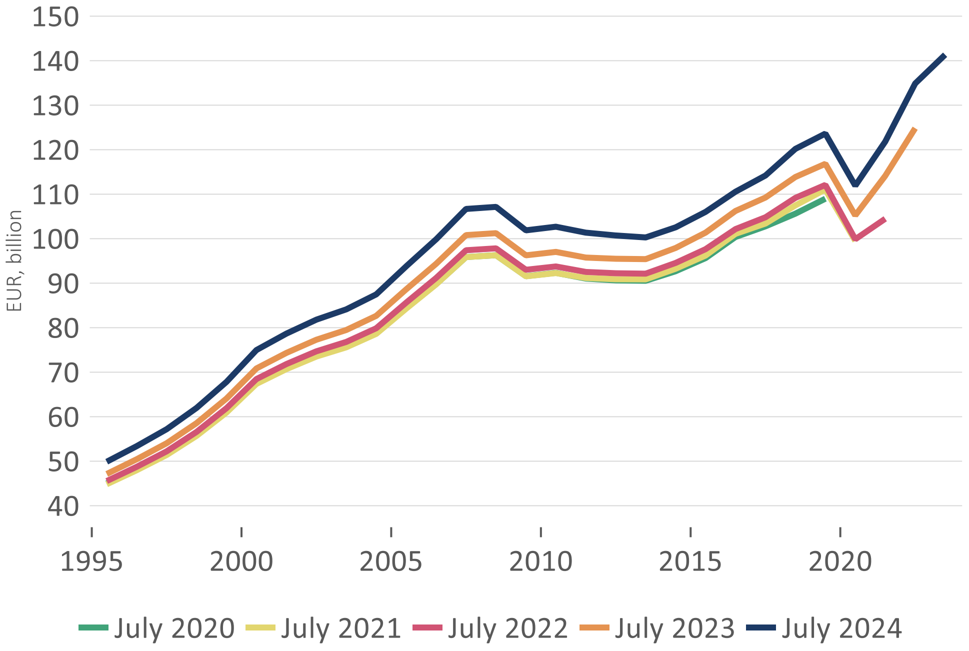
New data sources and major methodological changes have meant big upward benchmark revisions

Modified GNI has moved up significantly, with historical data revisions of ~20% for some years



Source: CSO

Consumption revisions notable in recent years, with 2022 seeing an upward move of c. €10bn in 2024 benchmark revision

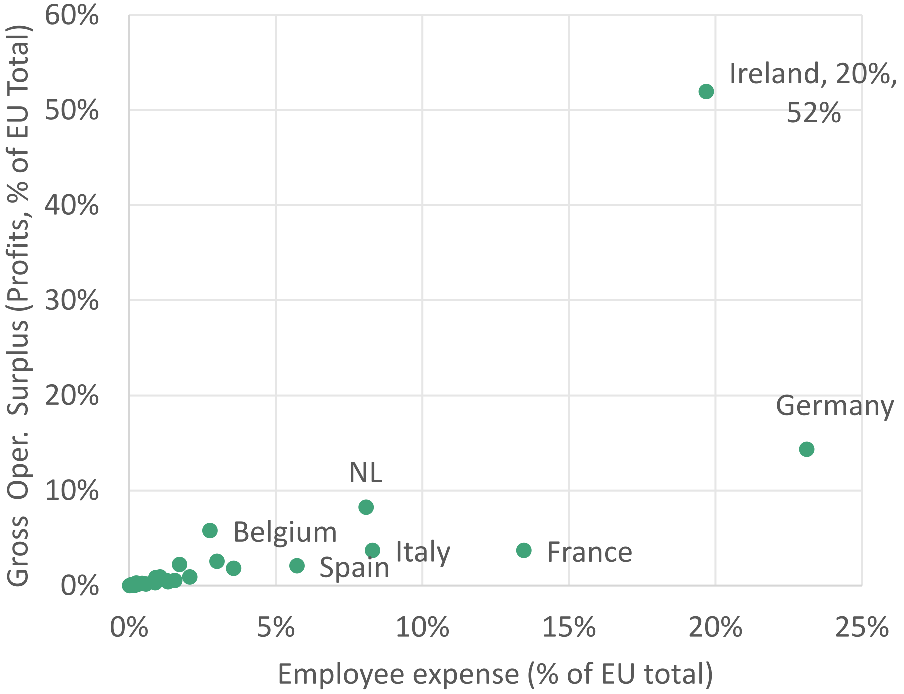


Source: CSO

Note: Legends d2024 was a Benchmark revision year for National Accounts purposes across EU Member States. Benchmark revisions are a coordinated major European revision carried out at least once every five years to incorporate new data sources and major changes in statistical methodology.

US companies in Europe

When US companies base themselves in EU, Ireland takes an outsized proportion



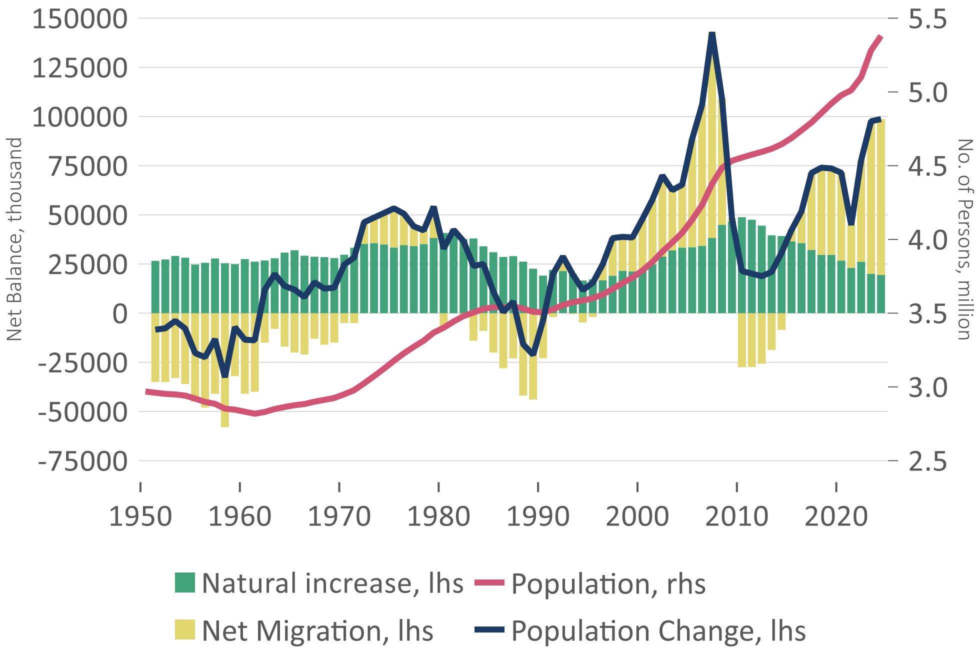
Company	Sector	Employees
Apple	ICT manufacturing	6,000
Microsoft	ICT Services	5,006
Google	ICT Services	4,832
Pfizer	Chemical & Pharma	5,000
Medtronic	Chemical & Pharma	4,000
Dell Ireland	ICT manufacturing	5,000
Meta	ICT Services	2,662
Cisco	ICT manufacturing	3,505
Merck	Chemical & Pharma	3,000
Citibank	Finance	2,900
Oracle	ICT Services	1,049
Analog Devices	ICT manufacturing	1,626
IBM	ICT manufacturing	1,283
Bank of America	Finance	2,548

Source: Eurostat; Irish times

Ireland's population helps growth potential

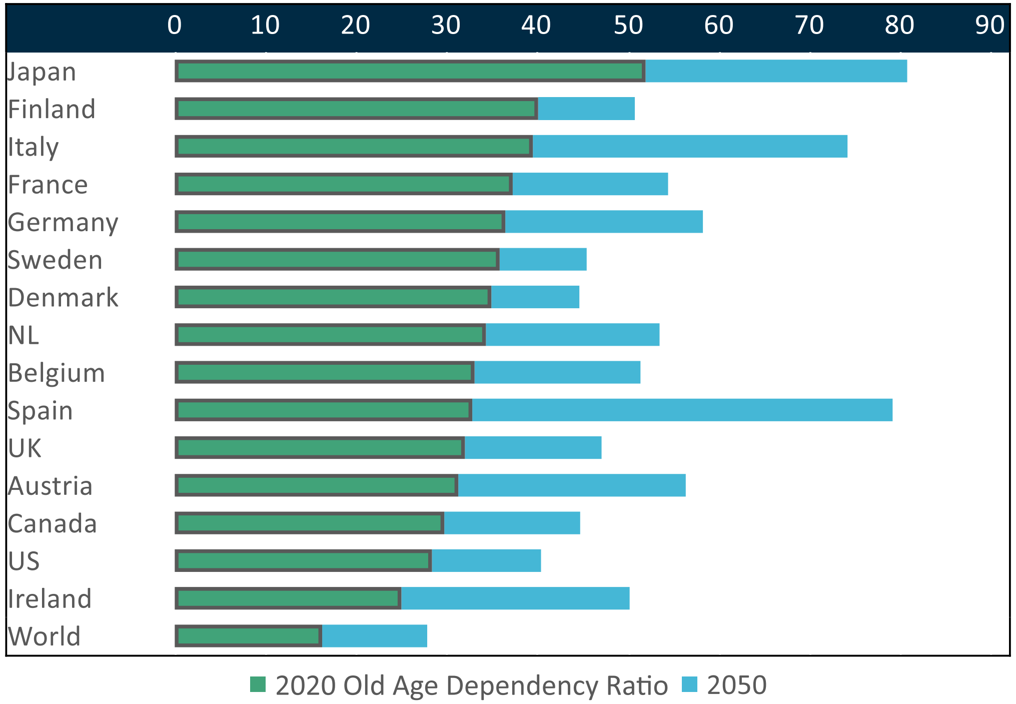
Age profile younger than the EU average but won't outrun aging demographics

Ireland's population at 5.4m in April 2024: Migration driving robust population growth



Source: CSO

Ireland's population will age rapidly in decades to come; to remain younger than most of its EA counterparts

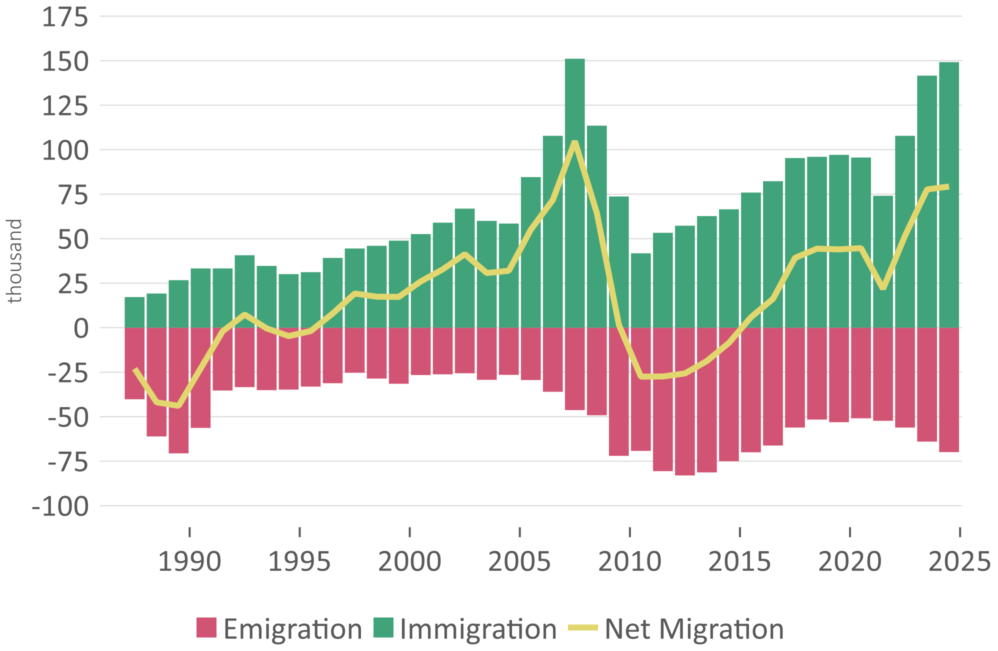


Source: UNDESA

Migration improves Ireland's human capital

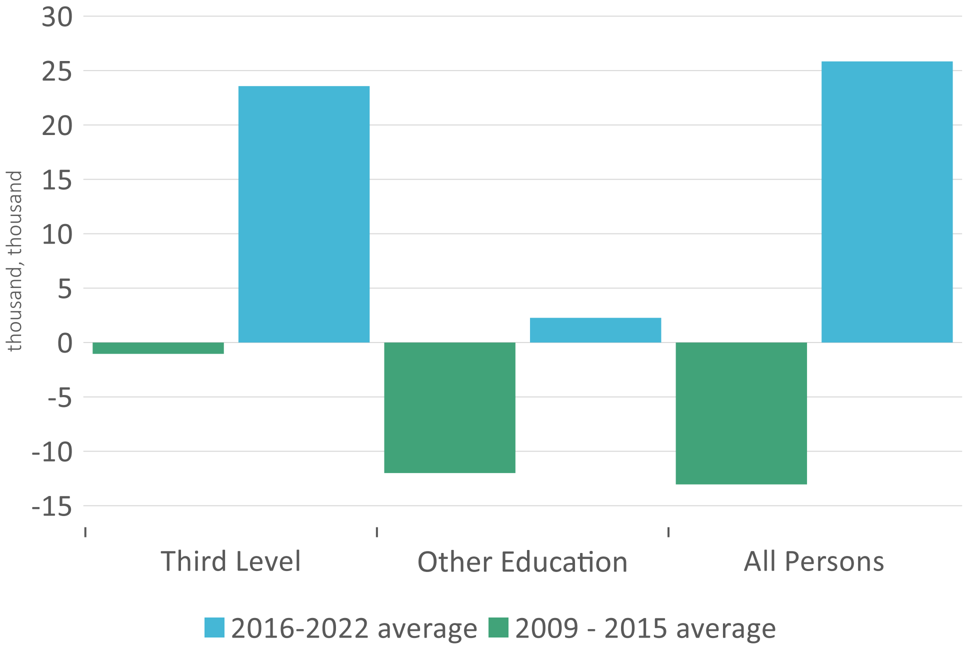
Ireland's net migration has swung back and forth on economic performance

Continued inward migration let to 98k increase (c. 2%) in last year – due to strong economy & UKR refugee efforts



Source: CSO

Migration inflow particularly strong in highly educated cohort – work in MNCs attractive

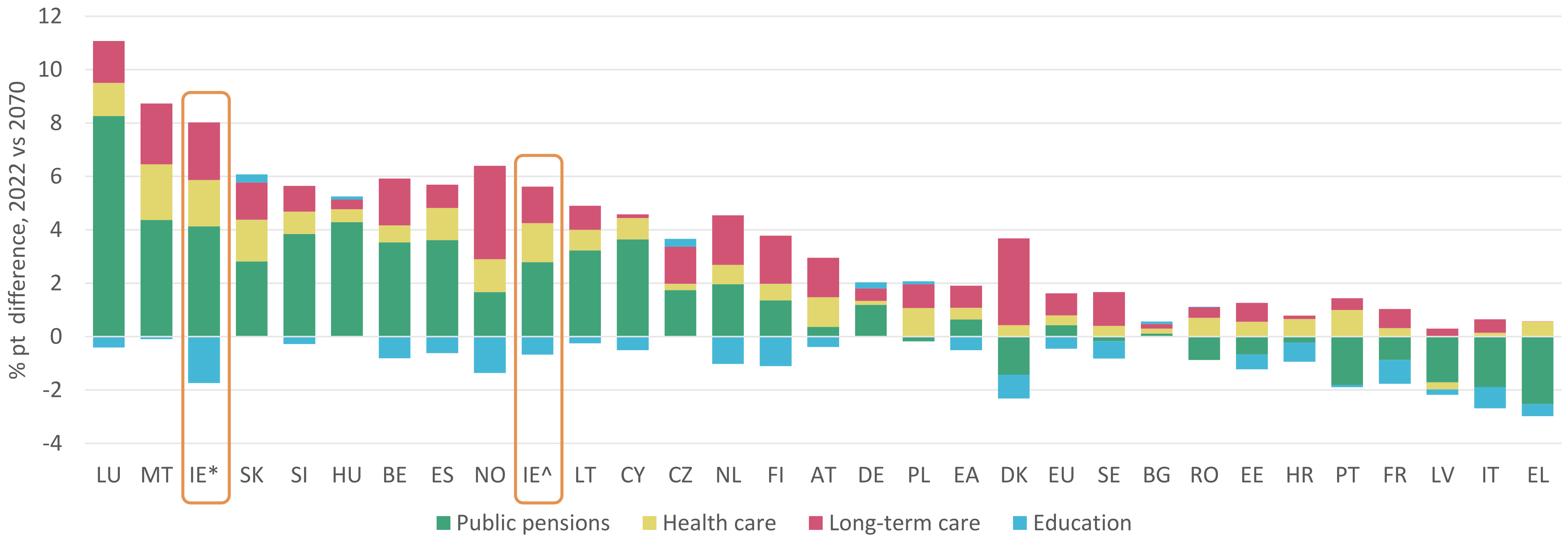


Source: CSO

Migration figures based on year to April

Total cost of ageing projected to increase

Increase largely driven by pensions, while education spending expected to decline



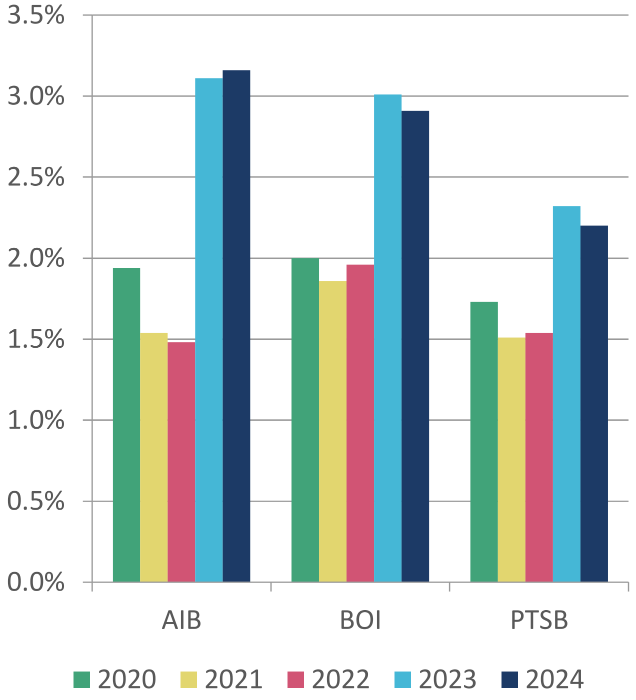
Source: 2024 Ageing Report. Economic and Budgetary Projections for the EU Member States (2022-2070) and NTMA calculations. Chart shows spending as a % of GDP/GNI*.

* denotes as a percent of GNI*, ^ as a percent of GDP.

Ireland’s Banking Sector Overview

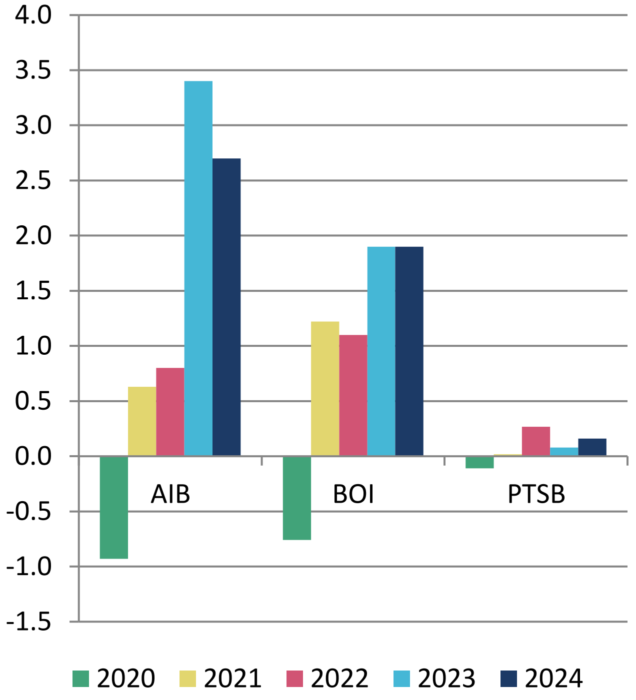
Profitable and well capitalised

Net Interest Margin – 2023 and 2024 saw rebound before ECB policy cuts



- Banking sector well capitalised with sufficient liquidity buffers
- Banks profitable as net interest margins helped by higher interest rate environment. ECB policy reversing this trend.
- The Irish Government has sold its share in BOI. This leaves just AIB and PTSB with government involvement.
- Further tranches of AIB and PTSB shares were sold in 2024/25. The Government owned 3.1% of AIB and 57% of PTSB as at May 2025.

Profit Before Tax (€bns) – margins helped by rates



Source: Annual reports of banks - BOI, AIB, PTSB

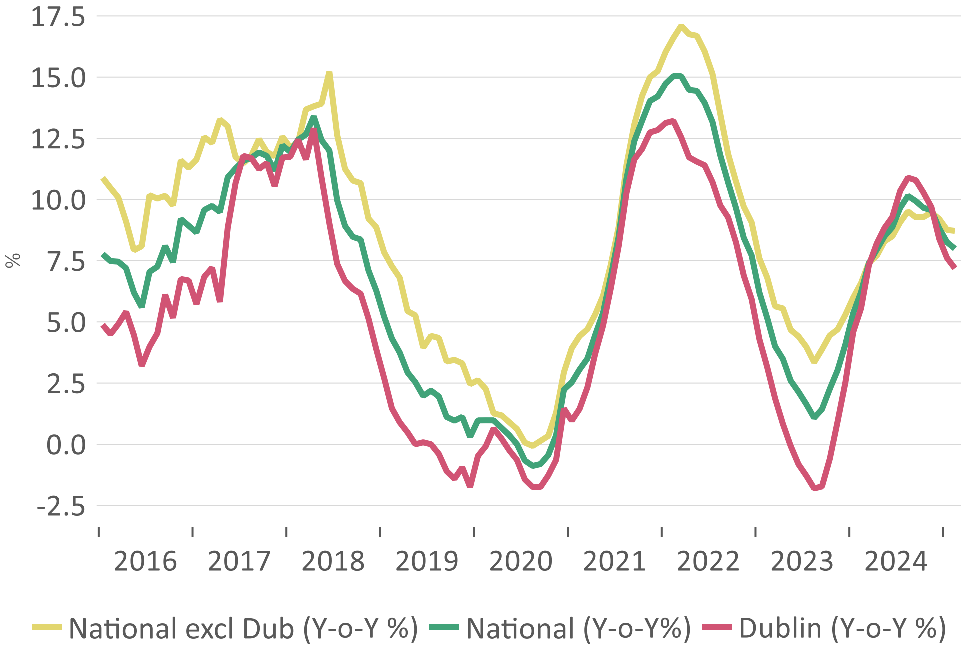
Housing

Demand/prices still elevated despite normalised interest rate environment and increased building costs

Prices up strongly in recent years

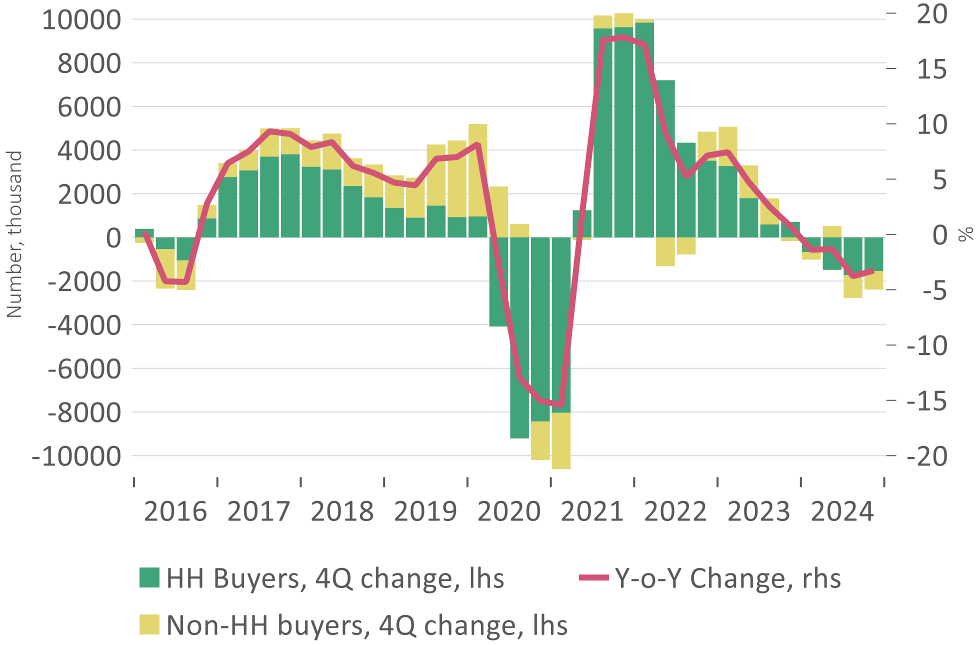
Supply hampered with some estimates have put housing needs at 50K p.a.

House prices up ~8% y-on-y. down from peak but still robust



Source: CSO

Transaction volumes have fallen on lower existing stock for sale as new homes completions in Q4 were down on 2023 Q4



Source: CSO

Note: Programme for Government sets out plan to build 300K by end 2030

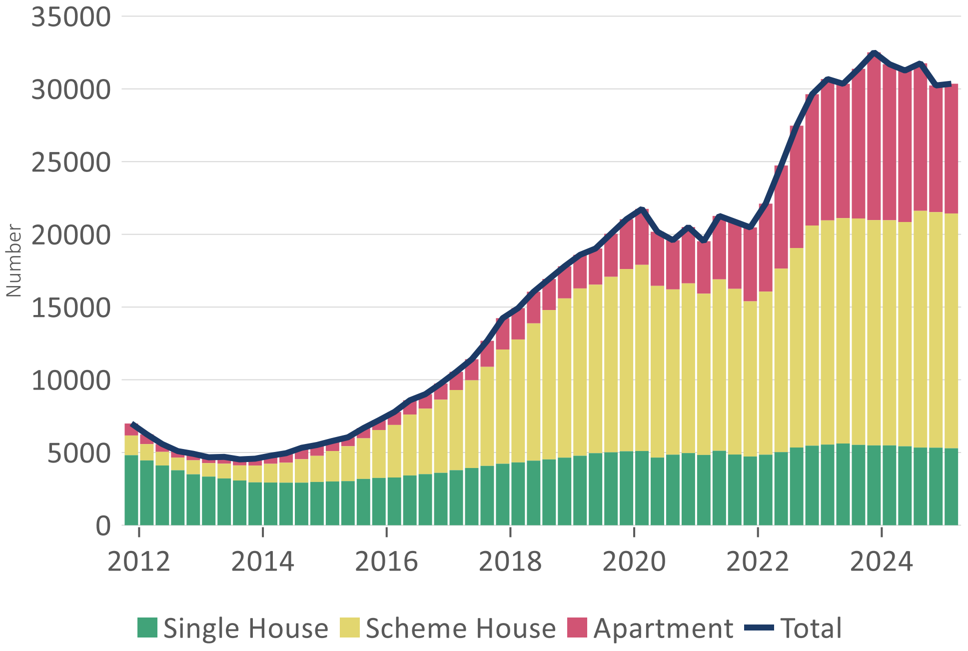
Supply of 30k units below goal of 50K+ per year

Recent starts data has not translated into completions

New Dwellings Completions* of 30K units in 2024, down on 2023 level;

Source: CSO, Irish Department of Housing, Planning & Local Government

Completions driven to 30K level by apartments, but apartments have fallen back recently (-24% y-o-y growth in 2024)



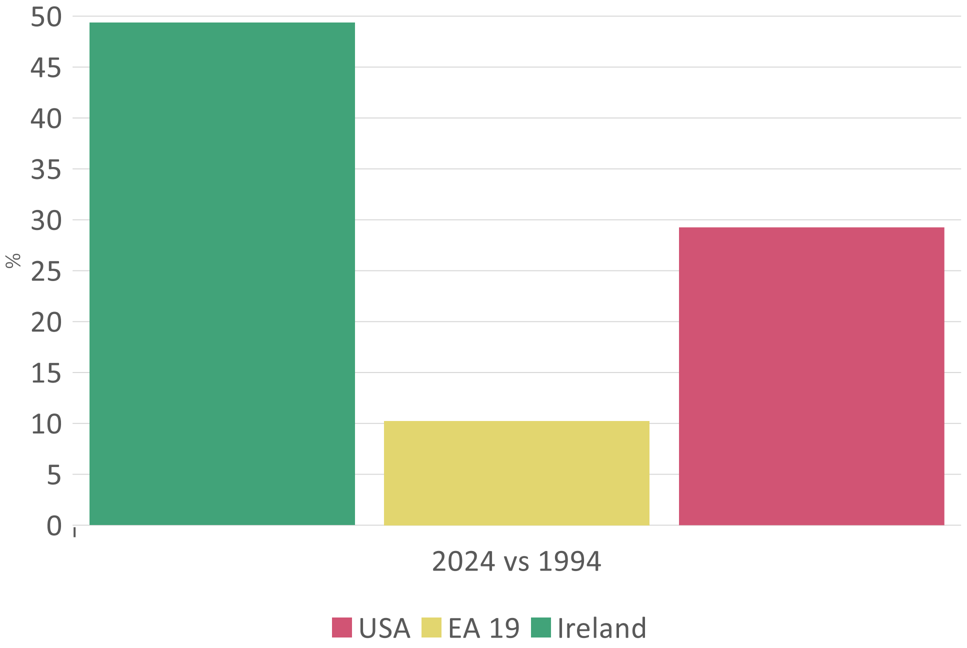
Source: CSO

* Housing completion derived from electrical grid connection data for a property. Reconnections of old houses overstate the annual run rate of new building (all connections in graph). Starts data in 2024 impacted by deadline related to waiver on development contributions and rebate on water charges

Demand is strong

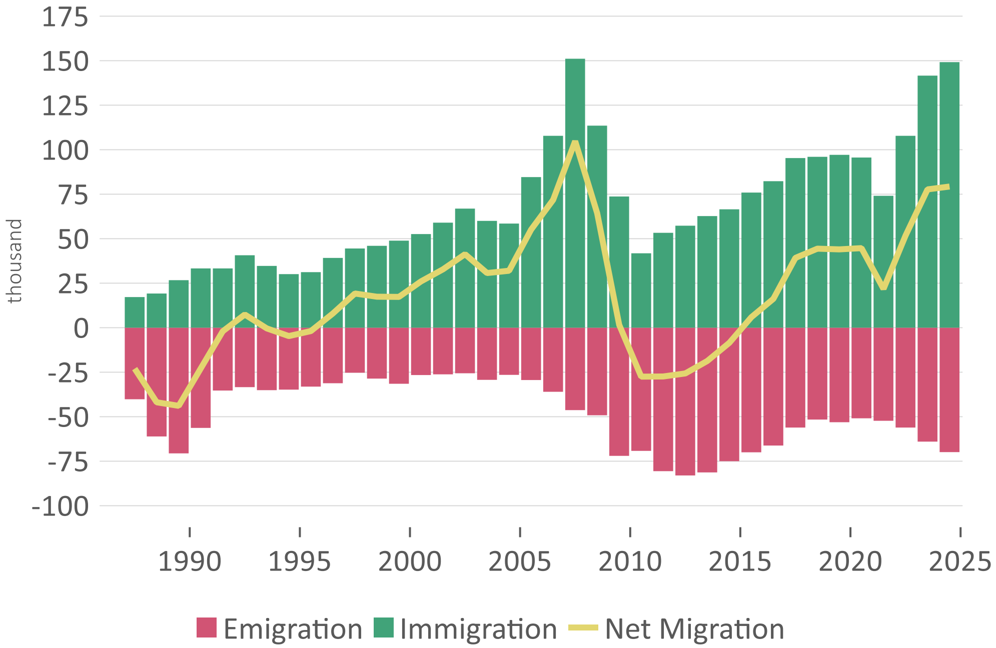
National population increase alongside net migration fuelling demand

Population has grown significantly for 30-40 years



Source: Eurostat, USCB

Increased net migration add demand for housing

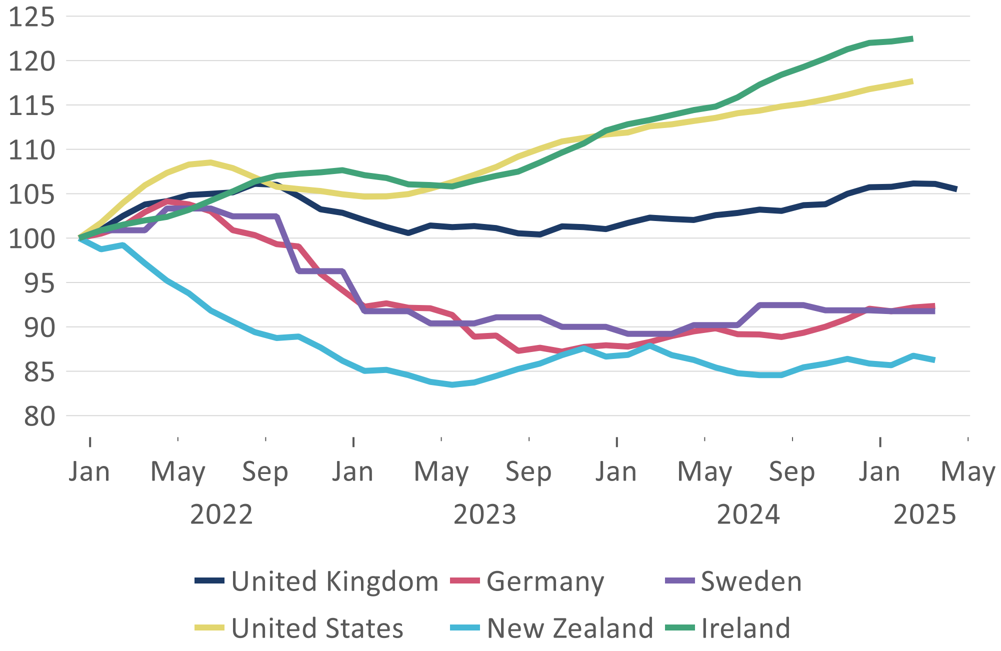


Source: CSO

House price strength versus other countries

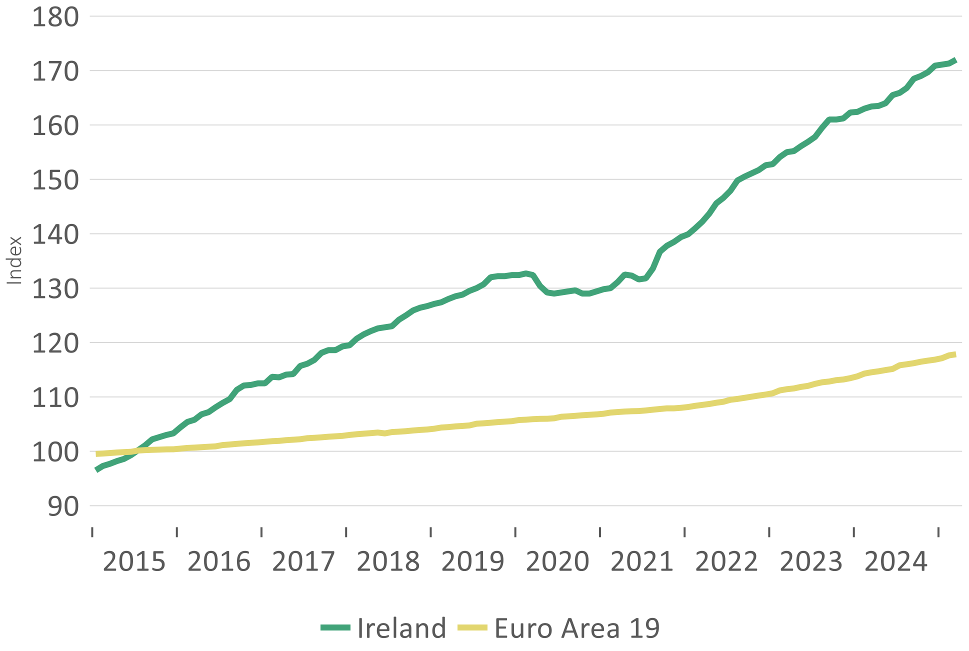
Demand has ensured prices and rents have increased

House prices have fallen in other countries, but Irish prices have remained elevated like US



Source: StatCan, CBS, Nationwide, S&P Global, Europace AG, Real Estate Norway (Eiendom Norge), REINZ, SCB, CSO, StatFin

Rent pressures remain strong with an annual rate of increase above 5% in 2024



Source: Eurostat

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