



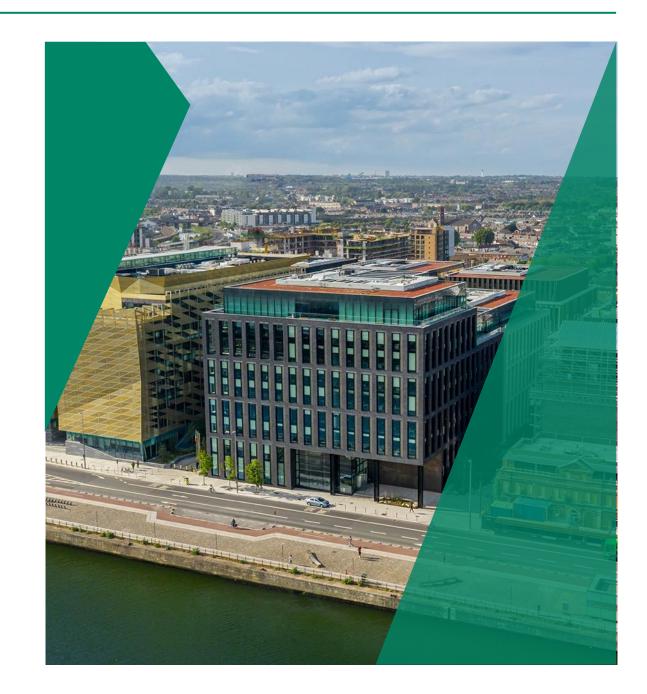
CONTENTS

- 03 Summary
- 08 Macro
- 28 Fiscal
- 40 NTMA Funding
- 50 ESG Sustainability
- 59 Structure of the Irish economy
- 68 Housing

Summary

Economic position is resilient

Global uncertainty could impact growth in Ireland

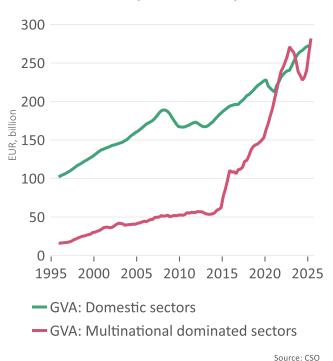




Real economic growth in H1 close to 4%

Labour market strength withstanding external headwinds so far

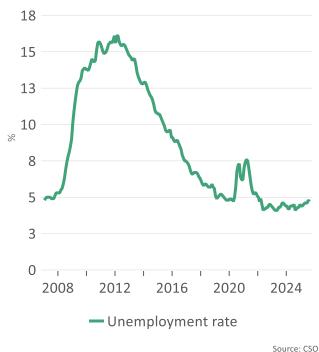
Strong value added from ICT & pharma but MNC volatility can distort picture



MDD gives better picture of growth: large spike in H1 GDP will reverse



Unemployment rate below 5% - full employment for three years



^{*} 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

Two long-term saving funds established – FIF/ICNF with c. €16bn AUM expected at end-2025

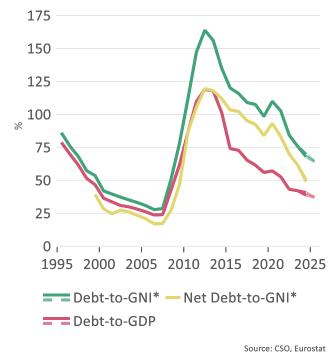
Forecasted GG surplus in 2025, similar to 2023 & 2024 (excl. CJEU)



Debt metrics continue to trend in positive direction



Debt to GNI* falling; net debt falling as well as govt. assets increasing



[^] 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 due to the outsized impact that the multinational sector has on national accounts data.



External environment - heightened uncertainty

Potential downside risks to strong growth outlook

Growth

Labour market strength in H1
2025 underpins consumption.
Healthy domestic balance
sheets, lower inflation likely to
help also.

Slower global growth is a potential headwind. In short term, impact from tariff imposition will come into play.

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 via strong tax receipts.

€16.5bn in new funds, after this year's transfers are 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

€6.75bn issued so far; cash balance is elevated but expected to fall

Cash

Ireland in strong cash position - cash balance was €34bn at end 2024. It is expected to fall by end-2025.

On General Government basis, EDP Assets were c. €60bn at end 2024.

WAM

Weighted average maturity of debt one of longest in Europe.

NTMA issuance since start of 2023 of €19.75bn at WAM of 16.7 years and average interest rate of 3.0%.

AA

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

S&P is at AA (positive). Fitch and DBRS are at AA also while Moody's remains at Aa3 but with a positive outlook.

Macro

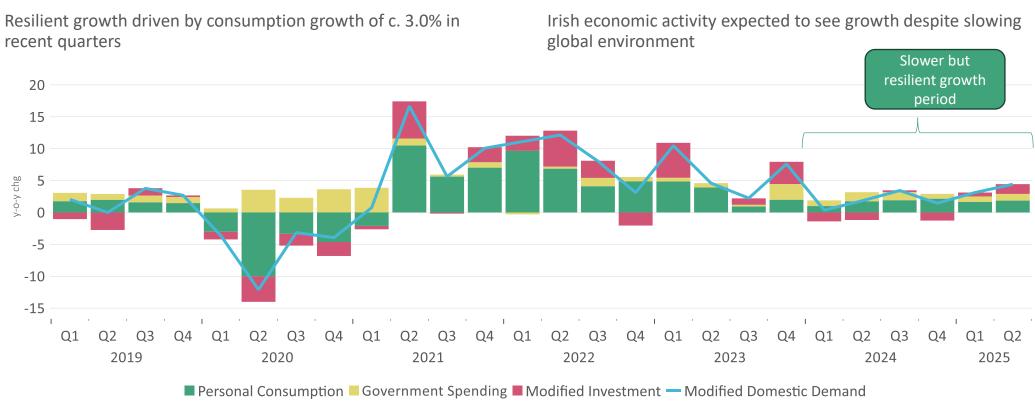
Growth has been resilient in H1 2025, tariff impact expected in coming years





Irish economic growth continues in 2025

Modified Domestic Demand: our preferred measure increased by 3.8% In H1 (versus H1 2024)



Source: CSO

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.



High frequency data

Consumer confidence & PMI hit while unemployment revised up, retail sales giving positive signal

	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	5/25	6/25	7/25	8/25
Unemployment rate	4.4	4.6	4.6	4.5	4.4	4.4	4.2	4.2	4.4	4.4	4.4	4.5	4.1	4.2	4.3	4.3	4.5	4.4	4.4	4.5	4.6	4.6	4.6	4.8	4.7
Headline HICP*	2.9	3.0	1.6	0.5	1.2	0.7	0.3	-0.3	-0.4	0.0	-0.5	-0.5	-0.9	-2.0	-1.9	-1.5	-1.0	-0.3	-0.6	-0.2	0.0	-0.6	-0.4	-0.4	-0.1
Core HICP	2.8	2.5	2.6	2.1	2.3	1.8	1.2	0.9	0.6	0.5	0.3	0.3	0.3	-0.3	-0.3	-0.5	-0.4	0.2	0.0	0.1	0.5	-0.2	0.0	-0.3	-0.1
Payroll employees	2.8	2.5	2.6	2.2	2.2	2.5	2.5	2.5	2.3	2.8	2.5	2.6	3.0	1.7	2.3	2.8	2.7	2.7	2.2	2.1	2.5	2.7	2.1	2.0	
Job posting wage growth	3.7	3.8	3.5	3.4	3.3	3.6	3.8	4.1	4.0	4.2	4.4	4.8	4.8	4.7	4.8	4.8	4.8	4.6	4.4	4.1	4.3	4.4	4.5	3.9	4.0
Traditional sector ind. prod.	6.5	6.3	-3.5	1.7	18.7	6.7	12.6	7.6	8.7	-1.3	2.0	1.4	-0.5	5.6	10.4	-2.1	4.0	-3.7	-7.6	0.2	2.4	-0.2	0.5	-0.1	
Retail sales (ex. motor)	2.8	0.6	-1.5	2.7	1.4	-0.9	-0.7	1.9	-0.5	-0.1	-1.5	1.2	-1.4	1.3	1.3	1.3	2.4	-1.4	2.4	1.0	2.3	2.0	4.3	3.1	
Card spending	6.8	10.0	30.3	27.9	26.9	28.7	31.8	12.3	15.9	10.4	7.2	13.1	11.4	13.4	10.4	9.6	13.8	9.2	8.0	13.7	10.8	9.4	15.1	9.5	
Tax revenue (ex. CT)	0.9	3.3	4.8	4.6	5.9	4.3	7.5	9.2	7.9	8.7	6.6	7.0	8.0	5.5	13.5	9.8	6.4	10.9	8.9	7.4	6.4	6.5	5.4	3.7	4.5
Housing price inflation	1.1	1.4	2.3	3.0	4.1	5.4	6.2	7.4	7.9	8.5	8.9	9.7	10.1	9.9	9.7	9.6	8.9	8.3	7.9	7.6	7.6	7.8	7.9	7.5	
Composite PMI	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	54.9	52.8	52.5	51.3
Consumer sentiment	62.2	58.8	60.4	61.9	62.4	74.2	70.2	69.5	67.8	65.7	70.5	74.9	72.1	71.9	74.1	74.1	73.9	74.9	74.8	67.5	58.7	60.8	62.5	59.1	61.1

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

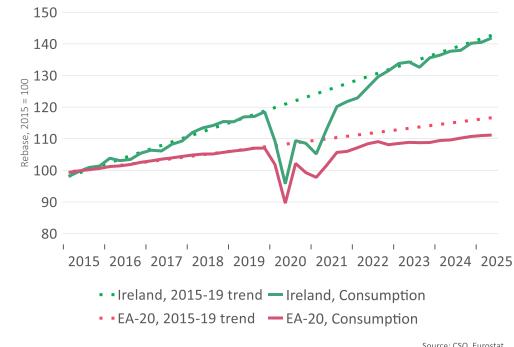
^{*} HICP figures are deviation from 2% target. Note: HICP measures, payroll employees, wages, industrial production, retail sales, card spending and housing price inflation are y-o-y growth rates. Tax revenue ex CT is y-o-y growth of monthly tax revenue excluding corporation tax and has a two-month moving average to smooth out VAT payments; November includes income tax for those who are self-employed.



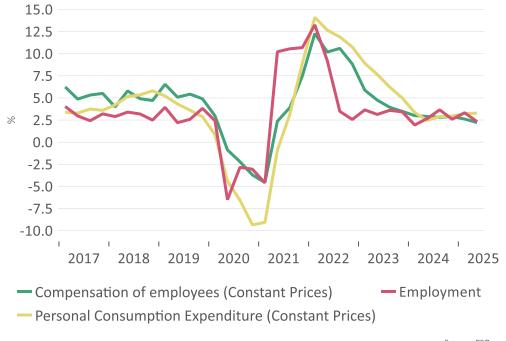
Real spending main driver of economy

Consumption strong over last several years

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



Growth in employment has underpinned wage bill and consumption growth



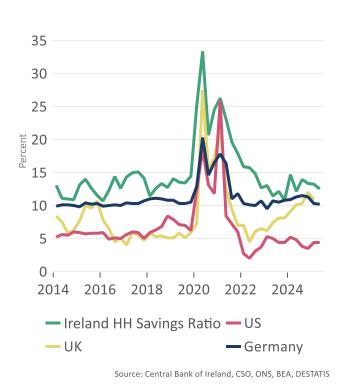
Source: CSO, Eurostat



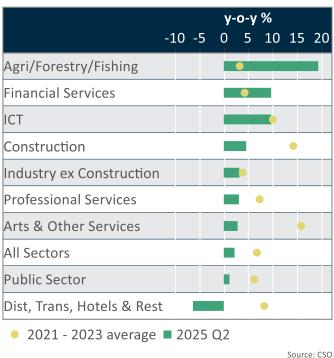
Basis for household consumption growth

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

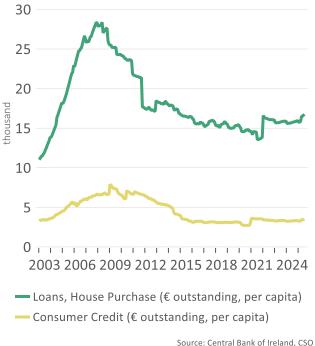
Large built up savings added to by high savings ratio



Income growth: Real compensation of employee growth still healthy



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



Source: CSO, Central Bank of Ireland

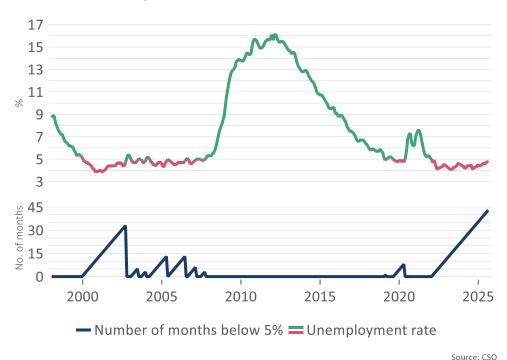
12



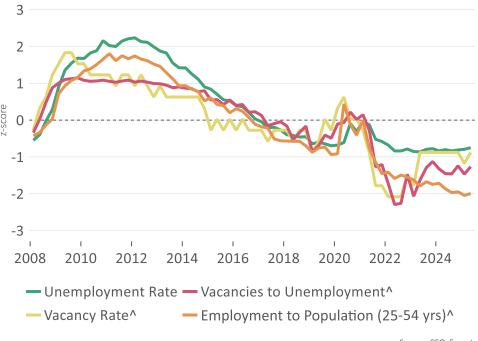
Labour market remains strong

Unemployment rate low despite measurement volatility

Unemployment rate at 4.7% in August – has been below 5% for more than three years



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



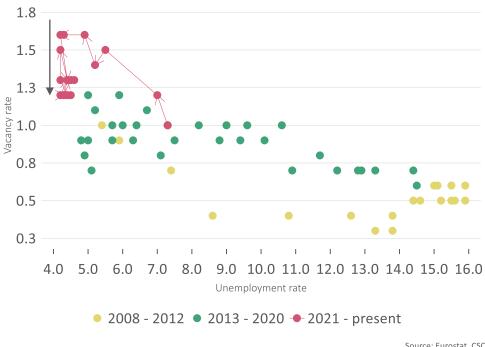
Source: CSO, Eurostat



Labour market tightness has eased

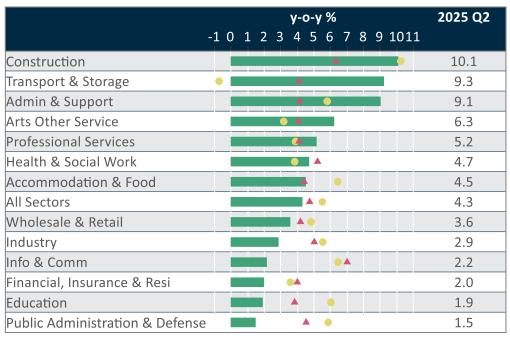
Wages are outstripping inflation currently

Beveridge curve suggests labour market is still tight but loosened slightly in recent years



Source: Eurostat, CSO

Latest wage data showing real wage growth has returned as inflation has been stymied – average hourly earnings



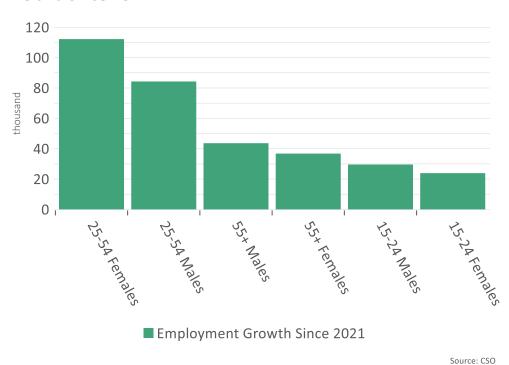
■ 2025 Q2 • 1 year ago ▲ 3 year average



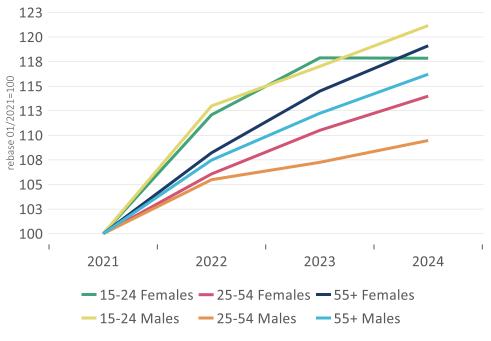
Employment growth broad-based

Participation rates up across the board

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



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

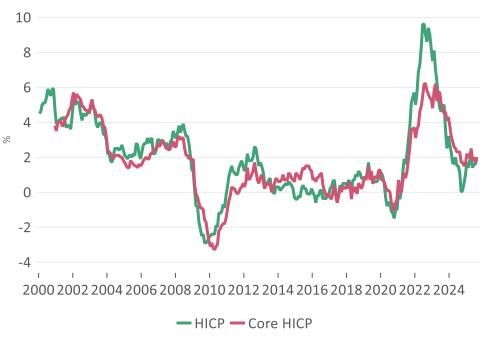




Harmonised inflation close to target

Recent prints close to target

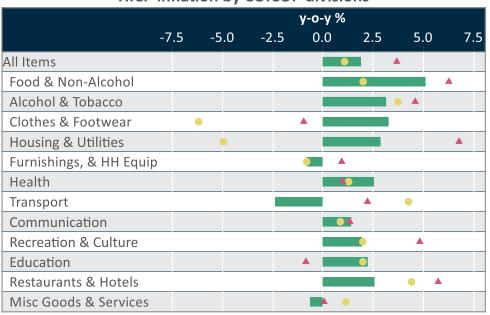
Both headline and core inflation around 2%



Source: CSO, Eurostat

Most elements in HICP are between 0-2% in August data; food & non-alcohol an outlier

HICP inflation by COICOP divisions



■ August 2025 • 1 year ago ▲ 3 year average



Overview: Ireland's trading partners

2024 Exports amounted to €700bn; €224bn goods; €483bn services

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

% of	Go	ods	Servi	ces	Total				
total	20	23	202	3	2023				
	Exports	Imports	Exports	Imports	Exports	Imports			
US	28	16	13	48	18	40			
UK	11	19	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.

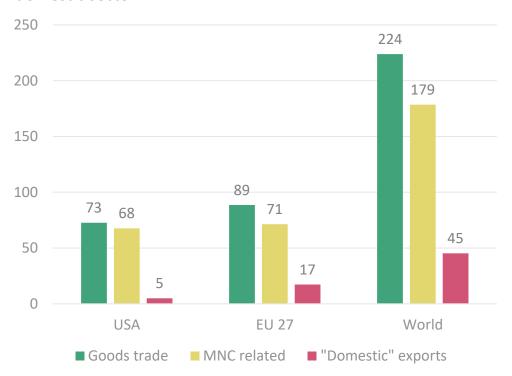


18

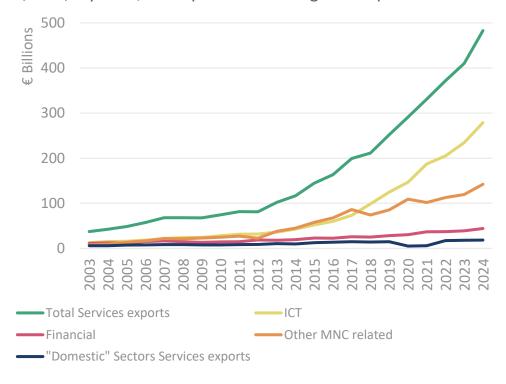
Exports by goods and services

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



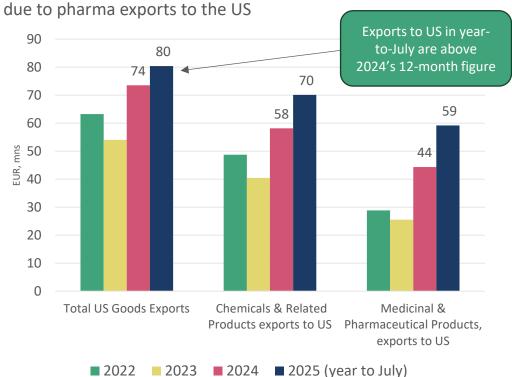
Source: CSO (includes 2024 data)



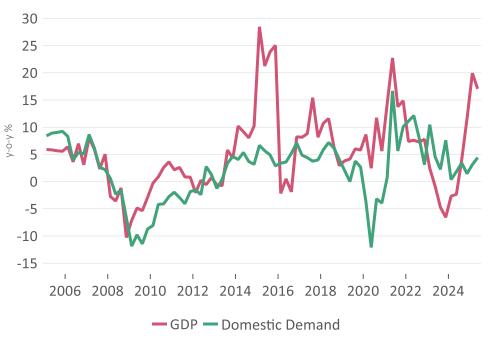
Frontloaded movement of exports in H1 2025

Q1 data show exceptional y-o-y growth

Total goods exports shot up at beginning of year, in large part



GDP in Q1 grew 20% on back of increase in exports, level was maintained in Q2

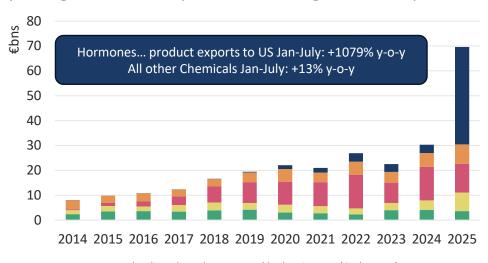




Type of pharma products exported shifts in 2025

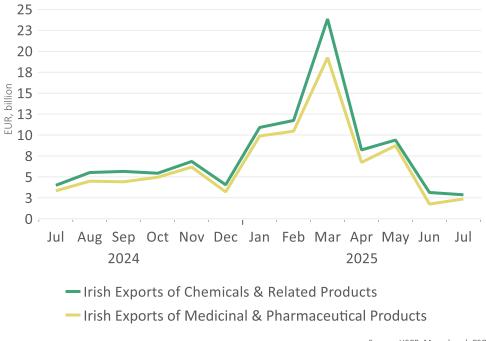
Frontloading trend alongside emergence of hormones product exports

Detailed trade data shows that much of 2025 increase is driven by strength in hormone products, differing from other years



- Hormones, prostaglandins, thromboxanes and leukotrienes... (Code 5415)
- Medicaments (Code 5429)
- Other heterocyclic compounds; nucleic acids (Code 5157)
- Glycosides; glands or other organs and their extracts; antisera, vaccines... (Code 5416)
- Other Chemical Products (rest of SITC code 5)

The jump in Irish exports to US has slowed since May



Source: USCB, Macrobond, CSO



Tariffs to impact Irish economy

EU-US trade deal results in a higher average tariff but gives clarity

- Outline of EU-US trade deal from Irish perspective
 - EU goods entering the U.S. subject to a 15% baseline tariff.
 - The 15% tariff is the maximum tariff and is not additive to existing rates.
 - An array of products are exempt, with some chemicals and some agricultural goods important for Irish exports
 - The EU stated that the 15% ceiling will apply to any potential future tariffs on pharmaceuticals including those based on Section 232. Until the US decides on whether to impose additional tariffs on these products pursuant to Section 232, they will remain subject only to US MEN tariffs.

The tariff impact of this scale will depend on the finer details. As such exact impact is uncertain but likely similar to analysis by DoF/ESRI.

- The recent SES 2025 acknowledges that;
 - Long-standing economic and trading relationships are being tested.
 Any increase in the scale and/or scope of tariffs could have a potentially large adverse impact on the Irish economy and public finances;
 - While the headline budgetary position is in surplus, this is almost entirely due to a handful of large corporate taxpayers;
 - Thus, the longer-term impact may be larger/nuanced than econometric models can appropriately estimate.

ESRI/DOF paper models the impacts of various tariffs: One scenario - 10% tariffs imposed, similar to agreed deal

Table 1: Tariff Shock: 10% US Unilateral Tariff to Rest of World

	After 1 Year			After 4 Years			After '	7 Years	
	Perm.	Temp.		Perm.	Temp.		Perm.	Temp.	
Imports	-0.5	-0.3		-3.1	-1.8		-3.8	-1.5	
Exports	-0.4	-0.2		-2.5	-1.5		-3.4	-1.5	
Import Prices	0.7	0.6		-0.1	0.2		-1.1	-0.6	
Prices	0.4	0.3		0.1	0.3		-0.5	-0.1	
Disposable Income	-0.7	-0.5		-1.2	-0.6		-0.7	0.2	
Consumption	-0.4	-0.3		-1.8	-0.8		-1.6	-0.2	
Production (Traded)	-0.4	-0.2		-2.2	-1.3		-3.0	-1.3	
Production (Domestic)	-0.2	-0.1		-1.4	-0.7		-1.5	-0.3	
Investment (Traded)	-0.5	-0.3		-2.6	-1.6		-3.5	-1.4	
Investment (Domestic)	0.1	0.1		-1.8	-1.0		-2.8	-1.2	
Employment	-0.1	-0.1		-1.6	-1.2		-2.2	-1.4	
GDP	-0.3	-0.2		-1.9	-1.1		-2.5	-1.1	
MDD	-0.2	-0.1		-1.	-0.6		-1.3	-0.5	
Government Debt	0.1	0.0		0.7	0.3		1.1	0.4	

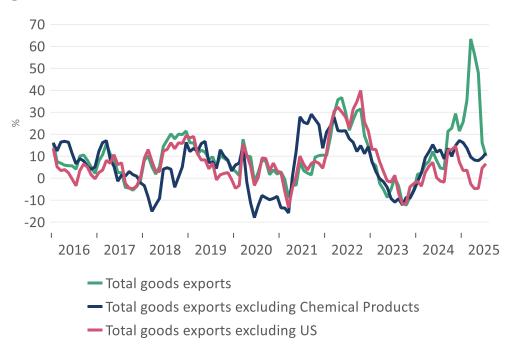
Source: ESRI https://www.esri.ie/system/files/publications/WP798 1.pdf



Exports excluding US seeing more modest growth

Goods exports outside of US trade is growing ~5% y-o-y recently

Stripping out the recent US exports impact reveals more modest growth



More domestic focused measures of exports are growing

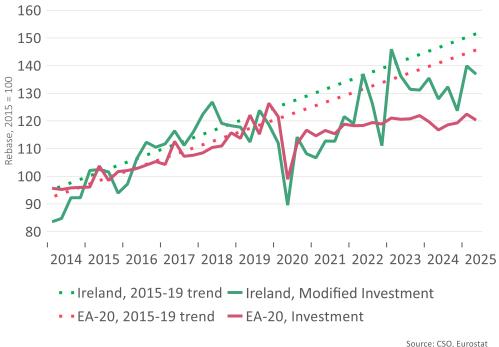




Investment weakness in recent years

Interest rate environment has slowed investment below pre-pandemic trend

Modified investment down by 4.2%% in 2024 after strong 2023. Volatility in investment data is apparent



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



tat Source: CSO



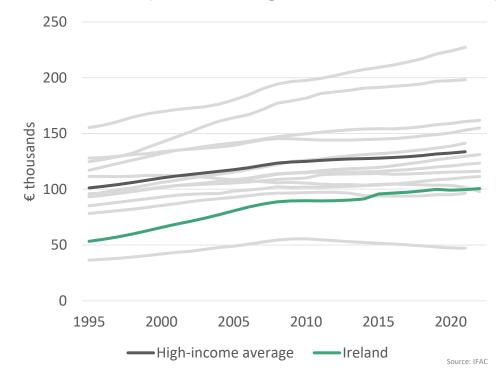
Continued need for infrastructure investment

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



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

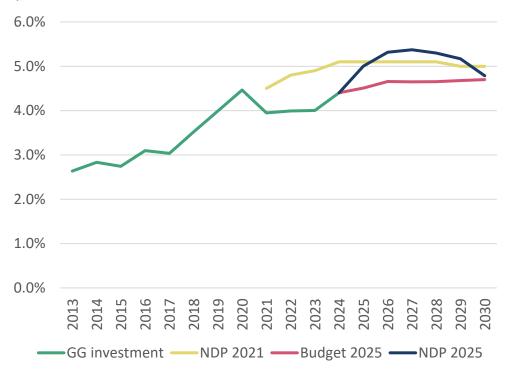




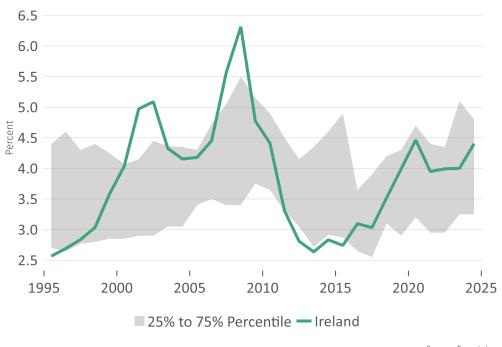
Government's National Development Plan (NDP)

NDP 2025 sets out the public capital expenditure plan to help close infrastructure gap

NDP is a step up on Budget 2025 plan; aims for 5% of GNI* in public investment



GG Investment as percentage of GDP/GNI* - Ireland above average in EU in recent years



Source: Eurostat



Uncertainty surrounding global corporate tax reform

Pillar Two implemented in EU in 2024; G7 agreement points to "side-by-side" system

OECD 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 would 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.

OCED 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 implemented the 15% rate from 2024.
- US administration has raised issues about the Undertaxed Profits Rule (UTPR) element of Pillar II. Recent G7 agreement outlines a "side-by-side" system of US and OECD tax legislation to tackle profit shifting. The system could fully exclude U.S. parented groups from the UTPR (and the IIR) in respect of both their domestic and foreign profits.
- Work is ongoing at a global level in bringing this agreement to implementation. A key focus will be ensuring firms are put on a level playing field globally.

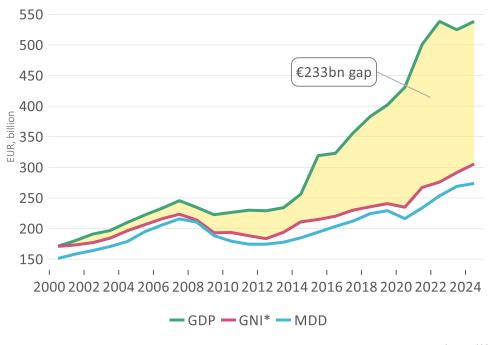
^{*} Excess profit is defined as a group profit in excess of 10% of its revenue



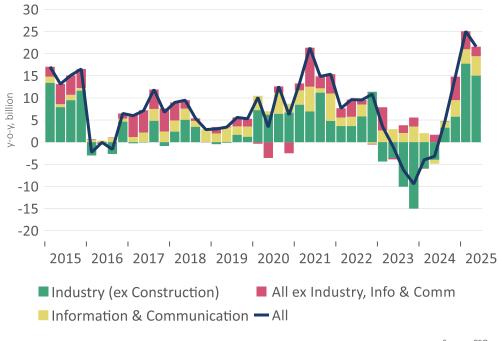
Real GDP grew by 18.5% in H1 2025

GDP isn't a reliable metric for Ireland; growth rate has been volatile due to Industry sector

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



Real GVA/GDP rebounded in H1 largely due to pick-up in Industry with some help from Information and Communication (ICT)



Source: CSO

Fiscal

2025 surplus expected

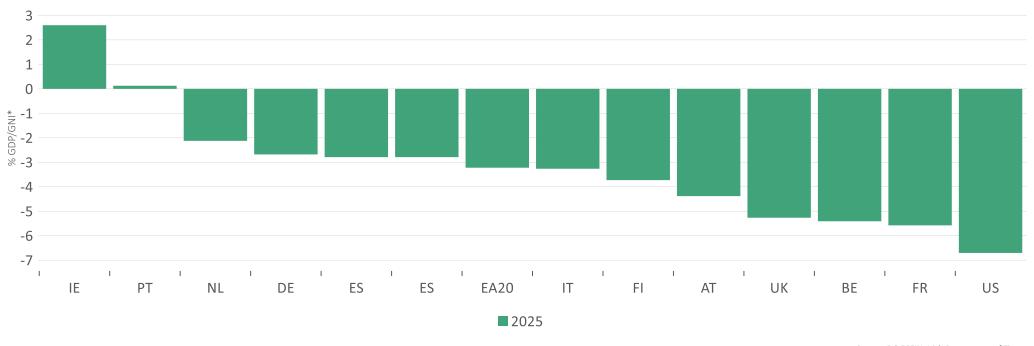
Sovereign Funds AUM to be €16.5bn at end 2025





Surplus expected in 2025

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



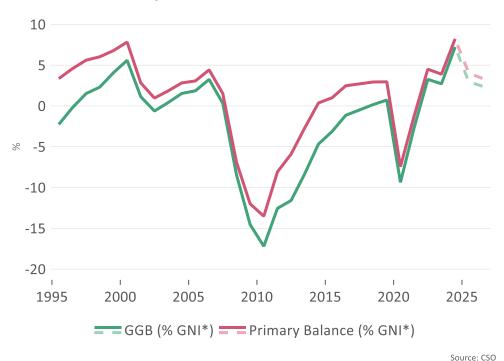
Source: DG ECFIN, Irish Department of Finance



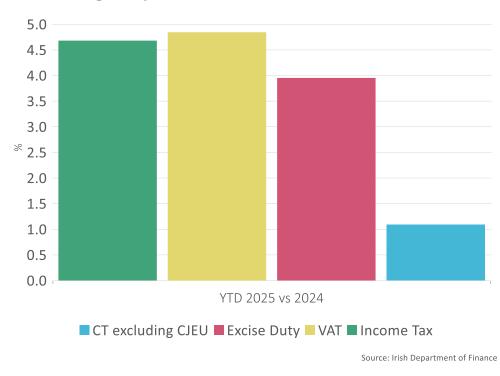
Fiscal surplus in Ireland – €9bn in 2024 (excl. CJEU case)

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

GG surplus expected in 2025 but will be significantly smaller than 2024 GGB surplus which included CJEU case one off



H1 2025 saw jump in CT but fell back in August. CT is expected to be strong into year end however



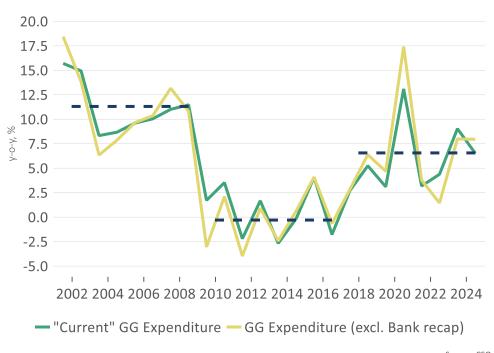
LHS chart: GG and primary balance numbers used exclude banking recapitalisations during GFC. For General Government statistics, the €14.1bn Apple case proceeds was recognised immediately in 2024. RHS chart: Expenditure is Total Gross Voted Expenditure



Expenditure growth remains high

Latest forecasts expect spending growth to be above 5%

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



Ireland's capital expenditure growth (GFCF) has been more procyclical than EU average (in yellow), hence ICNF introduction



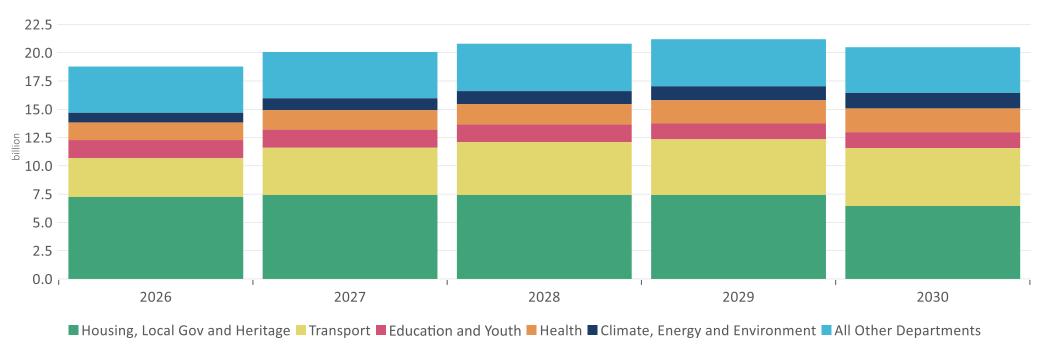
Source: CSO

Source: Eurostat



NDP 2025 make policy aims clear

Out to 2030, housing and transport account for more than half of capital spending allocations



Source: National Development Plan Review 2025

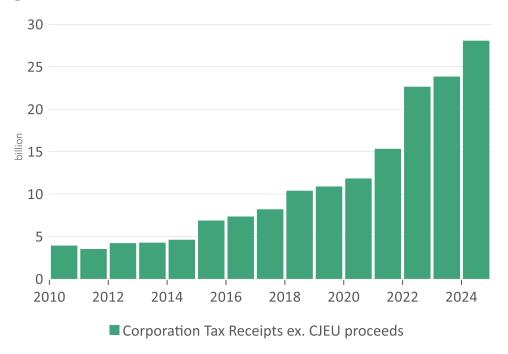
^{&#}x27;All Other Departments' includes Further and Higher Education; Culture, Communications and Sport; Enterprise, Tourism and Employment; Public Expenditure and Reform; Justice, Home Affairs and Migration; Agriculture, Food and the Marine; Defence; Rural and Community Development and the Gaeltacht; Children, Disability and Equality; Foreign Affairs and Trade; Finance; and Social Protection



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 – expectations are CT revenue to grow close to €30bn in 2025



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



Source: Irish Department of Finance

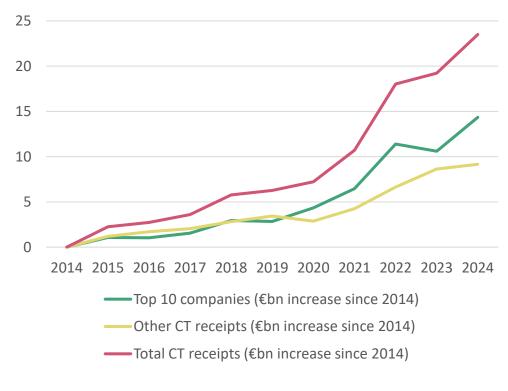


Multinationals at core of CT payments

Tech sector CT jumped by 50% in 2024 with Manufacturing a top driver in Corporate Tax also

CT paid (€m)	2024	vs. 2023
ICT (tech sector services)	6,223	+2,093
Manufacture of Computers	4,284	+36
Chemical and Pharma manufacturing	4,088	+204
Fin and Insurance	4,026	+434
Wholesale, retail	3,685	+985
Admin and Support	1,910	+301
Other Manufacturing*	1,119	+179
Prof, Sci, Tech	937	+92
Construction	643	+99
Mining, Quarry, Utilities	295	-26
Other	904	-124





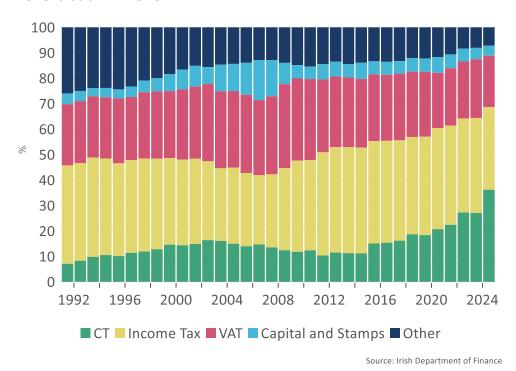
Source: Revenue Report 2025. * Manufacturing figures are broken out into Chemical and pharma manufacturing, Manufacture of Computers and other Manufacturing



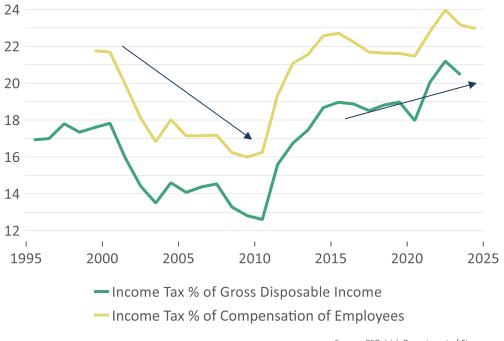
Corporate tax – critical revenue source

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

CT accounts for 36% of tax receipts including CJEU ruling; will revert back in 2025



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 excess CT risk; c. €16bn AUM expected across two funds by end 2025

Future Ireland Fund (FIF)

- 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.
- 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 approx. €8.5bn.
- 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)

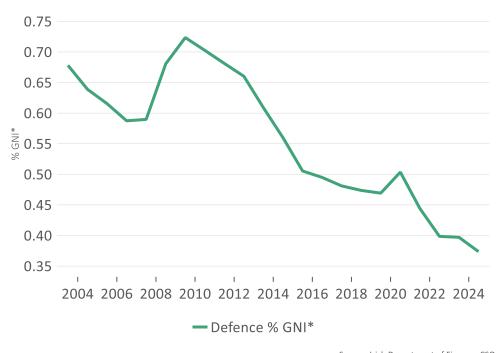
- The ICNF's mandate is to help the state meet its considerable infrastructure and green climate needs.
- In the past, Ireland has cut capital investment in downturns. This fund will act as a reserve to be drawn on for capital expenditure if a downturn arises.
- To start the fund off, the remaining €2bn 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.



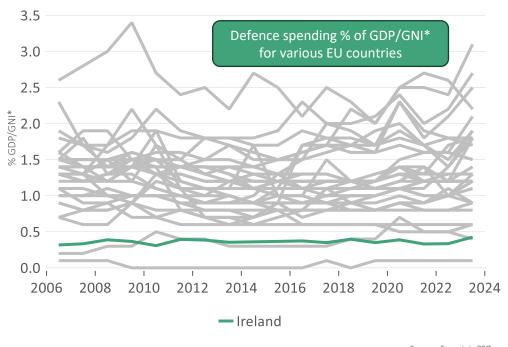
Ireland's limited defence spending

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

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



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



Source: Irish Department of Finance, CSO

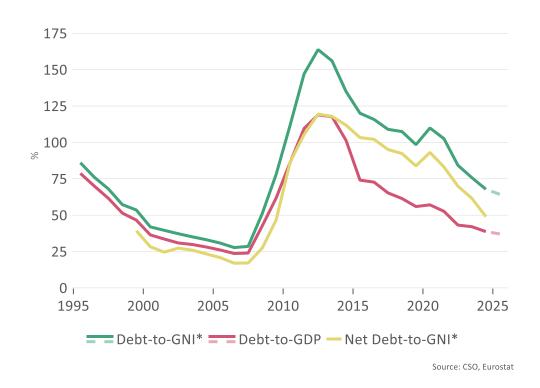
Source: Eurostat, CSO



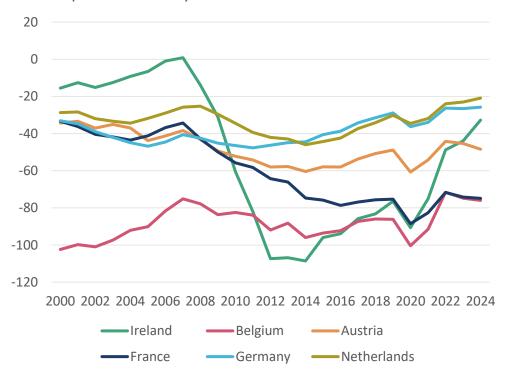
Debt to GNI* at 68% in 2024

Net debt as % of GNI* at 49% as surpluses and CJEU case increase financial assets held by State

Debt to GNI* at 68% in 2024 and forecasted at 65% in 2025



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

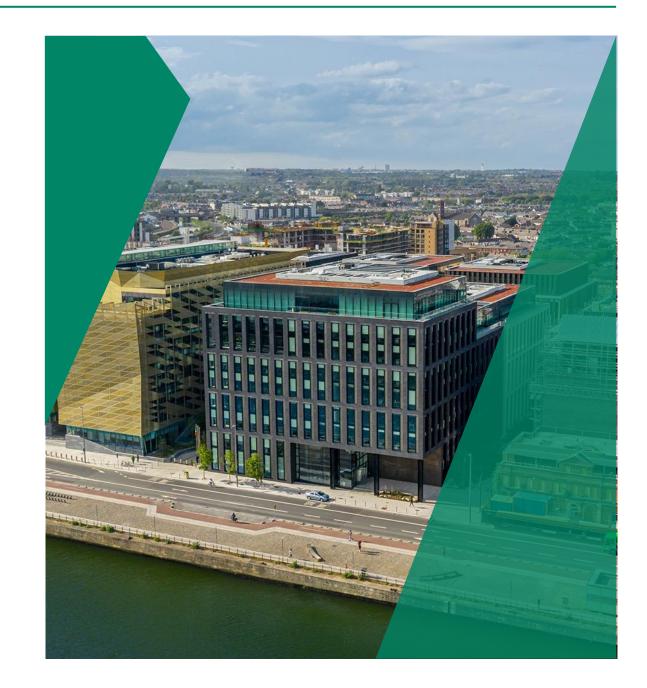
2025

	GG debt to GDP %	GG debt to GG revenue %	GG interest to GG revenue %
Greece	147	304	6.5
Italy	137	287	8.2
France	116	223	4.7
Belgium	107	214	4.8
UK	103	247	7.4
Spain	101	236	6.0
Portugal	92	208	4.9
EA 19	90	192	4.3
Austria	84	162	3.3
EU 27	83.2	180	4.3
Ireland	38 (65 GNI*)	153	2.4
Slovenia	65	141	2.7
Germany	64	134	2.3
Slovakia	61	139	3.6
Cyprus	58	130	2.7
Netherlands	45	107	1.8

Source: DG ECFIN, Irish Department of Finance

NTMA Funding

2025 funding range €6bn - €10bn





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

€6.75bn issued so far; cash balance is elevated but expected to fall

Cash

Ireland in strong cash position - cash balance was €34bn at end 2024. It is expected to fall by end-2025.

On General Government basis, EDP Assets were c. €60bn at end 2024.

WAM

Weighted average maturity of debt one of longest in Europe.

NTMA issuance since start of 2023 of €19.75bn at WAM of 16.7 years and average interest rate of 3.0%.

AA

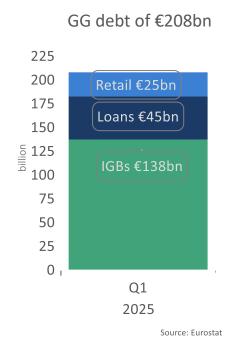
Ireland rated in the AA category with all major rating agencies.

S&P is at AA (positive). Fitch and DBRS are at AA also while Moody's remains at Aa3 but with a positive outlook.

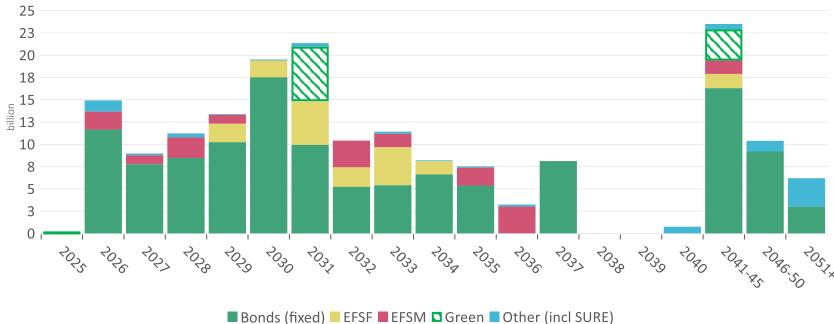


Smooth maturity profile

Redemptions are modest in coming years







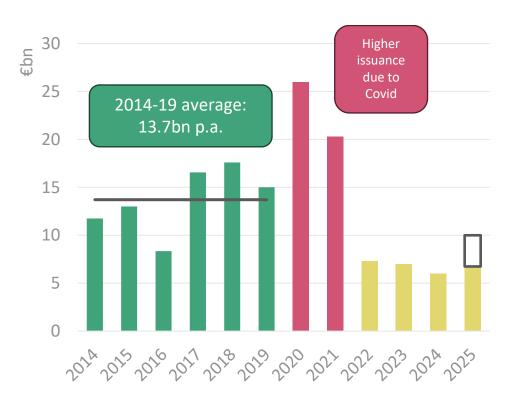
Source: NTMA



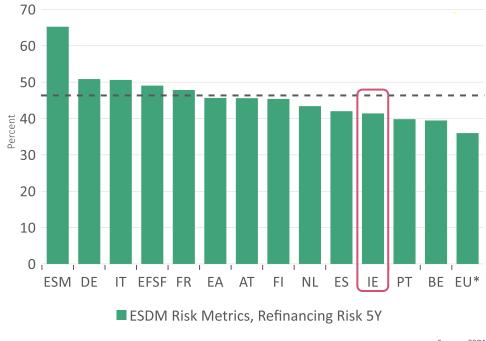
Recent low supply as result of strong surpluses

Redemptions in next 5 years are higher than last 5 but are modest compared to rest of Europe

2025 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



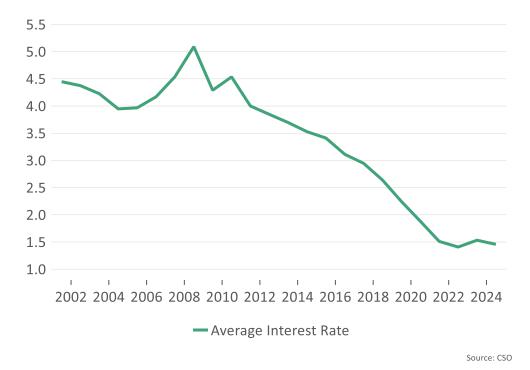
Borrowing costs anchored

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

Modest issuance in 2023-25 at "normalised" rates - issued at c. 3.0%



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



Note: LHS chart includes only auctions and syndication

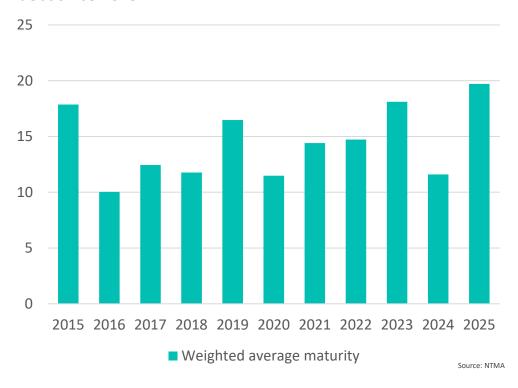
44



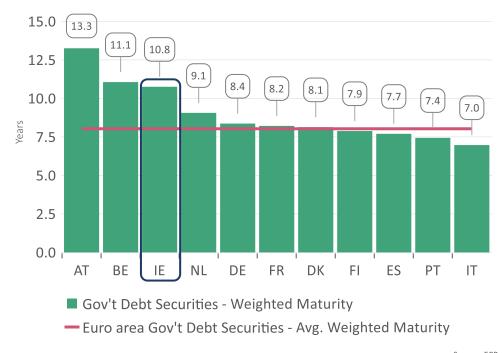
NTMA weighted maturity longer than most

Debt management strategy has extended debt profile

Benchmark issuance has extended the maturity of Government debt since 2015



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



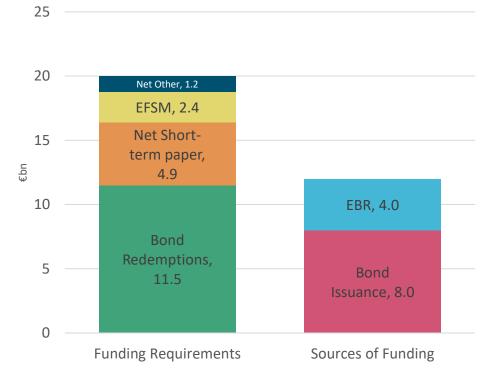
Source: ECB



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 2024/25. The balance at year-end 2024 was €34.3bn.
- Figures shown to be updated following Budget 2026 in early October.



Source: NTMA

Rounding may affect totals.

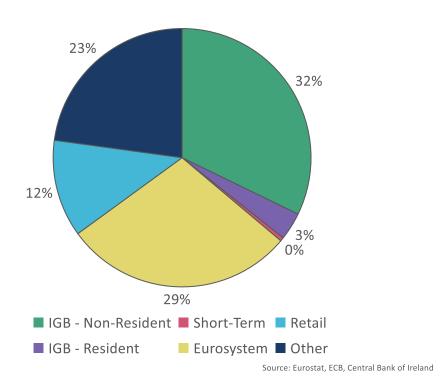
- 1. In the funding sources column, €8bn is reflective of the midpoint of the €6-10bn funding range.
- 2. EBR is the Exchequer surplus per the Department of Finance's Annual Progress Report (May 2025) estimate.



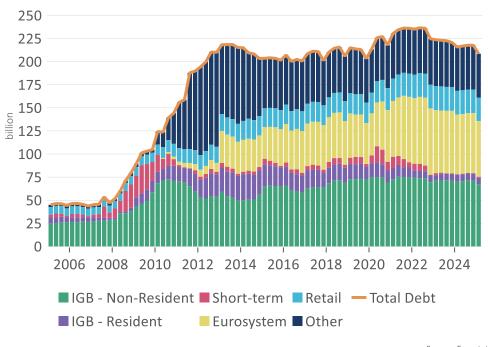
Diverse holders of Irish debt

"Sticky" sources account for nearly two-thirds of debt

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



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



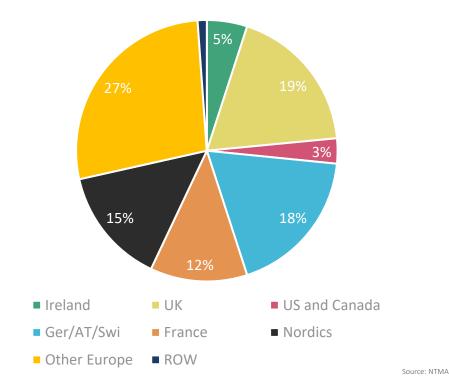
Source: Eurostat



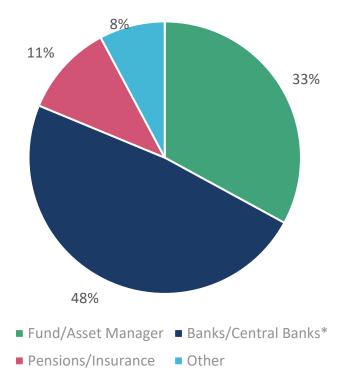
Investor base

Demand for Government bonds is wide and varied

Country breakdown: Average over last five syndications



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	2026
Fitch Ratings	AA	F1+	Stable	May 2024	7 November
Moody's	Aa3	P-1	Positive	Apr 2023	2026
Morningstar DBRS	AA	R-1(high)	Stable	Sept 2024	2026
R&I	AA	a-1+	Stable	May 2025	2026
KBRA	AA	K1+	Stable	May 2023	10 October
Scope	AA	S-1+	Stable	Aug 2024	2026

ESG Sustainability

Issuance & government policy demonstrate Ireland's green commitment

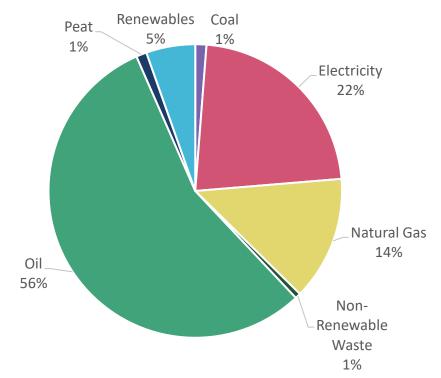




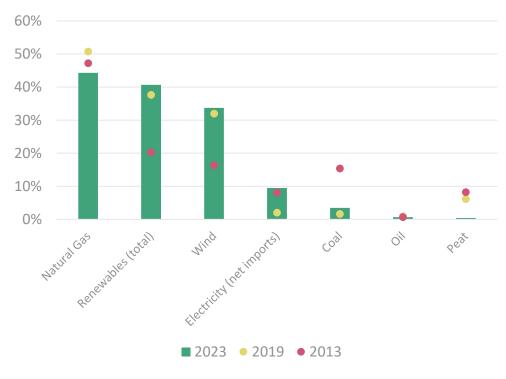
Ireland's energy: fossil fuels prevalent

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

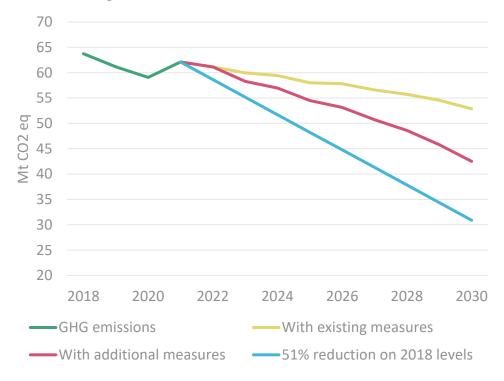




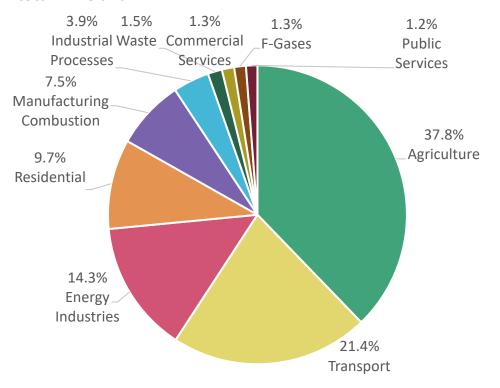
Ireland's greenhouse gas emissions

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





Climate Action Legislation

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

Climate Action & Low Carbon Act:

- <u>Carbon Budgeting:</u> The Act embeds the process of carbon budgeting into law. It requires Government to adopt a series of economy-widefive-year carbon budgets.
- <u>National Climate Objective:</u> First carbon budgets will aim for a reduction of 51% of emissions by 2030.
- <u>Climate Action Strategy:</u> 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





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

<u>Industry</u>

- 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 scaleup 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



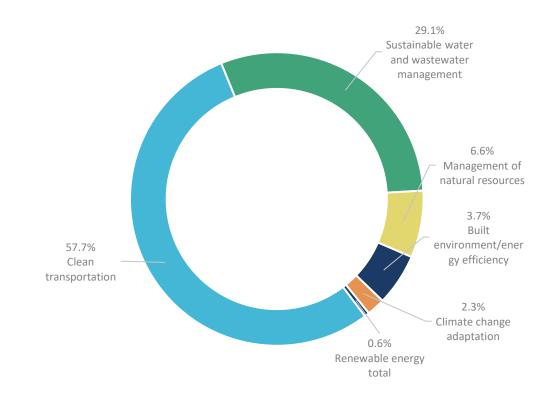
Irish Sovereign Green Bonds (ISGB)

Irish Sovereign Green Bond Impact Report 2023 & Allocation Report 2024: sample impacts

Summary of Green Bond Issuance

- €11.67bn nominal outstanding across two bonds
 - 1.35% Treasury Bond 2031
 - 3.0% Treasury Bond 2043
- Cumulatively €11.6bn 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
- Seven annual allocation reports and six annual impact reports now published

Total allocation of proceeds to 2024 is €283.59 million



^{*}For a more detailed break-down please see the Irish Sovereign Green Bond Allocation Report 2024 on the NTMA website



Irish Sovereign Green Bonds (ISGB)

Irish Sovereign Green Bond Impact Report 2023: Highlights

- Built Environment/Energy Efficiency
 - Non-residential annual energy savings: 371GWh
 - Number of homes renovated: 2,445
- Clean Transportation
 - Grant-aided EV home charging points installed: 20,416
 - Number of public transport passenger journeys: 310.6 million
 - Number of grant-aided EV purchases: 15,846
 - Kilometres of Active Travel infrastructure delivered: 193km
- Climate Change Adaptation
 - 16 major flood relief projects at planning, development or construction phase
 - 8,913 properties at risk from flooding protected on completion of projects

- Management of Living Natural resources and Land Use
 - Hectares of forest planted: 1,652ha
 - Land area conserved/restored under peatland restoration & management: 2,291ha
 - Number of landfill remediation sites with funding drawn down:
 82
- Renewable Energy
 - Number of companies (including public sector organisations) benefitting from SEAI Research & Innovation programmes as lead, partner or active collaborators: 32
 - SEAI Research & Innovation awards: 36
- Sustainable Water and Wastewater Management
 - Length of water main laid (new and rehabilitated): 512km
 - New and upgraded water and wastewater treatment plants: 51

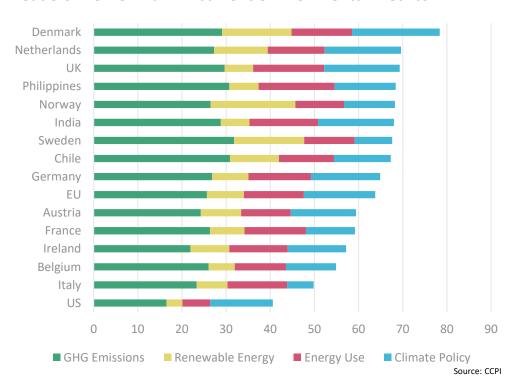
^{*}For further detail see the Irish Sovereign Green Bond Impact Report 2023 on the NTMA website



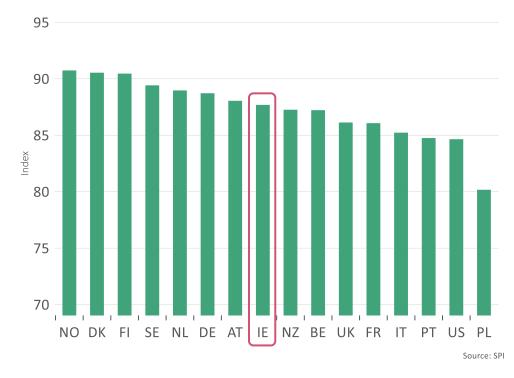
Further progress on 'E' and 'S' to be made

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



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





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

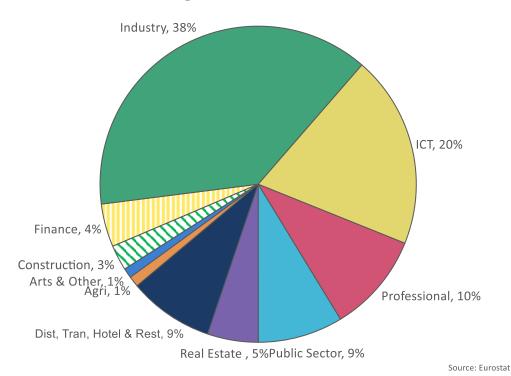




Multinational activity distorts Ireland's data

Notwithstanding those issues, MNCs have real positive impact

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



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	39
ICT (Tech)	7	10	20
Professional	11	15	10
Public Sector	31	28	9
Dist, Tran, Hotel & Rest	23	18	9
Real Estate	0	1	5
Financial	5	7	4
Construction	5	5	3
Agriculture	1	1	1
Arts & Other	4	2	1

Source: Eurostat

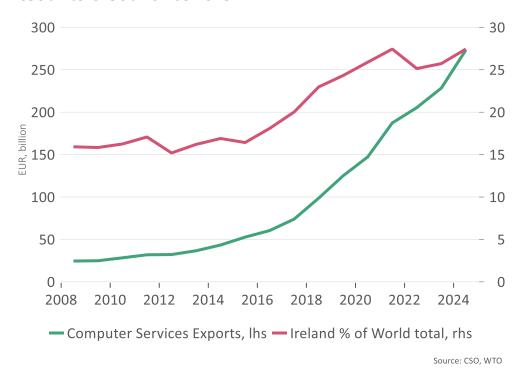
Note: Based on calendar-adjusted seasonally-adjusted data as of 2025 Q2



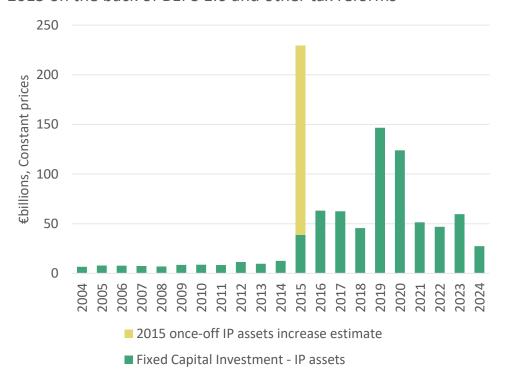
€0.8trn of intellectual property into Ireland

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

Ireland is now a leader in Computer Services; Exports up from €50bn to €250bn since 2015



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



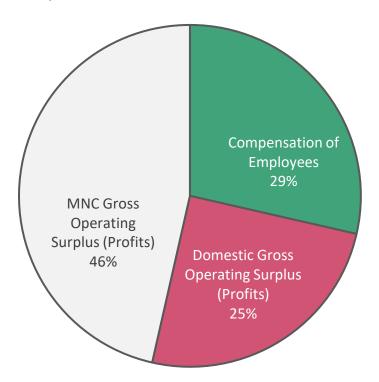
Source: CSO and NTMA analysis – Gross Fixed capital formation and Gross capital stock figures used in RHS chart



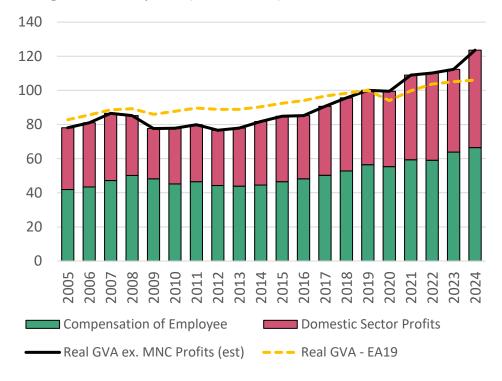
Underlying economy above EA average

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 (2019 = 100)



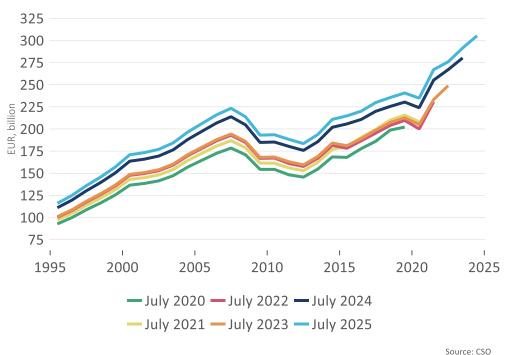
Source: CSO, NTMA calculations. LHS shows nominal 2023 data. Foreign-owned MNE dominated includes Nace sectors 19, 20, 21, 26, 31, 32, 58, 59,60, 61, 62, 63 and 77. Ireland's GVA data has been adjusted to strip out the distortionary effects of some of the multinational activity that occurs in Ireland. Specifically, a profit proxy is estimated for the sectors in which MNCs dominate.



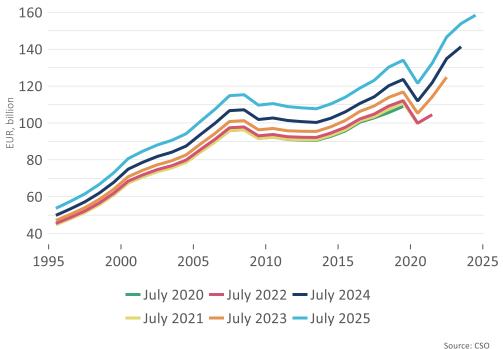
National accounts data regularly revised

New data sources have meant big upward benchmark revisions

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



Consumption revisions notable in recent years, with 2023 seeing an upward revision of c. €14bn

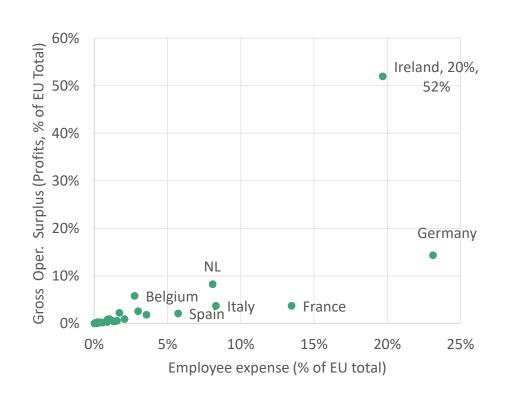


30000



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
Eli Lilly	Chemical & Pharma	3,700
Cisco	ICT manufacturing	3,505
Merck	Chemical & Pharma	3,000
Citibank	Finance	2,900
Meta	ICT Services	2,662
Oracle	ICT Services	1,049
Analog Devices	ICT manufacturing	1,626
IBM	ICT manufacturing	1,283
Bank of America	Finance	2,548

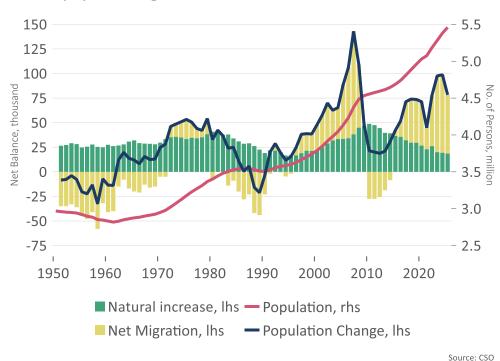
Source: Eurostat; Irish times



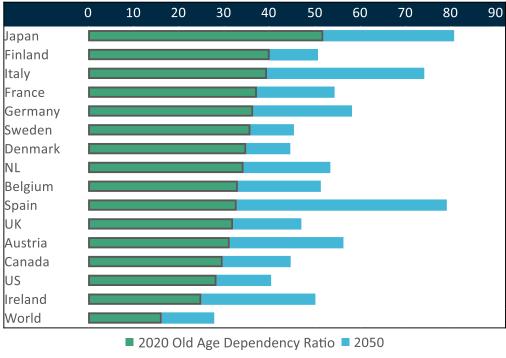
Ireland's population helps growth potential

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

Ireland's population at 5.46m in April 2025: Migration driving robust population growth



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



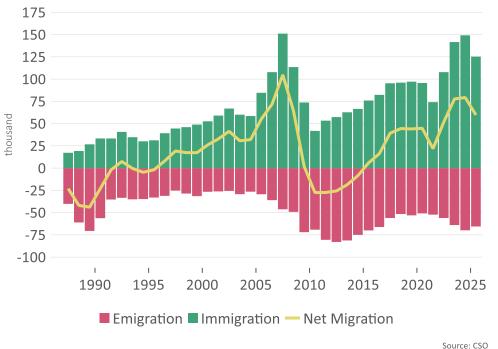
Source: UNDESA



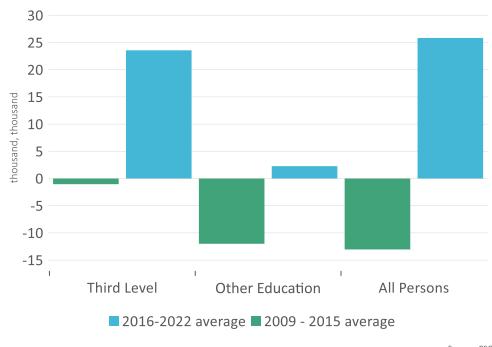
Migration improves Ireland's human capital

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

Continued inward migration led to 60k increase (c. 1.1%) in last year



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



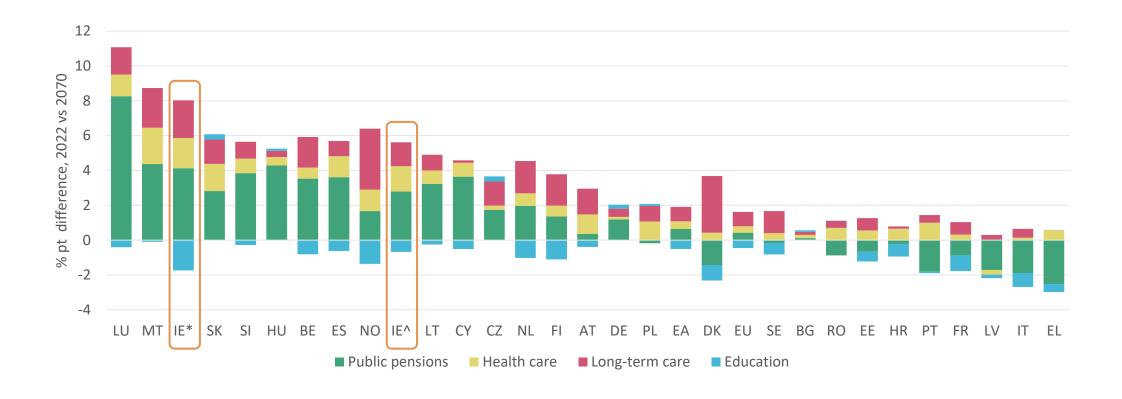
te: CSO Source: CSO

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*.

Housing

Demand/prices still elevated as challenges to supply remain

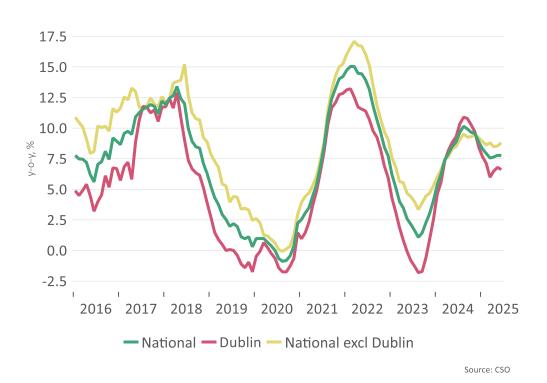




Prices up strongly in recent years

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

House prices up ~7.5% y-on-y. Down from peak but still robust



Transaction volumes have fallen as new completions growth have stalled versus 2022/23.



Source, CSO



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

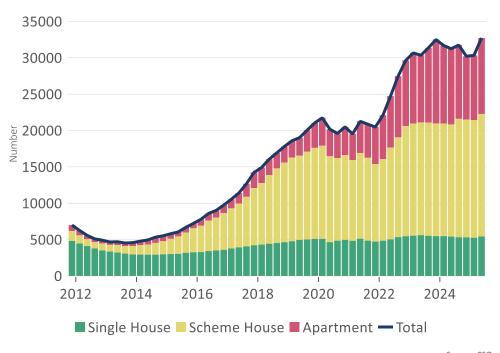
Recent starts data has not translated into completions

Completions* of 30K units in 2024 similar to 2023 level but more positive Q2 data alongside employment growth



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

Completions driven to 30K level by apartments, but apartments pace has slowed



Source: CSO

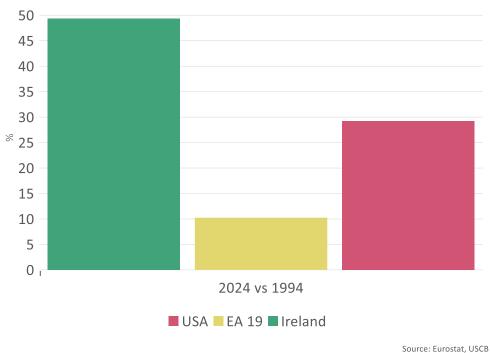
^{*} Housing completion derived from electrical grid connection data for a property. Reconnections of old houses overstate the annual run rate of new building (all connections in graph). Starts data in 2024 impacted by deadline related to waiver on development contributions and rebate on water charges



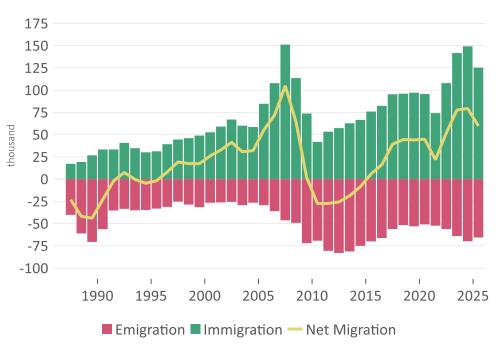
Demand is strong

National population increase alongside net migration fuelling demand

Population has grown significantly for 30-40 years



Increased net migration adds demand for housing



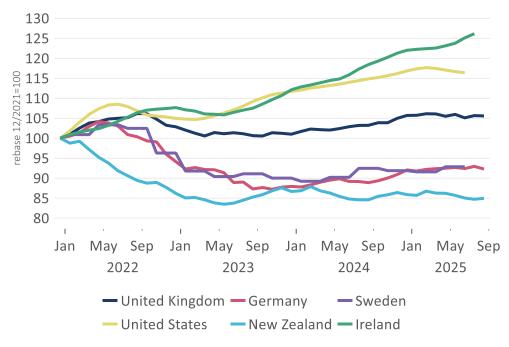
USCB Source: CSO



House price strength versus other countries

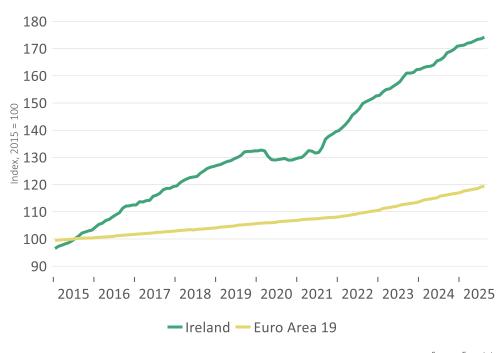
Demand has ensured prices and rents have increased

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 2025 so far



Source: Eurostat

Disclaimer

The information in this presentation is issued by the National Treasury Management Agency (NTMA) for informational purposes. The contents of the presentation do not constitute investment advice and should not be read as such. The presentation does not constitute and is not an invitation or offer to buy or sell securities.

The NTMA makes no warranty, express or implied, nor assumes any liability or responsibility for the accuracy, correctness, completeness, availability, fitness for purpose or use of any information that is available in this presentation nor represents that its use would not infringe other proprietary rights. The information contained in this presentation speaks only as of the particular date or dates included in the accompanying slides. The NTMA undertakes no obligation to, and disclaims any duty to, update any of the information provided. Nothing contained in this presentation is, or may be relied on as a promise or representation (past or future) of the Irish State or the NTMA.

The contents of this presentation should not be construed as legal, business or tax advice.

