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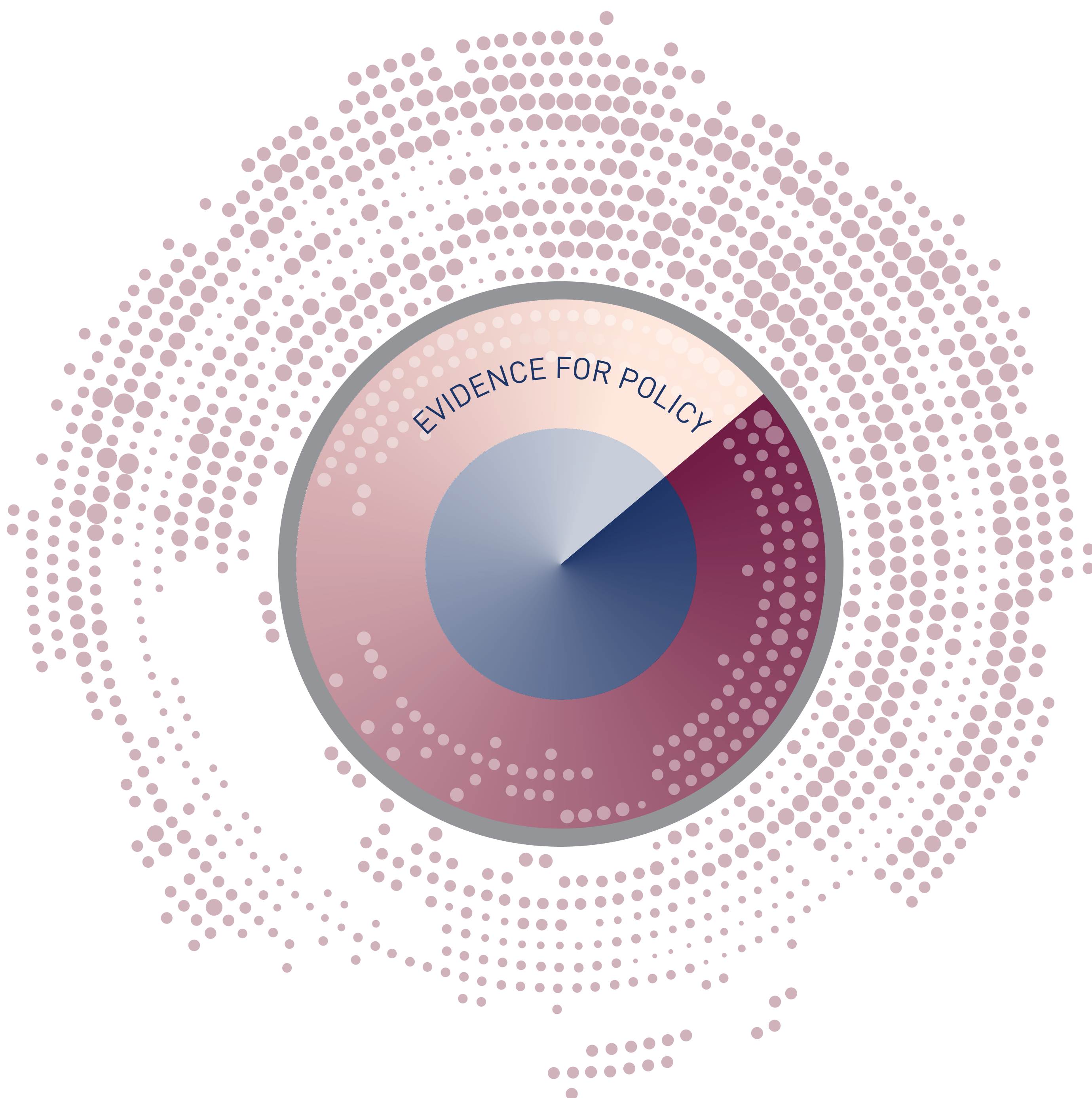
March 2024

QUARTERLY ECONOMIC COMMENTARY

SPRING 2024

KIERAN MCQUINN, CONOR O'TOOLE AND LEA HAUSER



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QUARTERLY ECONOMIC COMMENTARY

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Spring 2024

The forecasts in this *Commentary* are based on data available by 20 of March 2024

Draft completed on 20 March 2024

https://doi.org/10.26504/qec2024spr

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The Quarterly Economic Commentary has been accepted for publication by the Institute, which does not itself take institutional policy positions. It has been peer reviewed by ESRI research colleagues prior to publication. The authors are solely responsible for the content and the views expressed.

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SUMMARY TABLE

	2023	2024	2025
Output (Real Annual Growth %)			
Private Consumer Expenditure	3.1	2.5	2.7
Public Net Current Expenditure	1.7	1.2	1.2
Investment	2.9	2.4	3.1
Modified Investment	*-7.1*	*2.9*	*3.2*
Exports	-4.8	3.3	3.6
Imports	-3.0	3.5	3.8
Gross Domestic Product (GDP)	-3.2	2.5	2.3
Gross National Product (GNP)	4.4	2.0	1.9
Modified Domestic Demand	*0.5*	*2.3*	*2.5*
Domestic Demand (excl. Stocks)	2.8	2.2	2.3
Labour Market			
Employment Levels ('000)	2,685	2,729	2,740
Unemployment Levels ('000)	120	122	119
Unemployment Rate (as % of Labour Force)	4.3	4.3	4.2
Public Finances			
General Government Balance (€bn)	6.5	11.4	14.1
General Government Balance (% of GDP)	1.3	2.2	2.7
Price Developments			
Inflation (CPI)	6.3	2.3	2.0
Inflation (HICP)	5.2	2.4	2.1

Note: Labour market data from March 2020 to February 2022 are based on the monthly unemployment and the COVID-adjusted monthly unemployment series published by the Central Statistics Office (CSO).
Modified Domestic Demand refers to Modified Final Domestic Demand, which excludes large transactions of foreign corporations that do not have a large impact on the domestic economy. Definition available here: https://www.cso.ie/en/interactivezone/statisticsexplained/nationalaccountsexplained/totaldomesticdemandandmodifiedtotaldomesticdemand/#:~:text=Modified%20Total%20Domestic%20Demand%20goes%20further%20in%20trying,to%20exclude%20certain%20items%20that%20are%20in%20TDD.
Modified investment excludes investment in aircraft for leasing and investment in R&D from abroad.

The Irish Economy – Overview

- While MDD and headline indicators such as GDP and GNP reported differing accounts of the direction of change in Irish economic activity in 2023, we expect growth across all main indicators of activity in 2024 and 2025.
- We now believe MDD will grow by 2.3 per cent in 2024 and by 2.5 per cent in 2025. The unemployment rate, another key indicator of underlying growth in the economy, is set to fall to 4.3 per cent in 2024 and to 4.2 per cent in 2025.
- The labour market continues to perform robustly and is now operating close to capacity. In addition, inflation is expected to decline throughout 2024 with a return to growth in real incomes.
- A critical challenge in managing the Irish economy in the period ahead will be dealing with the well documented infrastructure bottlenecks in an economy operating at capacity. Box D in the *Commentary* by FitzGerald and McQuinn notes a low level of investment to output (adjusting for multinational distortions) when compared to other countries. The pace and scale of required investment will have to be cognisant of broader capacity constraints apparent in the economy.
- The domestic economy will inevitably be influenced by global developments in 2024 and 2025. To that end, O'Toole, in Box C, discusses the global outlook focusing in particular on the downside risks. Internationally, growth rates are stabilising and disinflation is occurring somewhat more quickly than expected. If these conditions continue, it is likely to allow monetary authorities space to moderate official policy rates. However, geopolitical tensions and their impact on global trade flows add notable downside risk.
- The *Commentary* contains a number of Boxes focussing on the Irish residential market; McQuinn examines the likely future trend in the user cost of capital for housing, while Hauser focuses on the degree of 'under-occupancy' in the Irish market compared with other EU countries.

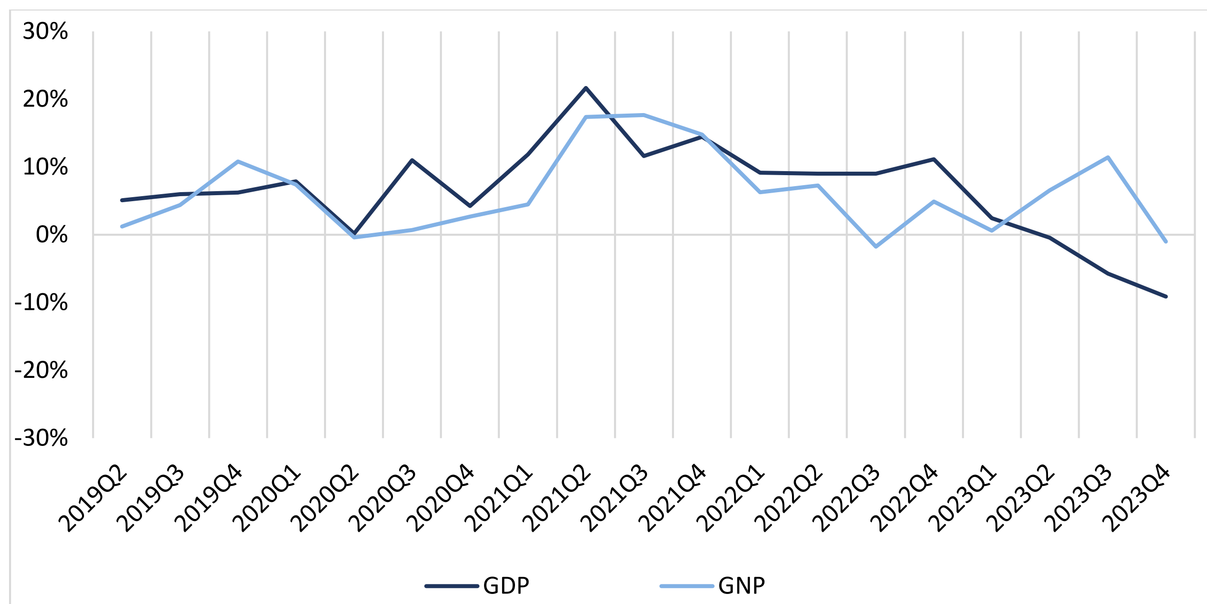
Domestic and International Outlook – Trends and Challenges

Global conditions remain challenging but with some upside risk

According to headline indicators such as GDP, Ireland's economy shrank in 2023 on the back of a decline in export activity. While global economic conditions deteriorated throughout the year on the back of higher interest rates, persistent inflation and geopolitical tensions, much of this decline in the Irish context appears to have been specific to the sectoral composition of Irish exports. As the traded sector faltered and the COVID-19 impacts faded, the domestic economy experienced steady but moderating rates of growth, offsetting the downward effects of lower exports.

Figure 1 highlights the slowing trend through 2023 in GDP and GNP in Ireland. The quarterly trend in GDP growth points towards a rapid loss in momentum throughout the year and this is driven by a substantial fall-off in exports. The moderation in GNP is not as substantial as the decline in GDP as factor income flows from multinationals have declined.

FIGURE 1 OUTPUT GROWTH IRELAND – YEARLY GROWTH RATES (SEASONALLY ADJUSTED)



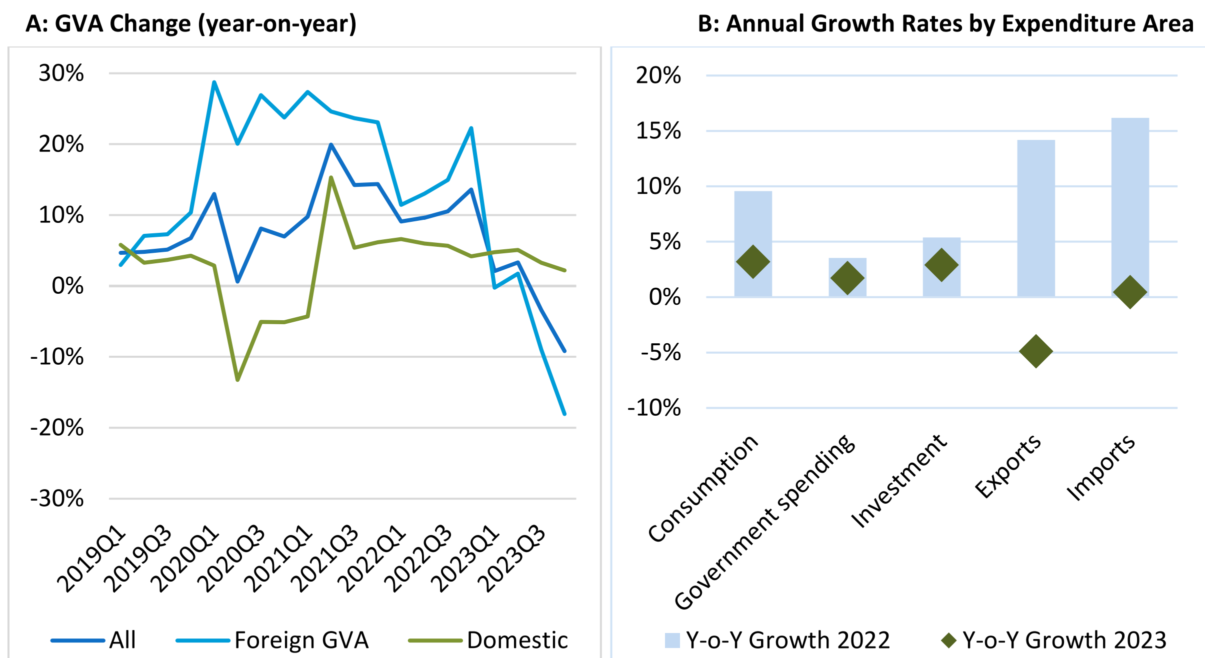
Source: Central Statistics Office.

Given the dual nature of activity in Ireland (between FDI-led exports and domestic activity), it is important to understand the factors contributing to the slowdown in growth. Figure 2A presents the breakdown of the growth in gross value added (GVA) by foreign-dominated sectors as well as domestic-oriented sectors (as

defined by the CSO). It can be clearly seen in panel A that the major downward pressure in terms of GVA comes through the foreign-dominated sectors. Having grown at double-digit levels in the period 2020 through 2022, a sharp downturn has continued throughout 2023. On the other hand, the domestic-oriented sectors are experiencing a stabilising growth rate following the volatility of the COVID-19 period. The steadying of growth in the domestic economy, albeit at a lower rate, points towards a degree of resilience despite the inflationary pressures and higher interest rates.

The divergence between the international and domestic component of the Irish economy can be again seen in Figure 2B which presents data for the expenditure components of GDP: consumption, government spending, investment, exports and imports. Household consumption grew strongly in 2023, by approximately 3 per cent. While this is notably lower than in 2022, the slowdown represents a normalisation of activity after the COVID-19 period as previously discussed. Investment expenditure has also slowed from 2022 levels which is is unsurprising given the international challenges and the ongoing elevated cost of financing. Exports represent the main channel through which growth has dropped, falling back by nearly 5 per cent year-on-year in 2023. As will be discussed later in the *Commentary*, the decline is likely to be linked more closely to sector and firm-specific issues rather than driven by any sustained international downturn in demand for Irish goods and services across the board.

FIGURE 2 FOREIGN AND DOMESTIC GVA AND COMPONENTS OF GDP



Source: Central Statistics Office.

Given these developments, and the relatively more benign international outlook than in the Winter 2023 *Commentary*, we expect GDP to grow by 2.5 per cent and 2.3 per cent in 2023 and 2024. Each of the subcomponents are discussed below but the overarching factors shaping the outlook are the quicker than expected disinflation, the likelihood of interest rate declines towards the end of 2024, the robust labour market in Ireland and the green shoots of recovery in the Eurozone. Factors weighing on the outlook include the high interest rate environment at present, the geopolitical tensions in the Middle East and its impact on global trade, as well as the risk of second round inflationary effects.

Focusing in on the performance of domestic versus foreign dominated sectors, Box A in this *Commentary* by FitzGerald discusses the changing structure of the Irish economy and in particular highlights the increasing role played by foreign multinationals. He finds that over 30 per cent of net national product comes from multinational firms and this has increased notably from 2013. Indeed, in certain sectors the share of multinationals is much higher; for example, in ICT, foreign-owned firms account for 80 per cent of the wages paid. Furthermore, he notes that some large domestic sectors – such as the construction sector – have experienced a decline in productivity in recent years while productivity growth has been driven by foreign dominated sectors.

This research further emphases the challenges of managing a small open economy with a very large multinational component. These large firms have an impact on the costs in the economy (such as wage levels) and this creates challenges for domestic firms and for the provision of public services and infrastructure, all of which are required to maintain a healthy multinational sector and society. As multinationals likely compete for resources, this can pose major challenges in an economy operating at full capacity with well documented infrastructural deficits.

BOX A THE CHANGE OF STRUCTURE OF THE IRISH ECONOMY

Introduction

This note uses the Institutional Sector Accounts and the National Accounts for 2022 to update an earlier note in the *Quarterly Economic Commentary* based on the 2021 accounts.[1] The methodology is unchanged, just a year of additional data added. However, some of the trends apparent in the earlier data continue, with implications for the management of the economy in the medium term.

Methodology

The Gross Value Added (GVA) for each industrial sector is set out in the CSO Institutional Sector Accounts, broken down by Multinational Enterprises (MNEs) and the rest of the economy. These data are combined with a range of other data to give a full breakdown of the composition of GVA by industrial sector,[2] including the derivation of the Net National Product (NNP) arising in each sector.[3]

The data from the Revenue Commissioners give the distribution of corporation tax by industrial sector. Unfortunately, the industrial sector classifications they use are slightly different from those in the Institutional Sector Accounts. They also do not breakdown corporation tax in each industrial sector by the tax paid by MNEs and the rest of business. As a result, some imputation has to be used in this analysis. In particular, the corporation tax paid by the financial sector, as shown in the Institutional Sector Accounts, is higher than shown by the Revenue Commissioners. However, here we use the Revenue Commissioners breakdown because it is more detailed by industrial sector.

The data on depreciation by institutional sector are used to derive depreciation by industrial sector, broken down by MNEs and non-MNEs. As a result of the fact that the National Accounts do not distinguish between the depreciation of MNEs and non-MNEs, some imputation has also to be used.

Because the MNE sector so dominated certain sectors – manufacturing and information technology (IT) – the imputation for these sectors is straightforward. For corporation tax the total for all industrial sectors paid equals the total shown in the Revenue Commissioners accounts. In the case of depreciation, it must sum to the figure shown for each industrial sector in the National Accounts.

For each industrial sector the deflator used is that implied in the National Accounts for Net Value Added (NVA).[4] This deflator is used for NVA in both the MNE and non-MNE firms in each industrial sector. Because the CSO use a more detailed approach, with different deflators for MNEs and the domestic sector, the results may differ somewhat from the CSO

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1 https://www.esri.ie/publications/understanding-the-irish-economy.

2 In the National Accounts 'industrial sector' is used to categorise all production sectors in the economy.

3 Net National Income is equal to NNP plus EU subsidies less EU taxes. Because of the relatively small size of these EU flows today the growth rate of NNI and NNP is very similar.

4 Depreciation at constant prices is subtracted from GVA at constant prices for each industrial sector to derive NVA at constant prices. This is divided into NVA at current prices to derive the deflator.

results for NVA at constant prices. However, as mentioned above, the heavy weight of MNEs in certain industrial sectors should minimise the consequences of this simplification. The approach here means that the profit repatriations by the MNE firms in each sector are deflated by the same deflator as the rest of NVA for each industrial sector. The result is that the profit repatriations component of factor income is deflated differently in the National Accounts, as the current CSO approach is to deflate profit repatriations by a special deflator specific to profit repatriations.

This difference between the way the profits are deflated as a component of GVA in each industrial sector and how they are deflated in the factor outflows may affect the growth rate of NNP and GNI* in a way that has no relation to actual production in the Irish economy. It would seem that the approach used in this paper is more consistent, treating the same profits, whether as an income or an outflow, with the same deflator.

The Growth Rate

The effects of using different approaches to deflation are shown in Table A.1, giving the growth rate for NNP at market prices for each year between 2014 and 2022. The first approach – 'individual' – deflates the profit outflows by the individual deflators for each industrial sector, as suggested in this paper. The second approach deflates the outflows using the implicit net factor income deflator, as implemented by the CSO, while their contribution to sectoral GVA uses the appropriate industrial sector deflator. The third row shows the National Accounts growth rate for NNP at market prices, as given in the latest release of data.

TABLE A.1 GROWTH RATE OF NNP AT MARKET PRICES

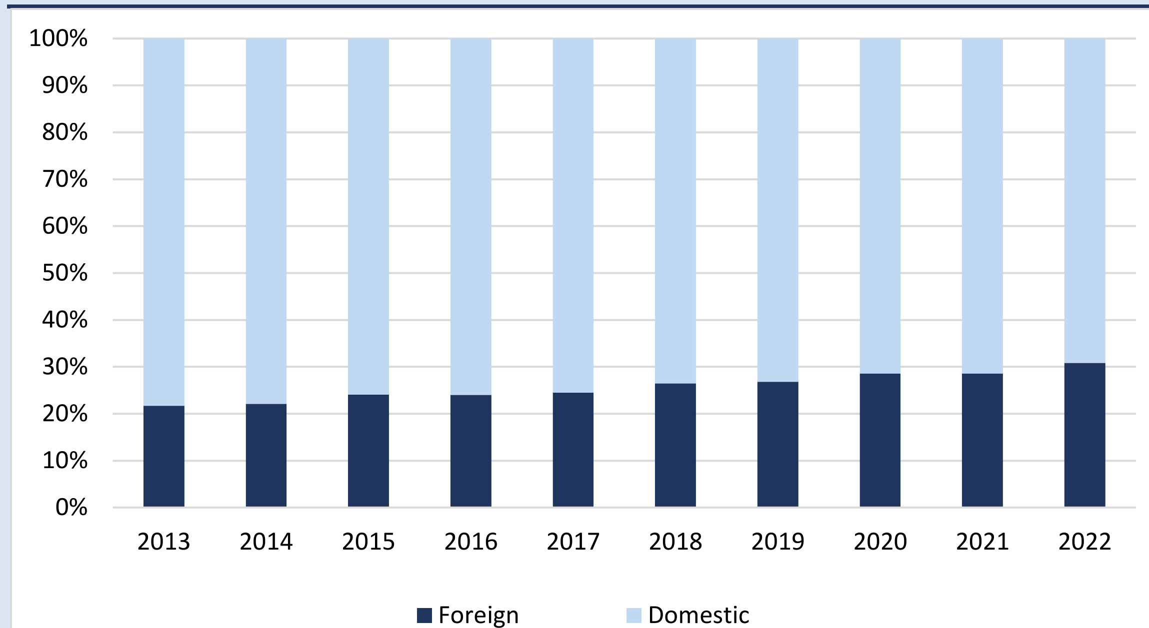
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2013-2022
Individual	7.8	2.3	4.5	1.8	6.7	4.8	-5.7	16.8	6.5	4.9
NFY	7.9	-1.3	3.9	1.0	7.3	4.0	-4.9	19.1	4.9	4.5
National Accounts	9.5	-4.3	4.8	4.3	4.4	2.2	-4.4	18.9	4.2	4.2

Source: *QEC* calculations.

The results in Table A.1 show significant differences in the growth rate each year between the different measures. When averaged over time, using the 'individual' measure, developed in this note, the growth rate is significantly higher than shown in the National Accounts. When the net factor income deflator is used for the outflows, but not for the GVA, it brings the average growth rate closer to that in the National Accounts. However, significant differences remain for individual years.

This suggests that part of the reason for the difference in the growth rate shown in this note, compared to the National Accounts, is due to the more consistent treatment here of MNE profits between their contribution to GVA and to net factor income. However, there is an additional difference, which is probably due to different (more appropriate) deflators being used by the CSO for MNE and non-MNE firms in each industrial sector.

FIGURE A.1 SHARE OF NNP BY INSTITUTIONAL SECTOR



Source: *QEC* calculations.

Structure of the Economy

Figure A.1 shows the structure of the economy each year, identifying the contribution to NNP of the MNE and non-MNE (domestic) sectors. It is clear that there was a continuing rise in the share of NNP attributable to the MNE sector.

TABLE A.2 STRUCTURE OF THE ECONOMY, SHARE OF NNP, %

	2013			2022		
	Total	Foreign	Domestic	Total	Foreign	Domestic
Agriculture	1	0	1	2	0	2
Manufacturing	12	6	6	14	10	4
Electricity, gas, and water	2	0	2	2	0	1
Construction	3	0	3	5	1	4
Distribution, transport, etc.	22	5	17	17	5	13
Information and communication	6	3	3	9	7	2
Financial	10	5	5	7	4	3
Real estate	8	0	8	9	0	9
Professional, admin etc.	10	2	7	14	4	10
Public sector	24	0	24	18	1	18
Arts, etc.	3	0	3	2	0	2
NNP excluding additional factor flows	100	22	78	100	31	69

Source: *QEC* calculations.

TABLE A.3 STRUCTURE OF THE ECONOMY, SHARE OF TOTAL WAGES, %

	2013			2022		
	Total	Foreign	Domestic	Total	Foreign	Domestic
Agriculture	1	0	1	1	0	1
Manufacturing	12	6	5	13	8	4
Electricity, gas, and water	1	0	1	1	0	1
Construction	3	1	2	4	1	4
Distribution, transport, etc.	21	6	15	18	6	12
Information and communication	6	3	3	10	8	2
Financial	10	6	4	8	6	2
Real estate	1	0	1	1	0	1
Professional, admin. etc.	10	3	7	14	6	8
Public sector	33	1	32	29	1	28
Arts, etc.	2	0	2	2	0	2
Total	100	27	73	100	36	64

Source: *QEC* calculations.

For 2013 and 2022 Table A.2 shows the share of NNP accounted for by foreign and domestic firms in each industrial sector. The NNP of MNEs consists of their wage bill and the corporation tax paid. For the domestic firms it consists of the wage bill and the profits arising in the sector, after depreciation. In 2013 foreign MNEs accounted for around 22 per cent of NNP but by 2022 this had risen to 31 per cent. The big increase in the share of NNP arose in the manufacturing, IT, and professional and administrative services sectors. By 2022, NNP arising from foreign MNE activity in these sectors accounted for over 20 per cent of the economy-wide NNP (Table A.2).

Table A.3 shows the share of the wage bill arising in each sector. Partly because the foreign sector pays higher average wages than the domestic sector, the foreign sector already accounted for 27 per cent of the economy-wide wage bill in 2013, rising to 36 per cent by 2022. The wage share is important in reflecting the allocation of the key domestic production resource – labour. The table shows that the foreign sector absorbed a rapidly increasing share of the fully employed labour force over the nine years.

Table A.4 shows the average annual growth rate by industrial sector between 2013 and 2022. For NNP at market prices, the average growth rate for the economy was 5 per cent while the growth of the foreign sector was 7.8 per cent a year, almost three times the growth of the domestic sector (2.7 per cent).

TABLE A.4 AVERAGE ANNUAL REAL GROWTH 2013-2022, BY INDUSTRIAL SECTOR

	All Sectors	Foreign	Domestic
Agriculture, forestry and fishing	11.4	7.0	11.6
Manufacturing	7.0	11.7	0.5
Electricity, gas, and water	4.3	13.2	3.7
Construction	4.8	3.2	5.0
Distribution, transport, hotels and restaurants	4.3	6.8	3.5
Information and communication	12.3	16.6	5.2
Financial and insurance activities	1.2	3.0	-0.6
Real estate activities	2.2	2.2	2.2
Professional, admin and support services	8.6	10.1	8.1
Public admin, education and health	2.8	10.5	2.7
Arts, entertainment and other services	2.5	4.8	2.3
NNP after profit repatriations	5.0	9.5	3.4
NNP at basic prices	5.1	7.8	2.7

Source: *QEC* calculations.

TABLE A.5 CONTRIBUTION TO GROWTH, BY INDUSTRIAL SECTOR, CONSTANT PRICES 2013-2022, %

	Total	Foreign	Domestic
Agriculture, forestry and fishing	2.9	0.1	2.8
Manufacturing	16.4	15.9	0.5
Electricity, gas, and water	1.0	0.2	0.8
Construction	4.0	0.3	3.7
Distribution, transport, hotels and restaurants	13.0	5.0	8.0
Information and communication	15.3	13.0	2.3
Financial and insurance activities	2.0	2.5	-0.5
Real estate activities	4.0	0.1	3.9
Professional, admin and support services	18.4	5.8	12.6
Public admin, education and health	10.8	0.8	10.1
Arts, entertainment and other services	1.0	0.2	0.8
Factor Income – profit repatriations	0.0	0.0	0.0
NNP after profit repatriations	88.8	43.7	45.0
Other factor Income, excluding redomiciled PLCs	-11.2	-5.0	-6.2
NNP adjusted for redomiciled PLCs	100.0	38.7	38.9

Source: *QEC* calculations.

The growth rates shown in Table A.4 can be a little misleading. For example, while there were very high growth rates observed in foreign firms in the agriculture and public administration sectors, they account for a tiny share of the output of these sectors.

Table A.5, which shows the contribution to the overall real growth in the economy arising in each sector, provides a better reflection of the sectors that were crucial to the high growth rate observed over the period. The output of the foreign MNE firms in the manufacturing sector contributed almost 16 per cent of the economy-wide growth. This was closely followed by the IT sector, contributing 13 per cent to the growth of the economy. The major contributions to growth in output from the domestic sector arose in the professional services, public administration and distribution sectors.

For the domestic sector the limited contribution to growth by firms in manufacturing is notable, while the most prominent contribution came from the professional and administrative services sector. For the latter, some of the services provided were inputs into the MNE sector.

Table A.6 shows the growth in productivity, measured as NNP relative to hours worked, for the different industrial sectors. Unfortunately, because data on hours worked by industrial sector are not available separately for the MNE and the domestic sectors, this table only shows the average for each sector. Because much of the growth in the manufacturing and IT sectors originates from the MNE sector, their average growth in output per hour will primarily reflect the performance of the MNE sector.

TABLE A.6 AVERAGE GROWTH IN PRODUCTIVITY, NNP PER HOUR WORKED, %

	2013-2022
Agriculture etc.	13.4
Manufacturing	4.0
Utilities	-0.3
Construction	-3.9
Distribution, etc.	2.7
Information and communication	6.0
Financial	-1.5
Real estate	-2.1
Professional, etc.	4.8
Public admin, education and health	-0.8
Arts, etc.	1.9
NNP, basic prices	2.1

Source: *QEC* calculations.

Productivity growth was particularly high in the MNE dominated manufacturing and IT sectors. This rise in productivity partly reflects the expansion of MNE firms selling very valuable products. This highlights the importance of new products and upgrading the products produced in these sectors.

Productivity growth was also very high in the small agricultural sector, reflecting an exceptional increase in output and a small fall in employment. The rise in agricultural output was due to the ending of the EU milk quota scheme, which had restricted output for decades.

The NNP in the MNE sector consists of the wage bill plus the corporation tax paid. As a significant share of the corporation tax paid by MNEs reflects the activities of firms whose major presence in the Irish economy is their Intellectual Property (IP), rather than their labour force, this will exaggerate the labour productivity of the MNE sector, measured as output per hour worked.

The growth of foreign MNE firms over the period 2013 to 2022 has been the major factor in the observed high growth rate of the economy. Without this growth, the economy would have shown a rather pedestrian performance. However, these firms have absorbed an increasing share of the skilled labour in the economy.

The result of this growth has been a very big increase in the surplus on the modified current account of the Balance of Payments, reaching a historically unprecedented level of over 7 per cent of GNI* since 2019. The counterpart of this surplus is very high net savings in the domestic economy. While households accounted for a lot of this exceptional saving in the pandemic years of 2020 and 2021, government saving in 2022 amounted to 7 per cent of GNI* – the counterpart to the very large current account surplus.

Implications

A recent paper by the Department of Finance[5] examines the income side of the National Accounts, using the CSO Institutional Sector Accounts. The paper highlights the very high rate of savings by the domestic sector of the economy (including the government sector) and the low level of investment by that part of the economy. A consequence of this is the large surplus on the modified current account of the Balance of Payments. The paper questions why investment by the domestic sector of the economy is so low. Part of the explanation lies in the sectors where the domestic firms are prominent. In all economies the capital output ratio of these sectors may be lower than is the case in manufacturing and IT, implying a relatively small contribution to total investment in the economy.

For example, in the professional and administrative services sector and the public sector, which were important contributors to NNP, the capital stock mainly consists of buildings, rather than expensive equipment or capital stock in the form of intellectual property. Also, in the domestic IT sector there may be an undercounting of investment in intellectual property, which is only fully accounted for if and when a domestic firm is sold to a foreign MNE.[6]

[5] https://www.gov.ie/en/publication/a73b6-economic-insights-spring-2024/.

[6] The sale price puts a value on the intellectual property built up in the firm while in domestic ownership.

However, as the Department of Finance note highlights, the high net savings of the domestic sector of the economy still needs further probing to understand whether its exceptional magnitude is due to unusually high gross savings or unusually low investment.

One area where investment is undoubtedly too low is in public infrastructure. The National Development Plan sought to address this but, as highlighted in Barrett, 2024,[7] full employment in the economy is making it very difficult to mobilise the necessary labour force to undertake this task.

In the case of the utilities sector (to date largely domestic), as highlighted in Kakkar et al., 2024,[8] there will be a need for major investment in renewables and supporting infrastructure over the rest of this decade which, if it is to be successfully implemented, will also need a major increase in labour force.

Disch et al., 2024,[9] highlight the problems posed in increasing housing output due to shortages of necessary skilled labour. As in the case of the other domestic sectors of the economy, the skill needs of this sector are rather different than those of the rapidly growing MNE sector.

In recent years, the foreign MNE sector has only been able to grow at a very high rate by attracting skilled labour from abroad. However, the related rapid rise in populations is putting further pressure on the provision of housing, infrastructure and public services.[10]

Conclusions

In the future, if the foreign MNE sector continued to grow very much faster than the domestic sector, because it is starting from such a high base, it would absorb an ever greater share of the labour force over the rest of the decade. This would put pressure on the domestic sector. As the domestic sector also provides essential goods and services, such as public administration, health and construction, squeezing the labour resources of these sectors would have implications for society.

While Ireland currently has a large modified surplus on the current account of the Balance of Payments, this is not very helpful in increasing the supply of public services and construction, which cannot be imported, but has to be produced in Ireland with domestic labour resources.

7 Barrett, A. (2024). Chapter 2: 'Capacity Constraints' in Barrett, A. and Curtis, J. (eds.), (2024). *The National Development Plan in 2023: priorities and capacity*, Dublin: ESRI.

8 Kakkar, P., Farrell, N. and Lynch, M. (2024). Chapter 4: 'Energy' in Barrett, A. and Curtis, J. (eds.), *The National Development Plan in 2023: priorities and capacity*, Dublin: ESRI.

9 Disch, W., Egan, P., Kenny, E. and McQuinn, K. (2024). *Contrasting housing supply in Ireland, Northern Ireland and the rest of the United Kingdom*, ESRI Research Report.

10 Duffy D., FitzGerald, J. and Kearney, I. (2005). 'Rising House Prices in an Open Labour Market', *The Economic and Social Review*, Vol. 36, No. 3, Winter.

Over the coming decade, if the challenge of improving public services, tackling climate change (which requires major domestic investment in retrofitting and renewable energy)[11] and dealing with the shortage of housing and public infrastructure is to be effectively tackled, we need to see further expansion of key domestic facing sectors, such as building and construction. Achieving the necessary reallocation of labour resources, without doing major damage to the very important foreign MNE sector, will be challenging for policy.

Redirecting scarce labour resources to provide the urgently needed public goods will also not be easy because of the very different skills required. The studies already cited point to the need to look again at the structure of education and training in Ireland. While it has been extremely successful in meeting the needs of the rapidly growing high tech. MNE sector, it has been less successful in ensuring a supply of the skilled labour force needed to expand Ireland's infrastructure.

Finally, the high growth rate experienced by the Irish economy in recent years is attributable to the success of the MNE sector. Because of the importance of this sector to the economy today, changes in policy abroad that harmed the MNE sector could have a serious impact on Ireland. To provide insurance against such an adverse event, the government has set up a special fund absorbing some of the recent exceptional increase in corporation tax revenue.

This Box was prepared by John FitzGerald

Steady growth through choppy seas for the domestic economy

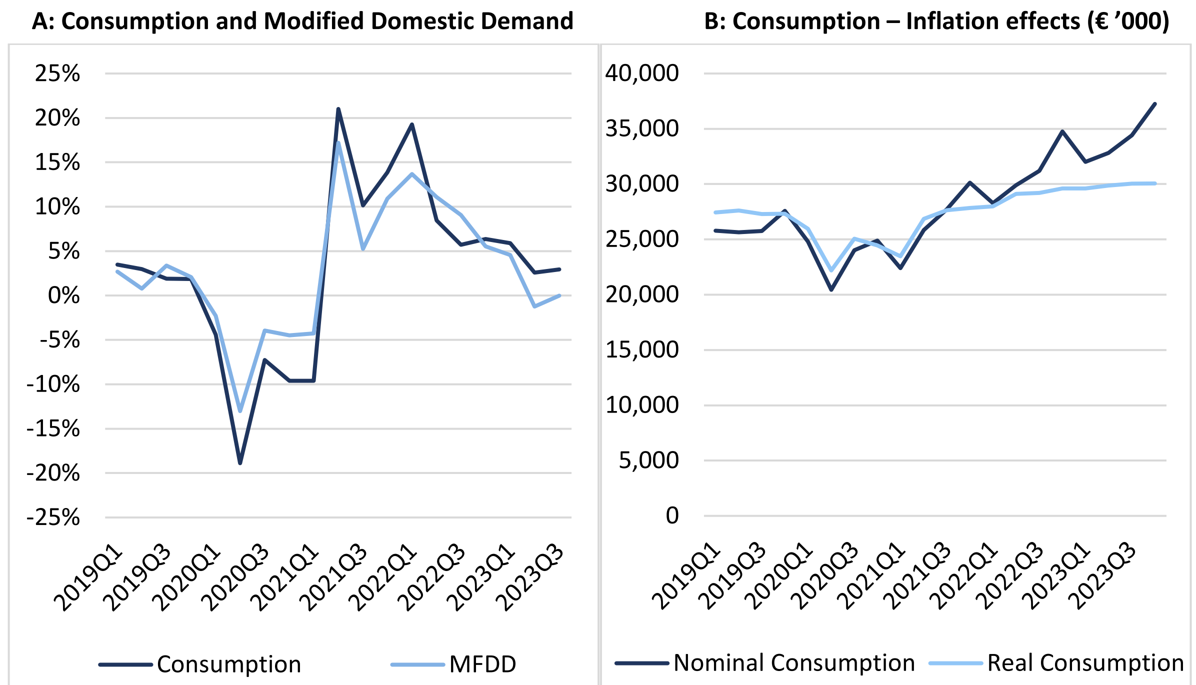
For the past number of *Commentaries*, we have documented the process of normalisation of the domestic economy to more moderate growth levels. Figure 3B presents the growth rate in personal household consumption and modified domestic demand (this is the adjusted domestic demand calculation which replaces overall investment, with the modified series removing aircraft leasing and R&D IP). The growth in both modified domestic demand and consumption are moderating, with a clear downward trend evident in the series.

A major factor in the downside pressure on the domestic economy in 2023 has come from inflationary factors eroding the real resources of households. Figure 3B highlights the impact of inflation on consumption, demonstrated as the difference between the nominal growth rate and the real growth rate (inflation adjusted). The gap between these series has widened as inflationary pressures have risen and eroded the real purchasing power of households. However, despite the impact on real incomes, the labour market has remained robust in Ireland and the

[11] FitzGerald (2021). www.climatecouncil.ie/media/climatechangeadvisorycouncil/contentassets/documents/cbcbackgroundpapers/MacroEconomicImplications_JF_210914.pdf.

unemployment rate low. This has likely maintained nominal wage growth, cushioning some of the inflationary factors. Modified domestic demand growth is lower than consumption as investment activities have been very subdued throughout 2023. This has mainly been due to the impact of multinational investment activities which are still accounted for in modified domestic demand as outlined in Box B in this *Commentary* by Egan.

FIGURE 3 DOMESTIC ECONOMY DEVELOPMENTS



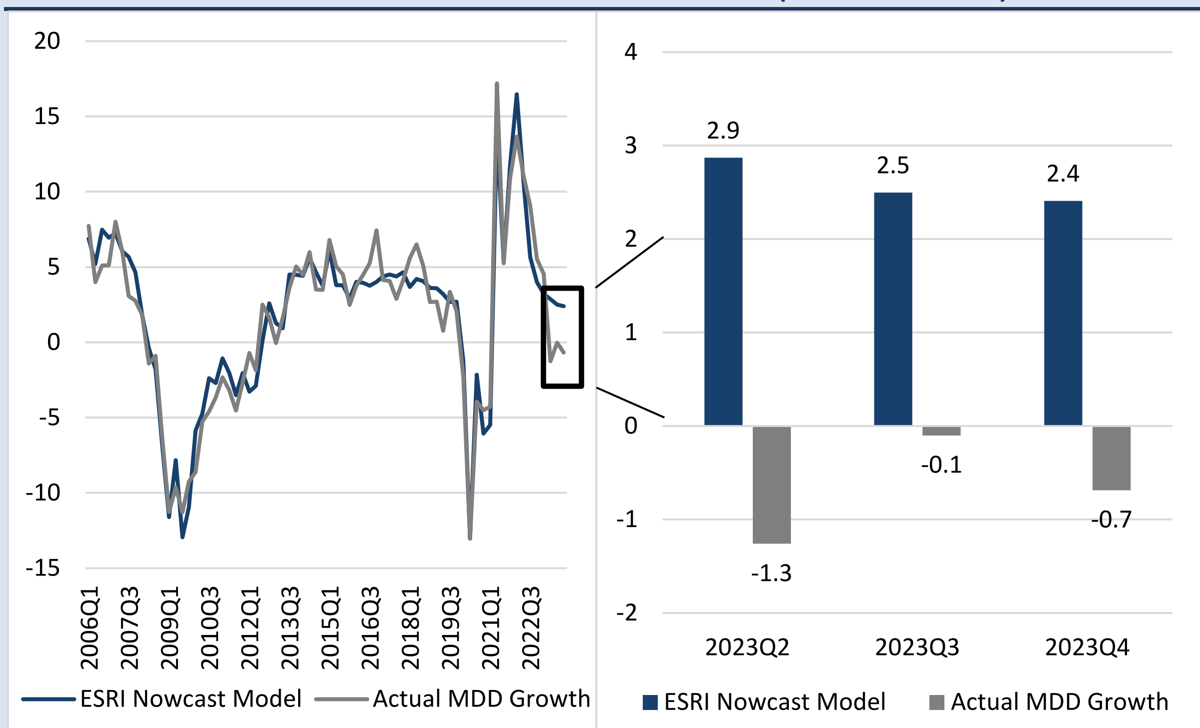
Source: Central Statistics Office.

BOX B NOWCAST

Introduction

The ESRI's Nowcasting model[12] has been employed to support the forecasting exercise in the *Quarterly Economic Commentary* since December 2021. Ireland's MDD has experienced three consecutive quarters of negative year-on-year growth over the period Q2 2023 to Q4 2023. As shown in Figure B.1, while the Nowcasting model has performed well historically, it failed to predict the negative growth seen throughout the second half of last year. In fact based on the Nowcast model, MDD was predicted to grow by 2.8 per cent in 2023, compared to the actual outturn of 0.6 per cent as provided in the National Accounts by the CSO.[13]

FIGURE B.1 ESRI'S MDD NOWCAST MODEL PERFORMANCE (YEAR-ON-YEAR %)



Source: Central Statistics Office and author's calculations.

The fall in year-on-year growth rates of MDD experienced throughout 2023 is likely driven by factors such as investment by MNEs. While, by definition, MDD aims to strip out distortions caused by certain MNEs, their disproportionate influence in certain sectors of the economy can still distort MDD figures through their impact on modified investment. 2022 saw a significant increase in modified investment, growing by 16.9 per cent. This is

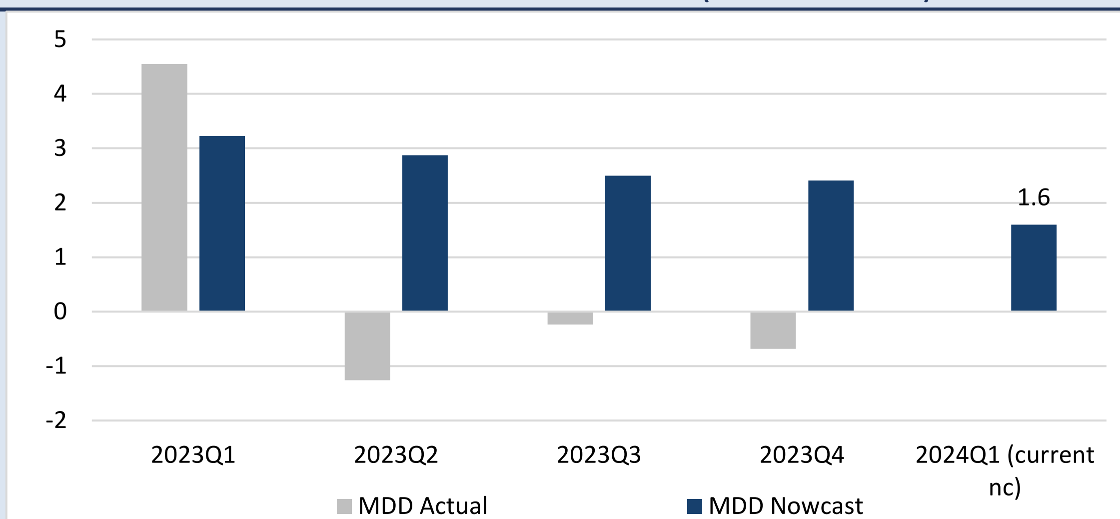
[12] Based on Egan, P. (2023). 'Nowcasting domestic demand using a dynamic factor model: the case of Ireland', *Applied Economics Letters*, 30(19), 2711-2716.

[13] The Central Bank of Ireland highlight a similar finding in their most recent *Quarterly Bulletin* published in December 2023. They show that MDD growth implied by their Business Cycle Indicator (BCI) to be 4.4 per cent and 1.1 per cent respectively in Q3 2023 and Q4 2023, as opposed to the negative outturns in both periods.

compared to the -6.8 per cent recorded in 2023. Interestingly, the CSO supressed data for the components of modified investment (modified Gross Domestic Fixed Capital Formation) due to confidentiality reasons in both 2022 and 2023. As the CSO are obliged to keep certain data confidential when there is a concentration of activity among a small number of companies due to the commercially sensitive nature of the data, it would suggest large movements from a small number of firms drove investment figures in 2022 and 2023, and figures are not likely to reflect investment among the majority of firms operating in the Irish economy. Therefore, we believe that the growth implied by the Nowcast provides a good barometer of the strength of the underlying domestic economy. Also, given that the 2023 slowdown in modified investment is likely due to this small group of firms returning to lower investment levels after the significant increases in 2022, it is likely that modified investment will stabilise in 2024.

Figure B.2 provides the most recent Nowcast for Q1 2024 based on partial data from January and February. The figure implies that the domestic economy continues to grow in Q1 2024, although at a slower pace than that implied by the Nowcast throughout 2023, with a value of 1.6 per cent year-on-year.

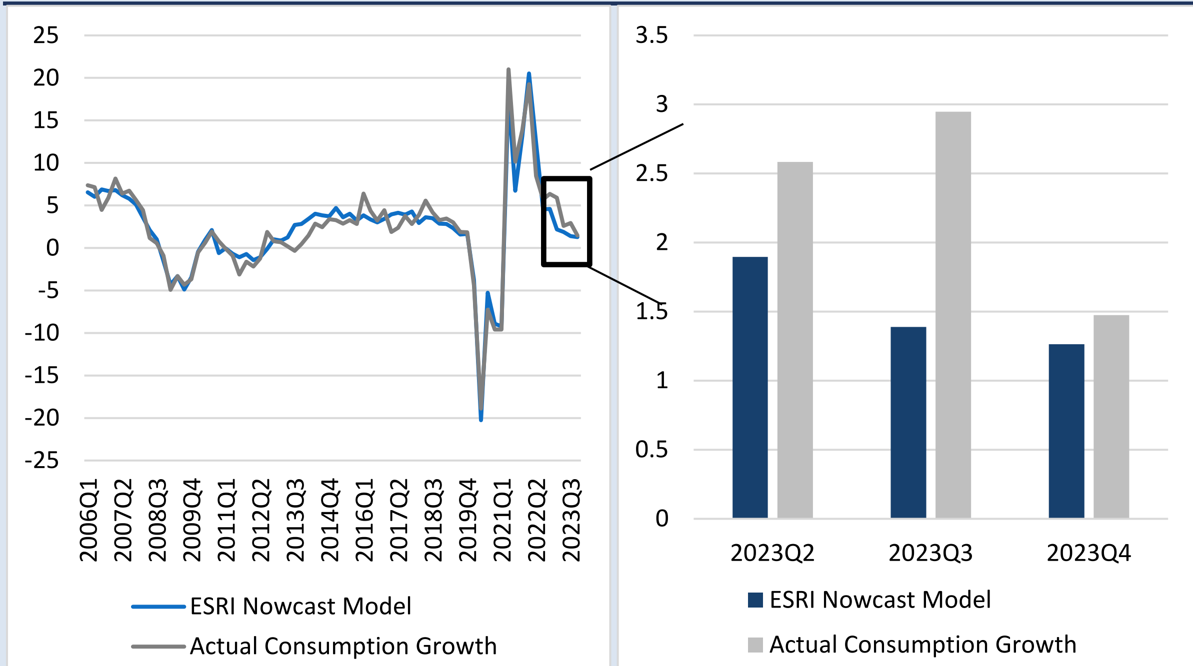
FIGURE B.2 ESRI RECENT AND CURRENT MDD NOWCAST (YEAR-ON-YEAR %)



Source: Central Statistics Office and author's calculations.

In addition, due to the uncertainty surrounding the MDD figures for the reason discussed above, we use the same Nowcasting model and apply it to the growth rate of personal expenditures on consumer goods and services (consumption). This has accounted for around 56 per cent of MDD from 1995-2023. The historic performance of the Nowcast model to predict the growth rate of consumption can be seen in Figure B.3. The illustration shows that, similar to the MDD Nowcast, the Nowcast of consumption has performed well historically but, unlike MDD, the model continued to provide an accurate picture of the growth rate in consumption in Q2 2023-Q4 2023.

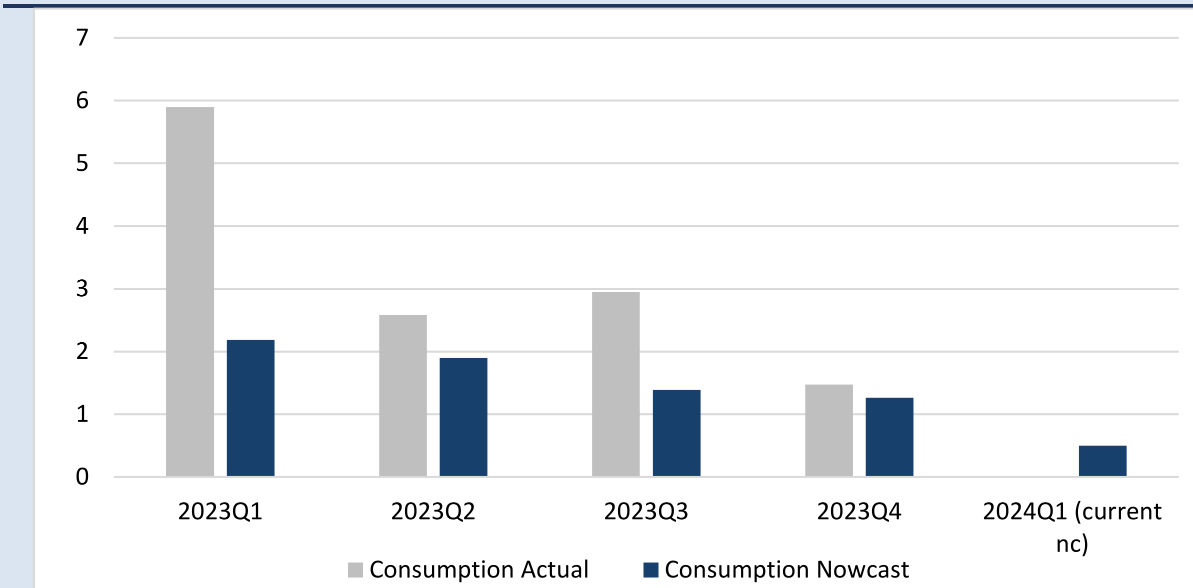
FIGURE B.3 NOWCASTING MODEL FOR CONSUMPTION (YEAR-ON-YEAR %)



Source: Central Statistics Office and author's calculations.

Figure B.4 shows the current Nowcast of personal expenditure and, like the MDD forecast above, suggests that consumption is still growing positively, although at a slower rate than in 2023, with a Nowcast value of just 0.5 per cent. It should be pointed out that the Nowcast is based on only partial data and, for example, only includes retail sales data from January.

FIGURE B.4 ESRI RECENT AND CURRENT CONSUMPTION NOWCAST (YEAR-ON-YEAR %)



Source: Central Statistics Office and author's calculations.

Conclusions

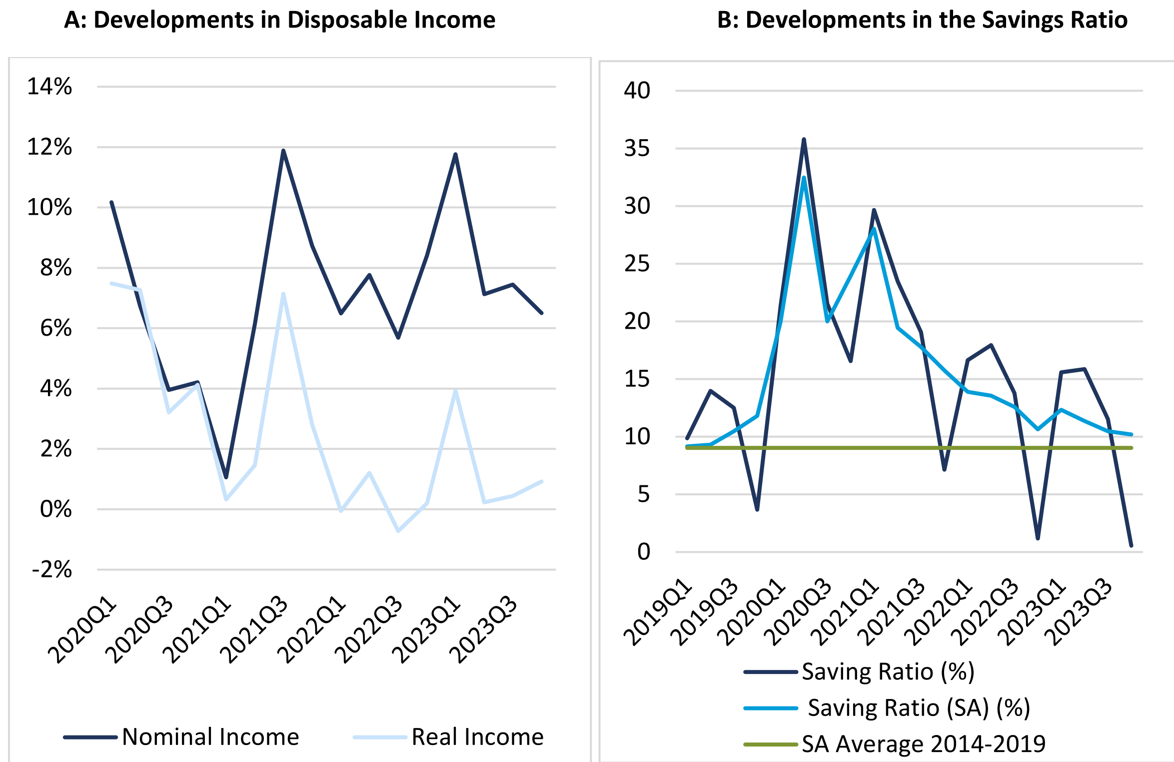
When additional MNE related distortions are controlled for, it is clear that the underlying Irish economy grew at a slower pace in 2022 than suggested by the headline MDD figure. This means that the underlying MDD estimate in 2023 is higher than the headline rate. This indicator of economic activity suggests that the Irish economy has been growing in a steadier manner over the past few years than the actual, official data suggest.

This Box was prepared by Paul Egan.

The main drivers of consumption (both income growth and changes in the savings ratio) are presented in Figure 4. In terms of income developments, Figure 4A presents developments in disposable income, with both the real and nominal figures. While nominal income growth has remained strong, reflecting the robust labour market performance, inflationary effects have eroded household spending power, with real incomes growing only modestly (at an economy-wide level).

Savings rates which were elevated following the COVID-19 pandemic have fallen back to more normal rates. This is likely due to many households using savings buffers to maintain consumption in the face of rising prices. Indeed, the Q4 2023 savings ratio (Figure 4B) is back close to the pre-COVID-19 trend of just under 10 per cent. As the savings ratio has reverted to its historical pathway, it is likely to stabilise at this rate, leaving consumption growth to track income growth in a more consistent manner than in the past two years.

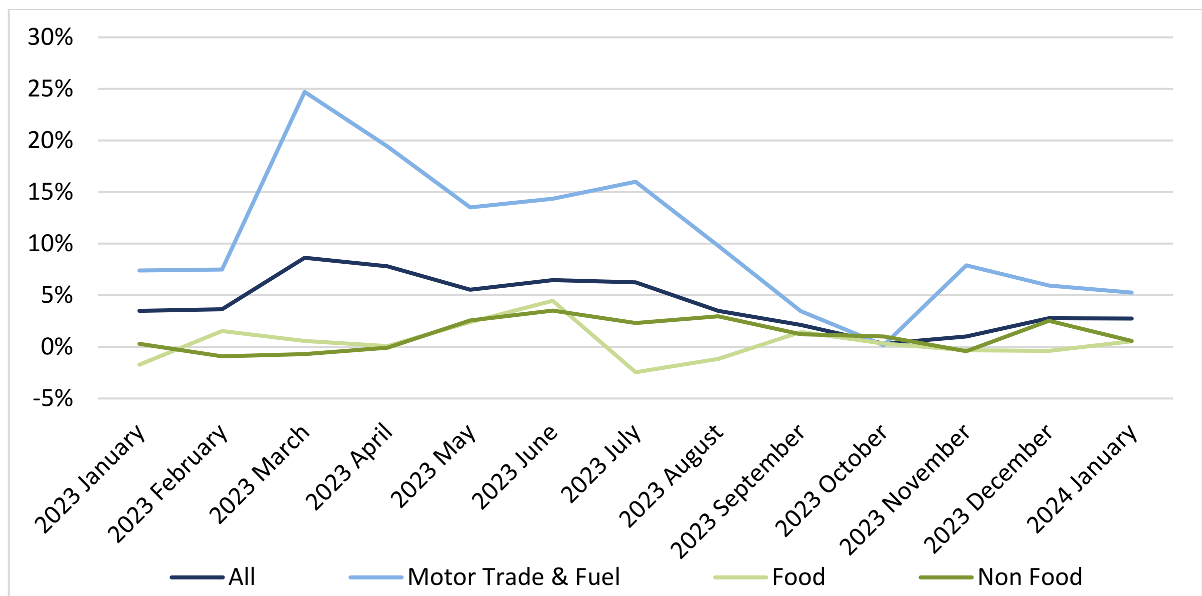
FIGURE 4 TRENDS IN INCOME AND SAVINGS (%)



Source: Central Statistics Office.

Further insight into the moderation in domestic household expenditure can be seen from the retail sales data in Figure 5. The figure presents four series; the overall retail sales index, the motor trade and automotive fuel sector, expenditure on food, and non-food items. Throughout 2023, a steady but sustained moderation is evident in expenditure across all activities. Looking forward to 2024, overall expenditure is remaining robust at just under 3 per cent but a slowdown in non-food expenditure may point towards some sluggishness in the retail sale of goods.

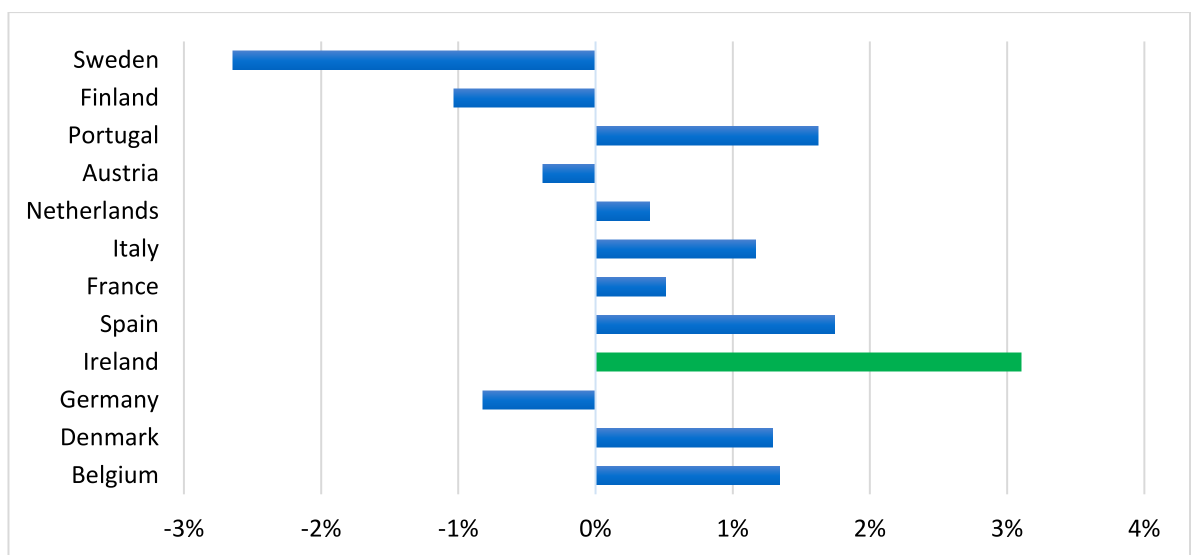
FIGURE 5 DEVELOPMENTS IN RETAIL SALES



Source: Central Statistics Office.

To provide some further context for Irish household spending developments, Figure 6 presents Ireland along with selected other European economies. The growth rate for Ireland is the highest of the countries presented which points towards the resilience and robustness of the domestic performance. Indeed, declines in household spending were evident in a number of other small open economies such as Sweden, Finland and Austria as well as in the large German economy. This reflects the challenges of higher inflation rates and elevated interest rates weighing on spending in these markets.

FIGURE 6 FINAL CONSUMPTION OF HOUSEHOLDS – SELECTED EUROPEAN ECONOMIES – YEAR-ON-YEAR CHANGE IN 2023



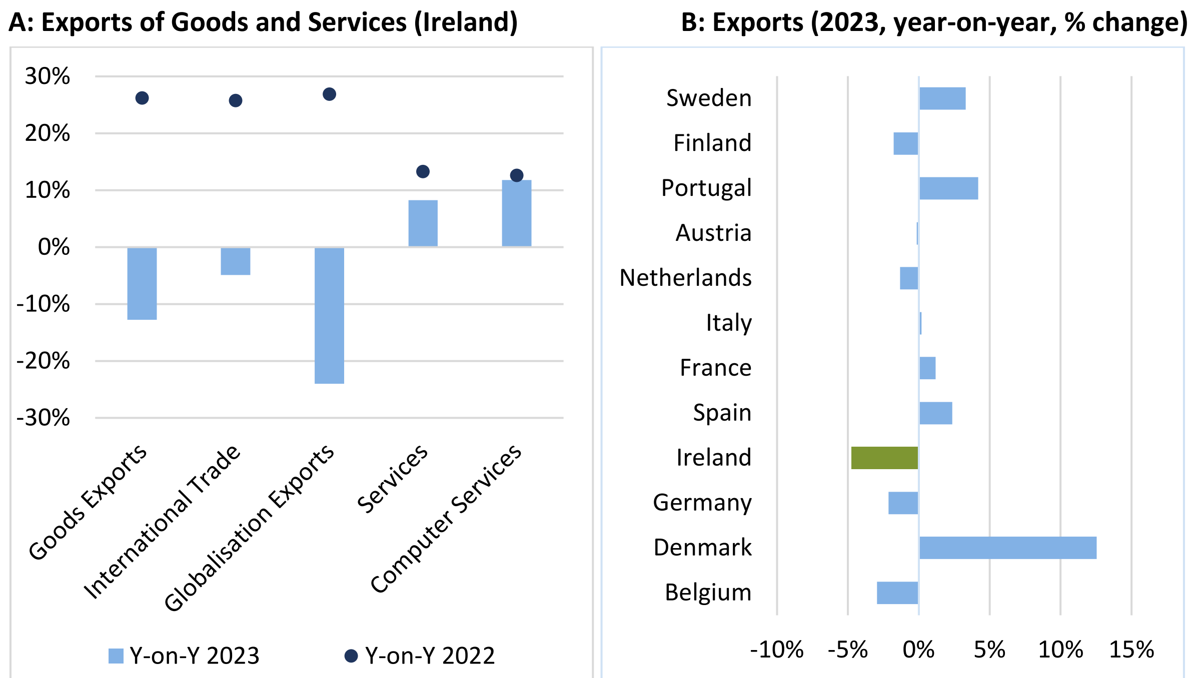
Source: Eurostat.

Sector-specific effects and global headwinds slow exports

Export growth from multinational activities has been the cornerstone of the extremely high growth rates of headline indicators experienced in recent years. The robust expansion of exports, particularly by multinational companies, has been a key driver of Ireland's remarkable economic growth rates in recent years. This growth has been particularly pronounced in sectors such as computer services and pharmaceuticals, where multinationals have performed exceptionally well. In addition, increased export activity facilitated by the globalisation strategies employed by these companies, including trade, contract manufacturing and other related activities, has further contributed to Ireland's export growth. However, in 2023, export growth dropped notably by nearly 5 per cent, reversing these trends. While the global economy slowed in 2023, the magnitude of the reversal in the performance of Irish exports is mainly driven by sector-specific effects and a reversal in globalisation strategies. Indeed, the decline in Irish exports in 2023 was greater than in a group of European peer economies as can be seen in Figure 7B.

Figure 7A presents the year-on-year change in exports between 2023 and 2022, splitting exports between goods (made up of international trade of cross-border flows and globalisation strategies) and services, of which computer services are presented.

FIGURE 7 EXPORTS OF GOODS AND SERVICES – EUROPEAN COMPARISON

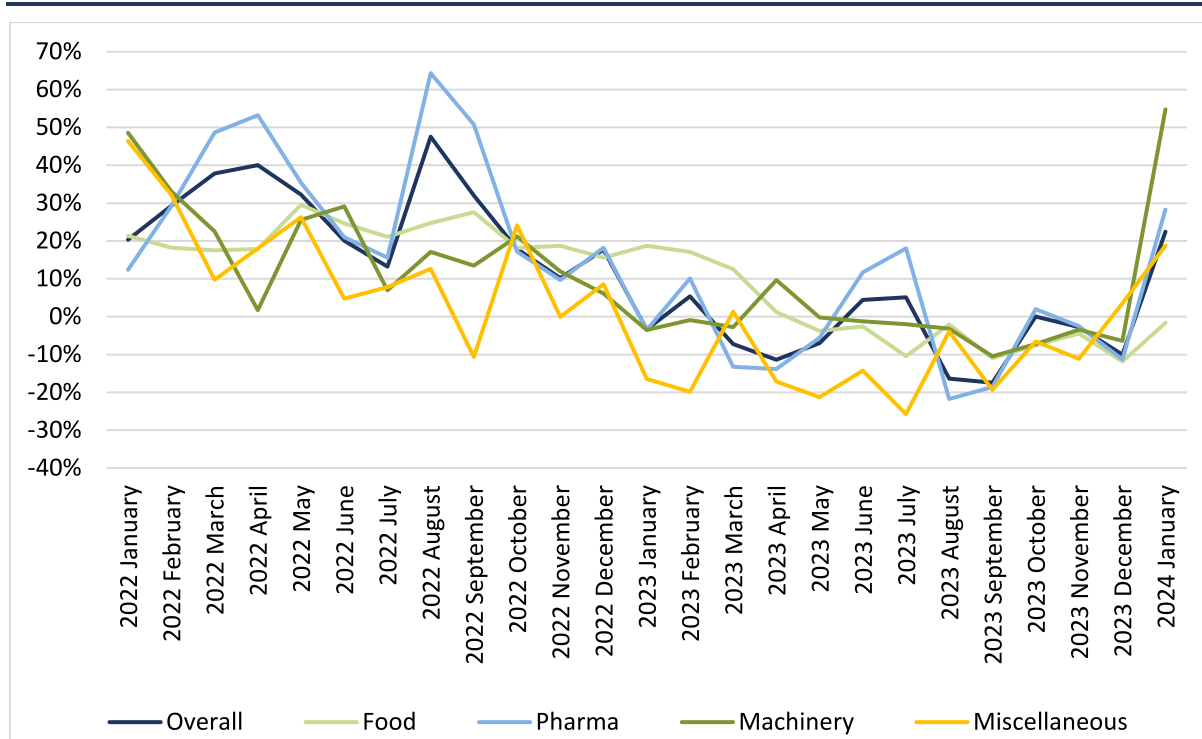


Source: Eurostat.

It is clear the moderation in activity is coming through the goods side, which experienced a decline in export volumes of over 12 per cent year-on-year in 2023, as compared to an increase of 26 per cent in 2022. The decline, however, is much more acute in globalisation strategies which is down nearly 24 per cent year-on-year. International trade is down by nearly 5 per cent. Service exports have performed strongly with computer services again growing at over 12 per cent, highlighting the resilience of the sector in the face of the international challenges it has faced.

Indeed, there is good reason to believe that Irish goods exports may recover in 2024. Data presented in Figure 8 provide the year-on-year growth rate in the value of exports by month using the merchandise trade data. It is clear that a rebound in January 2024 has taken place relative to the same period in the previous year. Of particular note is the rebound in pharmaceuticals and chemicals which had dropped back in 2023. This suggests a return to growth in exports for 2024.

FIGURE 8 VALUE OF EXPORTS OF GOODS – MERCHANDISE TRADE DATA



Source: Central Statistics Office.

Alongside the sector-specific nature of the fall-off in Irish exports, the international economy also slowed in 2023. This was likely to have fed through into the demand for Irish goods and services in many sectors. It is also likely to be a key determinant of the path for exports going forward. Box C considers the key challenges facing

the international economy and draws out the implications for Ireland. Given these considerations, we expect a return to export growth in 2024, in line with international trends, and a continued level of growth in 2025. We forecast exports to grow by 3.3 per cent in 2024 and 3.6 per cent in 2025. Box C by O'Toole summarises some of the global issues confronting the Irish economy over the forecast horizon.

BOX C WHERE IS THE GLOBAL ECONOMY HEADED IN 2024 AND BEYOND?

Introduction

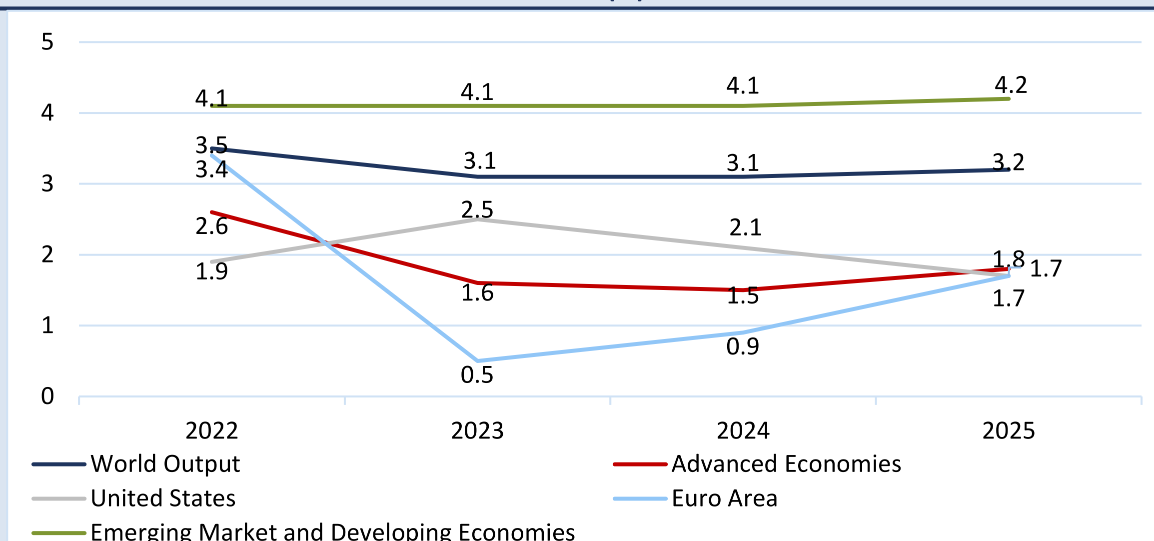
As a small open economy with a highly globalised foreign direct investment sector, Ireland's economic fortunes are very much dependent on developments in international economies. This dependency comes not only from our reliance on global markets as a source of demand but also through the importation of a considerable portion of our consumption and investment goods as well as intermediate goods in many industries. Indeed, nearly all of Ireland's investment goods are sourced overseas which means that addressing well known infrastructure bottlenecks is dependent on both domestic economic capacity but also global market trends for goods and services. Understanding the path of the global economy is therefore central to establishing the outlook for Ireland.

This short Box draws on a number of different sources, with a particular emphasis on the IMF World Economic Outlook January 2024, to consider the factors shaping the global economic situation in 2024 and beyond. It explores the key upside and downside risks that are weighing on the growth trajectory and discusses some of the international policy challenges. Finally, it draws out the implications for Ireland of the developments internationally.

The big picture

Following a period of repeated international shocks from COVID-19 to the war in Ukraine, the international outlook appears to have stabilised with output growing steadily. Drawing on the forecasts produced in the latest IMF World Economic Outlook (2024), the global economic outlook has improved marginally since the middle of 2023 when inflationary pressures were elevated and policy rates on an upward trajectory. Figure C.1 presents the forecasts for world, advanced economy, emerging/developing economy output growth as well as output growth in two major Irish trading partners; the US and the euro area.

FIGURE C.1 GLOBAL GROWTH DEVELOPMENTS (%)



Source: IMF World Economic Outlook.

Following a decline in growth in 2023, driven by challenges in advanced economies, overall global growth is forecasted to remain buoyant at just over 3 per cent for this year and into 2025. This represents an upgrade on the outlook for 2024 for both advanced and emerging economies. Overall growth in advanced economies is expected to flatline in 2024 before increasing marginally to just under 2 per cent in 2025. Most advanced economies followed an expansionary fiscal policy in 2023 to address the cost of living issues associated with higher rates of inflation, and the policy challenge will be withdrawing the support as inflation eases.

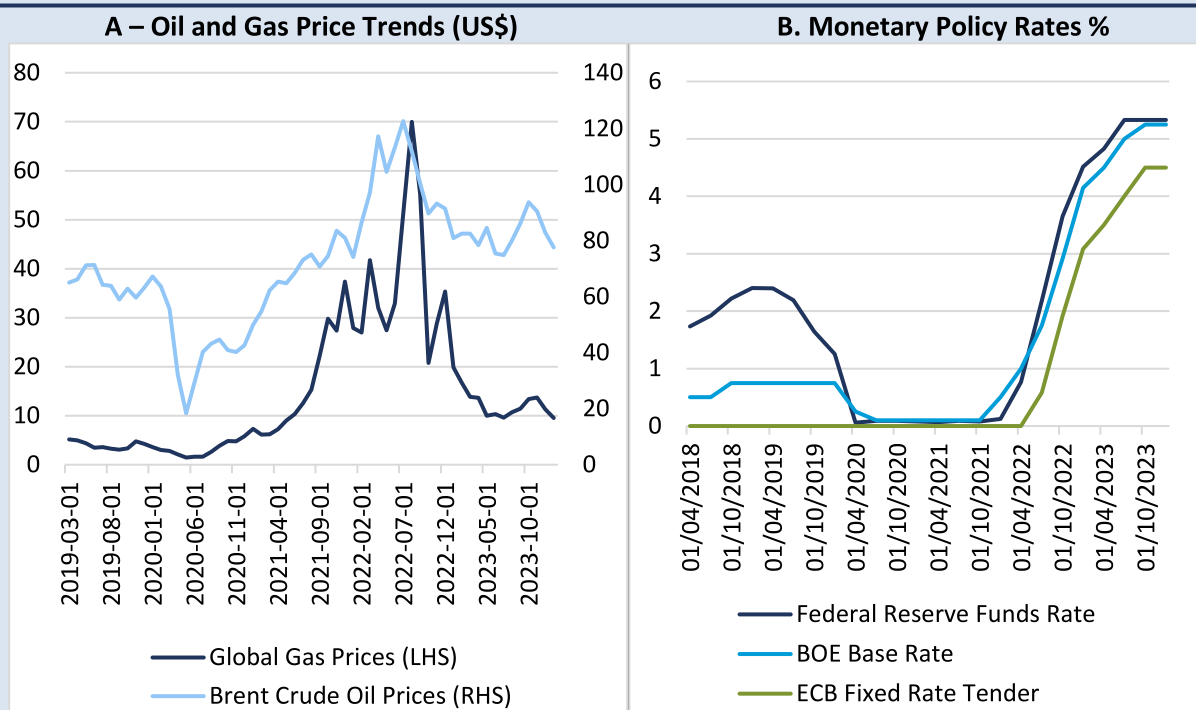
Beneath these trends, a divergence is expected between the US and the Eurozone for 2024: on the one hand, a robust growth performance in 2023 for the US is expected to wane as the lagged effects of monetary policy kick in, a gradual fiscal tightening occurs and labour markets soften; on the other hand, following an extremely challenging year with subdued growth for the Eurozone (due to the impact in 2023 of higher interest rates on business investment and consumption, as well as persistent inflation), the outlook is expected to improve in 2024 and 2025 as inflation moderates, businesses adjust to higher rates and consumer sentiment improves. More generally, the quicker-than-expected moderation in global inflation which has been evident through the later part of 2023 has offset the higher interest rates, pointing towards the possibility of easing monetary policy rates more quickly than anticipated.

Inflation path may lead to early easing of financial conditions

Since the end of the COVID-19 pandemic and the global price shocks from the war in Ukraine, managing inflationary factors has been the main challenge facing policymakers. Throughout 2022 and the early part of 2023, most economies experienced elevated rates of consumer price inflation on the back of major energy price shocks and supply chain disruptions. These large (particularly for the effects of the war in Ukraine) unanticipated

shocks caused major increases in both input and consumer prices. This led to considerable hardship for households who experienced material impacts on their standard of living but also caused difficulties for businesses, especially those in energy intensive sectors. Many governments, in particular in Europe, deployed fiscal supports to stem the impact on households and businesses while central banks raised policy rates in an effort to curb inflationary pressures. This combination of price shocks and higher interest costs weighted on growth. Figure C.2A highlights the increase in global energy prices for both natural gas as well as oil prices while Figure C.2B documents the increase in policy rates that different central banks implemented to attempt to curb the inflationary spiral. The latter has raised notably the cost of funds for firms and likely weighed on growth through investment channels.

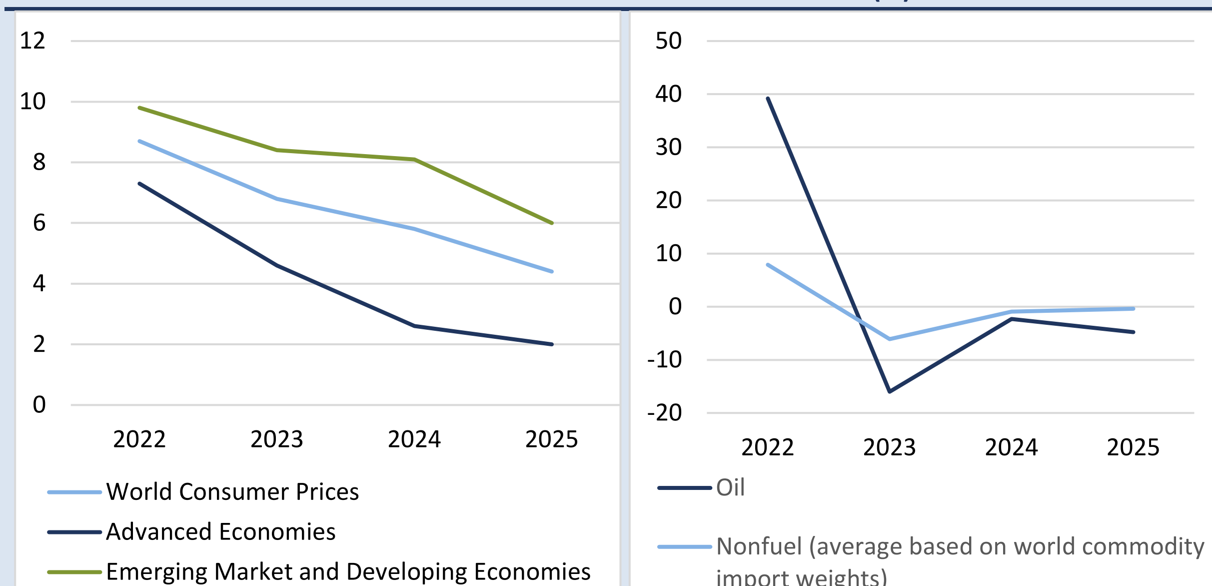
FIGURE C.2 ENERGY PRICES AND INTERNATIONAL POLICY RATES



Source: Federal Reserve Bank of Dallas, Bank of England, European Central Bank.
Note: Oil is: Brent - Europe, US dollars per Barrel; Gas is: US dollars per Million Metric British Thermal Unit.

However, as 2023 progressed, energy prices have fallen back and there has been a clear moderation in the pass-through to inflation. In terms of commodity prices, both oil, gas and other non-fuel commodities experienced deflation in 2023. Coupled with the contractionary effects of the increase in policy rates, and the normalising of supply chains, the outlook for inflation has improved and disinflation has occurred in a quicker-than-anticipated fashion. The IMF forecast for global consumer price inflation in 2024 is a full percentage point lower than for 2023, at 5.8 per cent, with a further decline to 4.4 per cent in 2025. For advanced economies, the expected rate of consumer price inflation in 2024 is 2.6 per cent, down from 4.6 per cent in 2023. This represents an increase in the rapidity of disinflation relative to previous international forecasts and highlights the movement back towards changes in price levels that are consistent with central bank mandates in advanced economies.

FIGURE C.3 ENERGY PRICES FORECASTS AND INFLATION OUTLOOK (%)



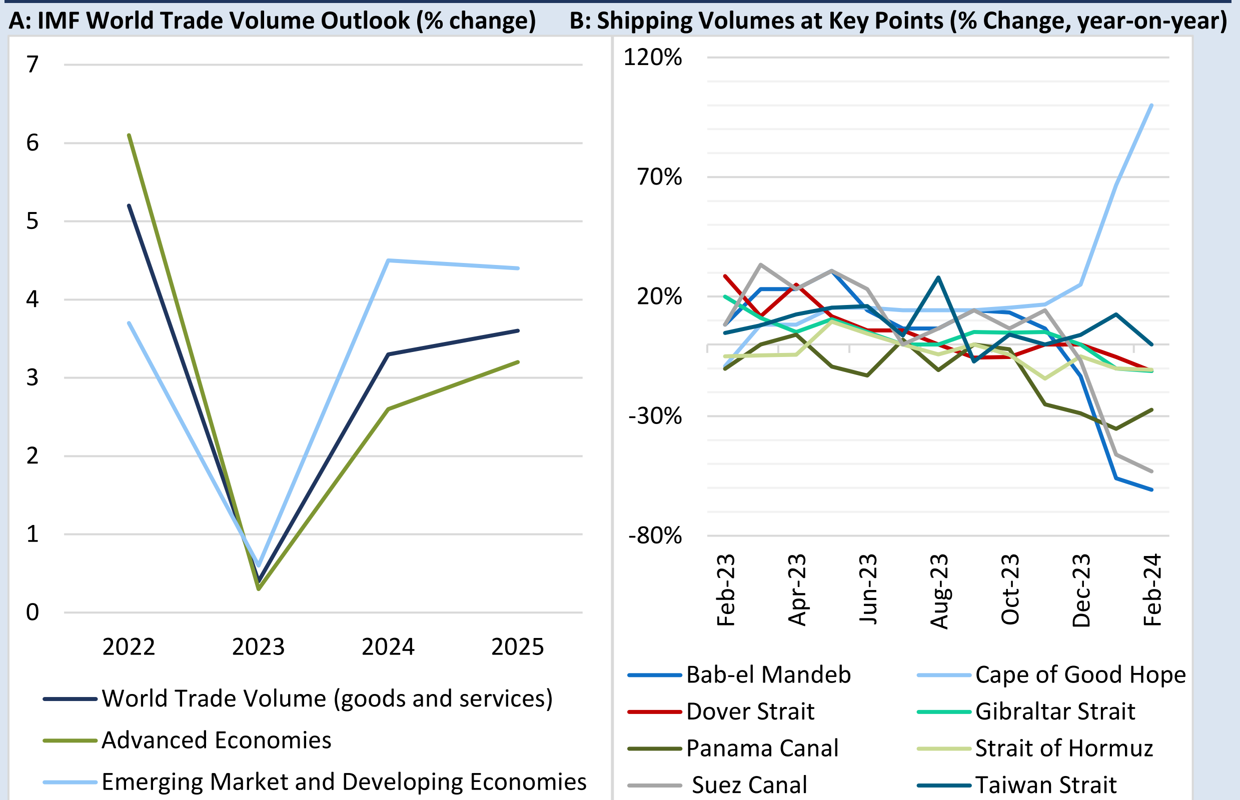
Source: IMF World Economic Outlook.

Trade expected to recover but with notable downside risks

Critical to the performance of world economies, and for import-dependent economies like Ireland, is the movement of goods and services around the world. World trade activity faltered in 2023 following the end of the post COVID-19 recovery in 2022. World trade volumes for goods and services only increased marginally in 2023 with growth of approximately 0.4 per cent on the back of higher inflation and the emergence of geopolitical tensions and increased trade fragmentation (Bolhuis et al., 2023). For 2024, a robust rebound is expected with growth to continue into 2025.

However, there are a number of considerable downside risks to global trade that are becoming increasingly apparent. The impact of the Israel-Hamas war has led to increased tensions in the Middle East. While the humanitarian impacts of the war have been devastating, the attacks on shipping activity in the approach to the Suez Canal and the Red Sea have disrupted trade and raised freight prices. Dunn and Leibovici (2024) note that while the geopolitical challenges are limited to the Suez Canal, this has spillover effects across prices on all freight channels. Prices for global freight have increased by 120 per cent since October 2023, and this has come through increases across a range of routes including the Atlantic and Pacific routes, physically unaffected by the Middle Eastern tensions. They find that since the start of the Israel-Hamas war in October 2023, the re-routing of container traffic to avoid the Houthi attacks in the Red Sea and Suez Canal have added 3,500 nautical miles per journey and an average of 14 days in shipping time. Figure C.4B shows the year-on-year change in trade volumes of shipping traffic going through a number of major 'chokepoints' using port mapping data as described in Arslanalp et al. (2021). It can clearly be seen that a major drop-off in activity is occurring in the Suez Canal and Bab-el Mandeb Strait with a commensurate increase in volumes at the Cape of Good Hope. This change in routing increases the time and cost of shipping and is likely to have knock-on effects on goods prices globally.

FIGURE C.4 GLOBAL TRADE VOLUMES OUTLOOK AND SHIPPING DATA FOR KEY CROSSING POINTS



Sources: A: IMF WEO Update January 2024; B: author's calculations using IMF port data.

Both the increase in freight costs, the trade disruptions in the Red Sea and the longer-term impacts of global trade fragmentation pose downside risks to growth. For an economy like Ireland, which is dependent on imports of capital as well as consumer goods, this could lead to higher consumer prices and also higher prices of key inputs such as those used in housing or infrastructure provision. This adds a further risk to the achievement of targets in these areas.

Concluding remarks

The global economy is expected to grow relatively steadily in 2024 with the outlook for advanced economies also continuing to improve. The quicker than anticipated disinflation now prevalent is likely to provide breathing space for households, remove the requirement for fiscal supports from governments and improve consumer sentiment. This may also provide scope for central banks to re-adjust policy rates and loosen financial conditions more quickly than previously anticipated. This, in turn, could see an increase in investment expenditure by enterprises.

However, increasing geopolitical risks, in particular around trade in the Red Sea, could lead to the emergence of further commodity price shocks, increase supply chain bottlenecks and halt the downward momentum in inflation. If this risk were to materialise, monetary policy rates could remain higher for longer which would impact adversely on growth prospects.

References:

Arslanalp, S., Koepke, R. and Verschuur, J. (2021). 'Tracking Trade from Space: An Application to Pacific Island Countries', No. 2021/225, IMF Working Papers, International Monetary Fund.

Bolhuis, M., Chen, J. and Kett, B. (2023). 'Fragmentation in Global Trade: Accounting for Commodities', No. 2023/073, IMF Working Papers, International Monetary Fund.

Dunn, J. and Leibovici, F. (2024). 'Shipping Disruptions in the Red Sea: Ripples Across the Globe', *On the Economy Blog*, Federal Reserve Bank of St. Louis.

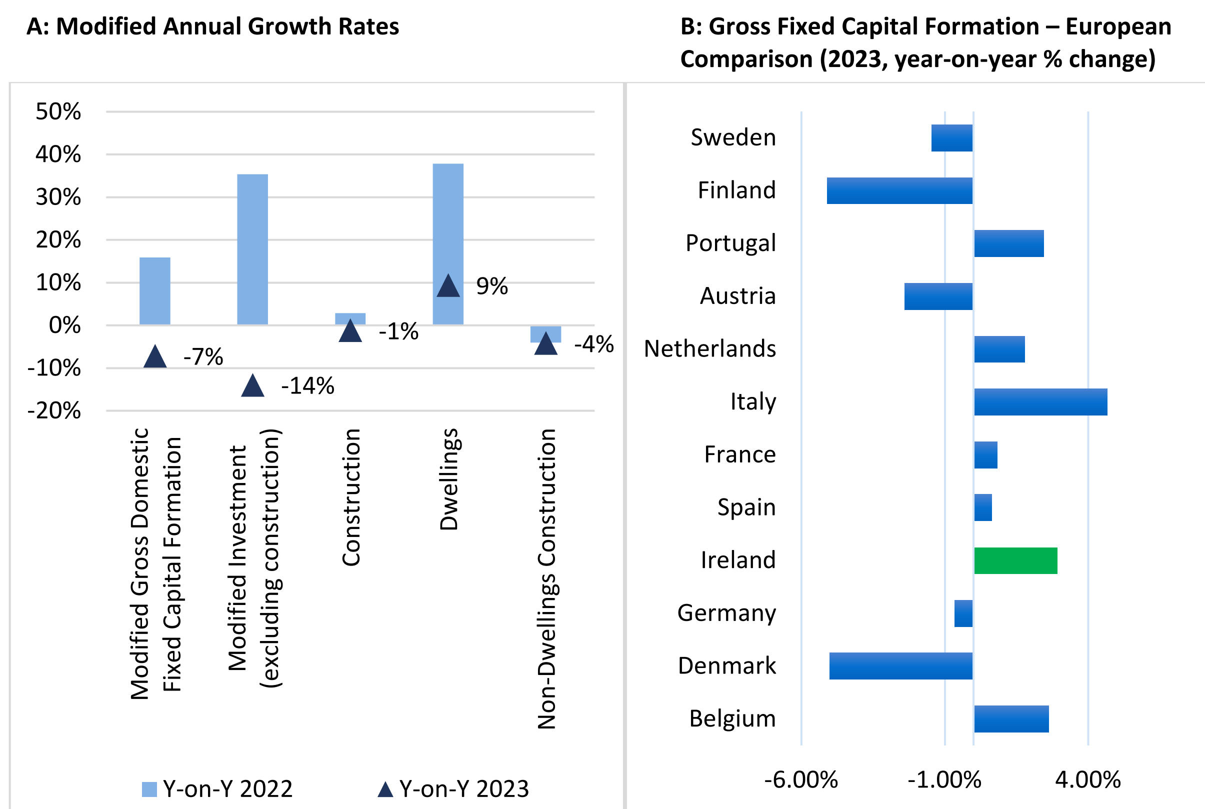
International Monetary Fund (2024). 'World Economic Outlook: January 2024 Update', Washington D.C., US.

This Box was prepared by Conor O'Toole

Uncertainties and financing costs weighing on investment outlook

Underlying investment in the Irish economy faltered in 2023 as interest rates increased the cost of financing and global uncertainties weighted on the business outlook. Figure 9 presents the annual growth rate for 2022 and 2023 of modified investment (which removes the aircraft leasing and R&D intellectual property assets), construction investment and non-construction modified investment. Overall modified investment fell back by approximately 7 per cent, with non-construction investment dropping by 14 per cent and construction investment dropping by 1 per cent. Within construction, the market was characterised by countervailing effects across the sub-sectors with residential dwelling investment increasing by over 9 per cent while non-dwellings construction dropped by 4 per cent. This reflects the ongoing challenges faced by the commercial real estate sector which has suffered a notable downturn on the back of a number of factors such as changing work practices and higher interest rates. Drops in investment are also evident in other European economies such as Sweden, Finland, Demark, Austria and Germany reflecting the challenging outlook and higher financing costs. Overall investment in Ireland (presented in Figure 9B) grew by 3 per cent as higher intangible asset investment occurred in Q4 2023.

FIGURE 9 INVESTMENT TRENDS



Source: Central Statistics Office; Eurostat.

The fall-back in investment in Ireland is particularly noteworthy when considered in the context of the optimal level of capital formation in the domestic economy. Box D in the *Commentary* by FitzGerald and McQuinn adds further insight in this regard by calculating the underlying rate of investment in the Irish economy on the basis of the alternative output measures advanced in Box A. Accounting for multinational distortions, it is clear that the investment rate in the Irish economy is below the EU average. While some of this is likely to be driven by different sectoral structures across countries, it does provide further evidence of the requirement to raise investment rates, albeit in a sustainable way.

BOX D WHAT IS THE INVESTMENT SHARE OF OUTPUT IN THE IRISH ECONOMY?

Introduction

At present, there is a general consensus that the Irish economy needs a significant degree of investment across a number of specific areas. The recently published review of the National Development Plan (Barrett and Curtis, 2024) examines the challenges in meeting the specific investment targets outlined in the most recent NDP which was published in 2018.

The last ten years has seen a remarkable and sustained recovery in the Irish economy as it emerged particularly scalded from the impacts of the Global Financial Crisis (GFC). A key indicator for tracking and monitoring investment levels in any economy is the investment share; the ratio of investment levels to overall economic activity. However in the Irish case, such measures are bedevilled by the well-known issues concerning the representativeness or otherwise of key headline indicators in the National Accounts. A wide variety of studies have commented on these issues with some seeking to advance the case of alternative indicators as presenting a more accurate assessment of domestic economic activity.[14] Given the significant role played by multinationals in the Irish economy, both estimates of overall output levels and headline investment levels are subject to considerable distortions. Consequently, this makes it acutely difficult to generate a representative estimate of the investment share in an Irish context.

In this Box, availing of recent work by FitzGerald (2023), we present an improved estimate of Ireland's investment share. We use net national product at market prices as an indicator of overall domestic economic activity as advocated by FitzGerald (2023), FitzGerald (2020) and in Box A in the present *Commentary*. We then combine this with the series on Modified Gross Fixed Capital Formation as published by the Central Statistics Office.

Modified investment, which is part of the modified domestic demand (MDD) indicator now published by the CSO, excludes certain items which are contained in the headline investment figure. These include aeroplanes purchased by leasing companies in Ireland but then operated in other countries. Also excluded are intellectual property (IP) purchases which typically only relate to foreign-owned corporations and generate profits that flow out of the economy. While modified investment does not wash out all of the distortions in headline investment levels, it is the most accurate estimate of investment in the Irish economy.

Updated investment share

In Figure D.1 we present annual growth rates for our output series and for modified investment from 1996[15] to 2022.

From the graph it is clear that both changes in investment and output track each other quite closely over the period in question. However, it is also clear that, particularly in the period after the GFC (2008-2012), the decline in investment was more severe than the fall in output. This reflects the particularly severe impact of the GFC on the Irish residential and commercial property markets. There have been periods where the growth rate of investment exceeded that of output; in the latter period of the Celtic Tiger era, when housing output grew persistently, and in the post-GFC recovery period 2012-2017. Both output and investment levels experienced a sharp decline in 2020 due to the health restrictions imposed due to the COVID-19 virus.

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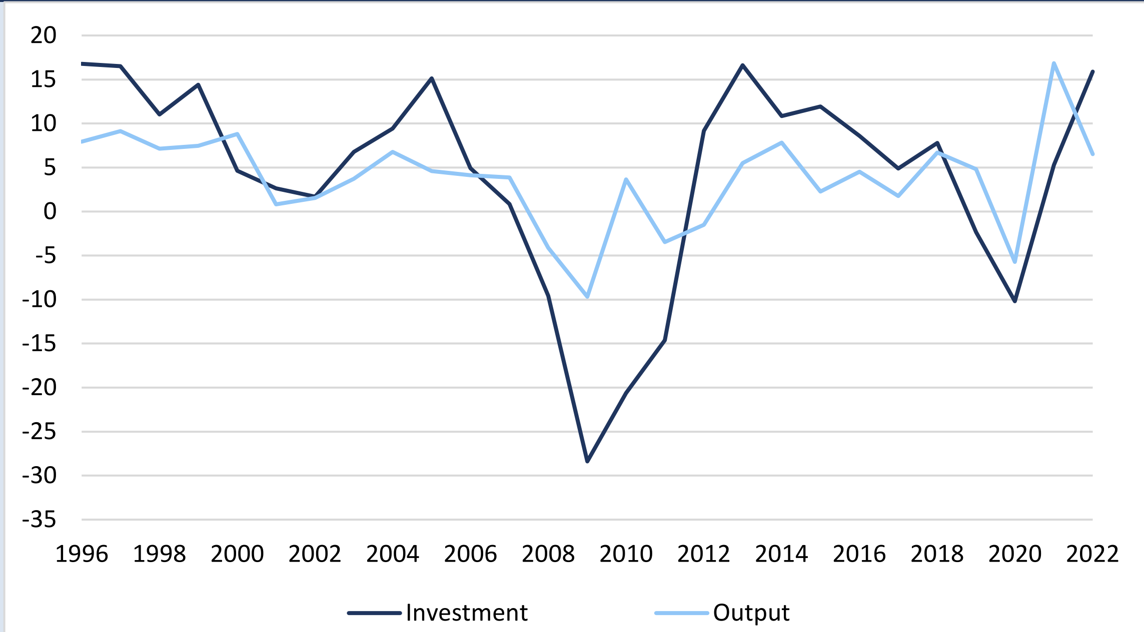
[14] These include but are not limited to Lane (2017), FitzGerald (2020), Honohan (2021), FitzGerald (2023) and Kostarakos et al. (2023).

[15] Net national product at market prices as presented in FitzGerald (2020) and FitzGerald (2023) is only available from 2013-2022. Prior to 2013 the series is 'backcast' with net national income at constant prices.

FIGURE D.1 ANNUAL GROWTH RATE OF IRISH OUTPUT AND MODIFIED INVESTMENT: 1996 – 2022 (%)

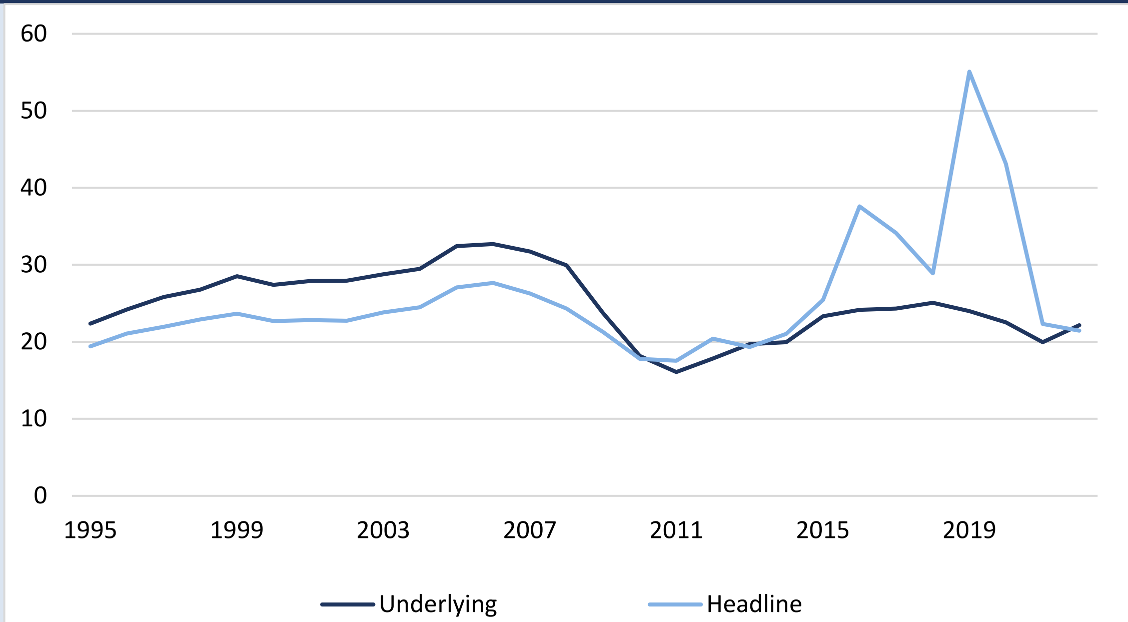


Source: *QEC* calculations.

Preferred investment share and concluding comments

What does all of this mean for the investment share? In Figure D.2 we plot the resulting share based on our preferred measurements of output and investment levels. We also, as a comparison, plot the headline investment share according to headline GDP and total investment levels.

FIGURE D.2 INVESTMENT SHARE IN THE IRISH ECONOMY: 1995 – 2022 (%)



Source: *Quarterly Economic Commentary.*

As can be seen, a significant difference emerges between both series. In the period preceding the GFC, the underlying share is consistently higher than the headline rate would indicate. However, in more recent times it is evident that the headline rate is greatly in excess of the underlying rate.

The importance of estimating these alternative indicators in assessing the state of the domestic economy is quite clear. From a policy perspective, for example, it suggests using the actual, headline data would provide a very misleading account of investment levels in the domestic economy. The underlying investment share has fallen quite consistently since 2007 and, despite the strong recovery of the Irish economy, is still at a rate comparable to what it was back in the mid-1990s before the escalation of the Celtic Tiger. This highlights that if economic growth is to be sustained into the medium term, this ratio will have to increase on a persistent basis from its current position. The scale of change required is only evident from the underlying indicator.

While not exactly comparable, it is useful to compare the underlying investment-to-output ratio for Ireland, shown here, with the average for the EU. Over the full period 1995 to 2022, the average ratio for Ireland was around 25 per cent, very similar to the rest of the EU of 26 per cent. However, the Irish figure was bolstered by high levels of investment in the Celtic Tiger years. For 2022 the ratio of modified investment to NNP in Ireland was 22 per cent whereas for the EU as a whole it was 28 per cent. While some of the difference may be due to a different structure of the economy, with less heavy industry, it also reflects serious underinvestment in necessary infrastructure, as discussed in Barrett and Curtis, 2024.

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Kostarakos I., McQuinn K. and Varthilitis, P. (2023). 'The role of intangible investment in Ireland: A growth accounting perspective', *Review of Income and Wealth, 2023*, available online: https://onlinelibrary.wiley.com/doi/10.1111/roiw.12651.

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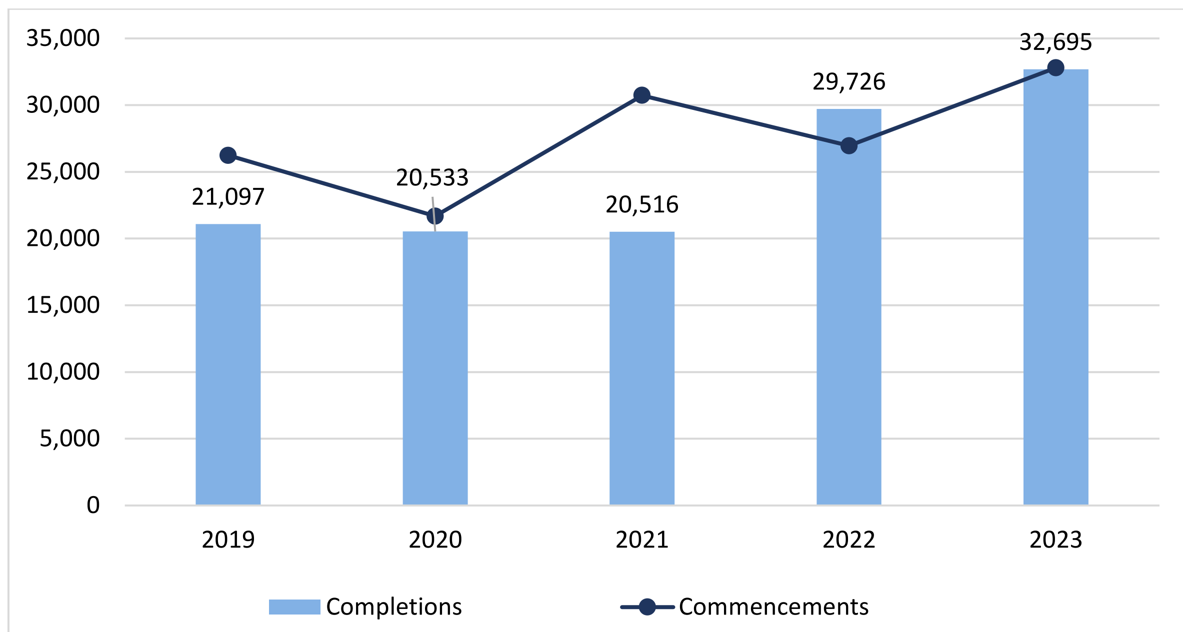
This Box was prepared by John FitzGerald and Kieran McQuinn.

It is well documented that one area in which Ireland faces a capacity shortage relates to housing, with new housing completions remaining below the level indicated by the structural demand for housing since the Global Financial Crisis. As noted above, dwelling investment was the only area in which investment increased in 2023. This manifested itself in a substantial increase in housing completions. Figure 10 presents the trend in housing completions and housing commencements (starts) since 2019.

FIGURE 10 HOUSING OUTPUT



Sources: Central Statistics Office.

The output in 2023 rose to just under 33,000 units which is the highest level since the onset of the financial crisis in 2007. However, given the extent to which housing is acting as a constraint on the economy, and the fact that new household formations are likely to be well in excess of 33,000 units, substantial additional investment is going to be required in the housing sector in the coming years. While the volume of new housing is critically important, the type of accommodation also matters in an Irish context, with Box E in this *Commentary* by Hauser documenting a notable gap in the number of smaller properties in an Irish context. This research suggests that a substantial expansion of smaller units in Ireland would help to deal with issues around the efficiency of dwelling use in the domestic economy. The Irish residential market has a very high share of under-occupied dwellings relative to other EU countries.

BOX E UNDER-OCCUPIED DWELLINGS IN IRELAND

Introduction

This Box addresses the issue of 'under-occupation' in the Irish housing market and the related issue of the efficiency of the available housing stock. It will also explore one source of data to contribute to the issue of understanding the efficient use of the housing stock in Ireland. We draw on the EU-SILC dataset to explore the issue of under-occupation based on a cross-country context.

As households progress through different phases of the lifecycle, their housing needs change. For example, as families grow larger, there is a need for additional rooms, while fewer rooms are needed as a household shrinks. However, there is little research as to whether the current housing stock in Ireland provides an adequate supply for small households such as young couples, small families, or expats and young professionals moving to Ireland. This Box explores this issue using cross-country EU-SILC data.

Under-occupied housing in Ireland and Europe

According to Eurostat 'a household is under-occupied if it has at its disposal more than a minimum number of rooms considered adequate'.[16] With an under-occupancy rate of 67.3 per cent, Ireland is in the top three in Europe (together with Malta and Cyprus) in terms of under-occupancy. The EU average is 33.6 per cent, around half the Irish figure. Figure E.1 shows the under-occupation rate for selected European countries between 2005 and 2022.

In terms of the groups which are living in under-occupied units, the data reveal that more than 88 per cent of people over 65 years live in under-occupied housing. Under-occupation is more prevalent in higher income households. A higher proportion of households in the fifth income quintile live in under-occupied residential units than in other quintiles. The proportion of households living in under-occupied housing decreases according to income quintile; in 2022 the first income quintile (57.6 per cent) just surpassed the second (57.2 per cent). Therefore in 2022, 76.7 per cent of households from the highest income quintile lived in under-occupied housing units.

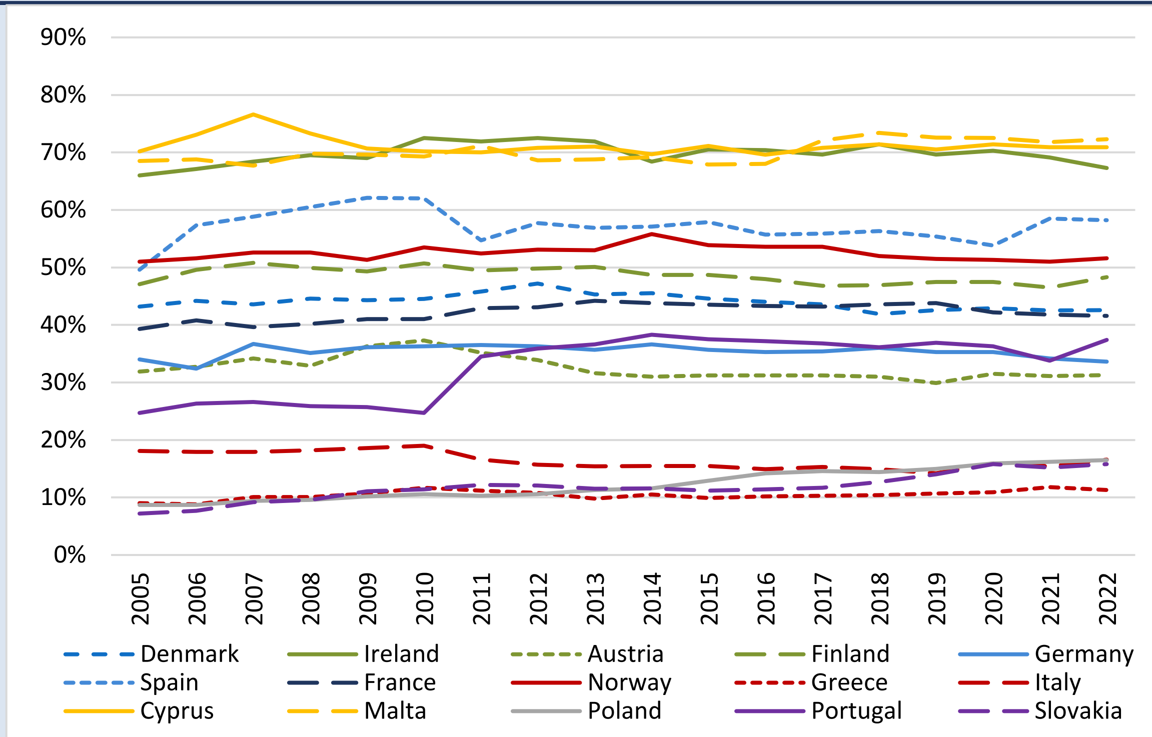
Looking at the proportion of under-occupation by tenure it becomes clear that homeowners are much more likely to live in an under-occupied housing unit than renters. In 2022 almost 80 per cent of homeowners lived in an under-occupied unit whereas only 38.4 per cent of the renters did.

When it comes to the degree of urbanisation, in 2022, the under-occupancy rate is lower in cities (58.7 per cent) than in towns and suburbs (68 per cent), and the highest proportion of people living in homes that are too large is in rural areas (75.9 per cent). At 58.7 per

16 Adequate is considered as: One room for the household, per couple, for each adult single person, per pair of single people of the same gender aged 12-17, for each single person aged 12-17 and not included in the previous category, and per pair of children under 12.

cent, Ireland has one of the highest under-occupancy rates in cities. The European average of 27.3 per cent is less than half as high as in Irish cities.

FIGURE E.1 SHARE OF PEOPLE LIVING IN UNDER-OCCUPIED DWELLINGS



Source: Eurostat.

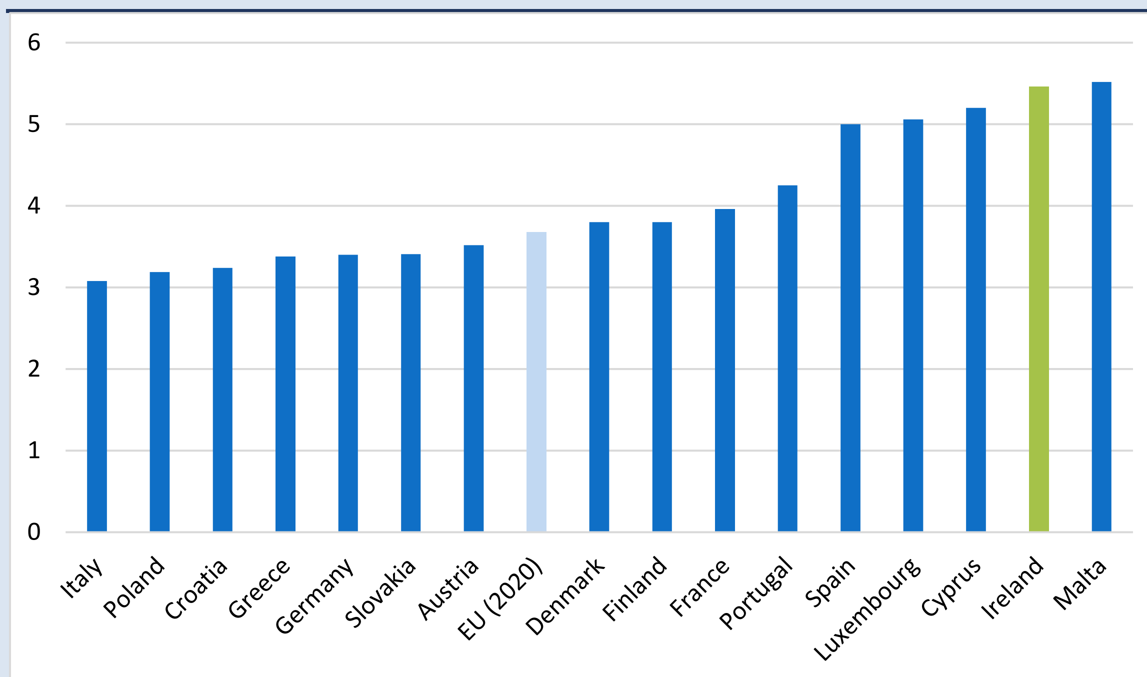
Housing conditions in Ireland vs Europe

The elevated level of under-occupation observed may be attributed to specific cultural norms – e.g. the preference for houses over apartments – inherent in the housing market compared to the rest of Europe. While the homeownership rate in Ireland at 70 per cent is close to the EU average which is 69 per cent, other housing indicators reveal different patterns. For example, there is a clear trend towards smaller households in Europe. In 2022, the average household size in the EU was 2.3 people, while in Ireland it was 2.6, making it one of the countries with the highest average household size in the EU. Only Slovakia (3.1), Serbia, Poland (both 2.9) and Croatia (2.7) have a higher average household size. At 2.6 people per household, Greece and Cyprus have the same average household size as Ireland.

It may therefore seem surprising that such a high under-occupation rate prevails despite the relatively large households. As under-occupancy refers to a situation where a housing unit is larger than needed for its occupants, this appears to be the main cause of the notable under-occupation rate in Ireland as it is among the countries with the highest average number of rooms per person, standing at 2.1. The only two countries with more rooms per person are Malta (2.3) and Luxembourg (2.2) whereas the EU average stands at 1.6 rooms per person.

From these averages it can be concluded that the average Irish housing unit consists of 5.5 rooms, while the EU average is 3.7 rooms. This is a big difference and a likely reason for the high under-occupation in the Irish case. The average size of residential units is displayed in Figure E.2 for different European countries. The graph shows that Ireland is among the countries with the highest average size of housing. This is clearly related to the fact that the Irish housing stock consists of 89.3 per cent of houses compared to apartments.

FIGURE E.2 AVERAGE SIZE OF HOUSING IN DIFFERENT EUROPEAN COUNTRIES



Source: Eurostat, authors' calculations.

Connecting under-occupation to the housing market and the lack of housing supply

A key issue in the Irish housing market at present is the lack of availability of housing units. Estimates by Bergin and Garcia-Rodriguez (2020) indicate that the structural demand for housing in the Irish economy is approximately 35,000 units per annum.[17] However, 2023 is the first year since the Global Financial Crisis (GFC) where new dwelling completions have surpassed 30,000, which underlines that supply is lacking behind and cannot meet the demand for housing in Ireland.

Therefore, along with the fact that not enough residential units are being built, the current housing stock would appear to be skewed towards larger units, with more smaller dwellings required. If the Irish population ages, and household sizes decrease, this will become more acute a challenge. The Irish housing stock consists of 73.3 per cent dwellings with more than two bedrooms. That number does not differ much between rural areas

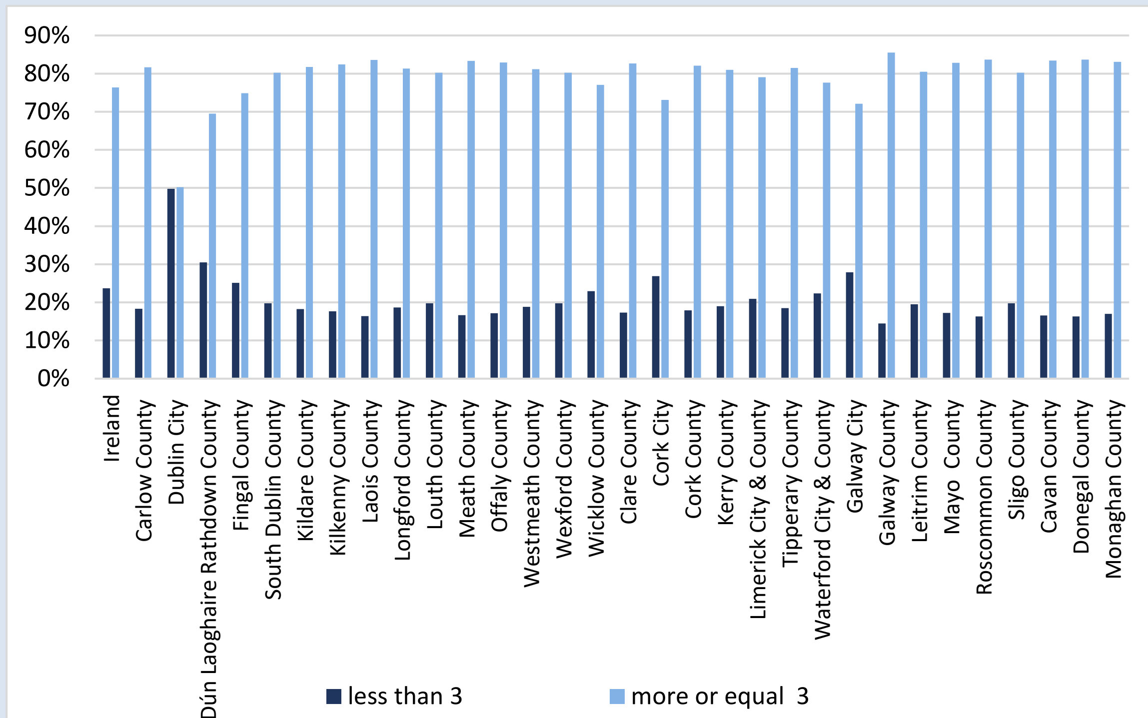
[17] These figures are set to be updated later this year and, given the change in population and immigration levels over the last number of years, the expectation is that the number will be greater than 35,000 units.

compared to e.g. the Dublin area. In Dublin County[18] the split between residential units with more than two bedrooms and less than three bedrooms is 68.7 per cent compared to 31.2 per cent.

This is partly due to the lack of density in residential buildings. The particularly high percentage of Irish people living in a house compared to an apartment, 89.3 per cent, compares with 52 per cent of people living in a house in the rest of Europe. Conversely, this means that it is by far the country with the smallest number of apartments, at 10.6 per cent of the total housing stock. Together with the Netherlands (18.7 per cent), it is the only country in the EU where the proportion of apartments in the housing stock does not exceed the 20 per cent threshold.

The lack of smaller housing options poses challenges for people who want to adapt their housing situation to stages of their lifecycle. Finding a one- or two-bedroom apartment is a major challenge in Ireland due to the lack of supply, even though there are many situations in which demand for those units exists. These scenarios include older couples who want to downsize when their children move out, couples without children who want to form their own household, young and small families, and young professionals who want to become independent from their parents' household.

FIGURE E.3 DWELLINGS BY NUMBER OF BEDROOMS



Source: Census of Population, 2022.

18 Dublin City Council, Dún Laoghaire Rathdown County Council, Fingal County Council, South Dublin Council.

Summary

The under-occupation of residential units in Ireland is a key feature of the domestic market, particularly when compared with other EU countries. Compared with other European countries, housing units in Ireland are, on average, bigger with less people living in them. This circumstance is very likely a product of the high share of houses and small share of apartments, especially in the cities. Furthermore, it is important to note the high share of housing units that consist of more than two bedrooms. Clearly, more high-rise developments would allow a greater number of people to use relatively smaller floor space more efficiently compared with a situation where everyone owns a house. Therefore, in dealing with the issue of low housing availability, policies which incentivise and facilitate the construction of relatively smaller housing units will be an important part of the policy response.

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Eurostat (2023). 'EU-SILC survey - Share of people living in under-occupied dwellings by age, sex and poverty status - total population'. https://ec.europa.eu/eurostat/databrowser/view/ILC_LVHO50A__custom_7141057/bookmark/table?lang=en&bookmarkId=21315587-fee0-40f8-90be-5cc3c2a69cf5.

Eurostat (2023). 'EU-SILC survey - Distribution of population by tenure status, type of household and income group'. https://ec.europa.eu/eurostat/databrowser/view/ILC_LVHO02__custom_7139277/bookmark/table?lang=en&bookmarkId=6eeb03d1-dd59-4bb4-a9b8-ad21bed9cd21.

This Box was prepared by Lea Hauser

For the present year, there are a number of factors that are likely to be weighing on the residential investment outlook, in particular the ongoing high rates of interest, the elevated cost of materials and other inputs as well as capacity constraints in the labour market. Indeed, no substantial pick-up in housing commencements has been seen in 2023 (typically commencements lead completions by 6-18 months). Given the level of commencements in 2023 and the other factors weighing on the outlook, we expect a similar level of housing output for the present year compared with that in 2023. For 2025, we expected a moderate pick-up in completions as inflation slows and central banks begin to taper policy rates in line with the downward inflation path.

Overall, we expect investment to pick up in 2024 relative to 2023 as the global outlook has stabilised, inflation moderated more rapidly than expected, and financing costs are likely to ease towards the end of 2024. We forecast investment to grow by 2.4 per cent in 2024 and 3.1 per cent in 2025.

INFLATION

Inflation remains elevated but a moderation is evident

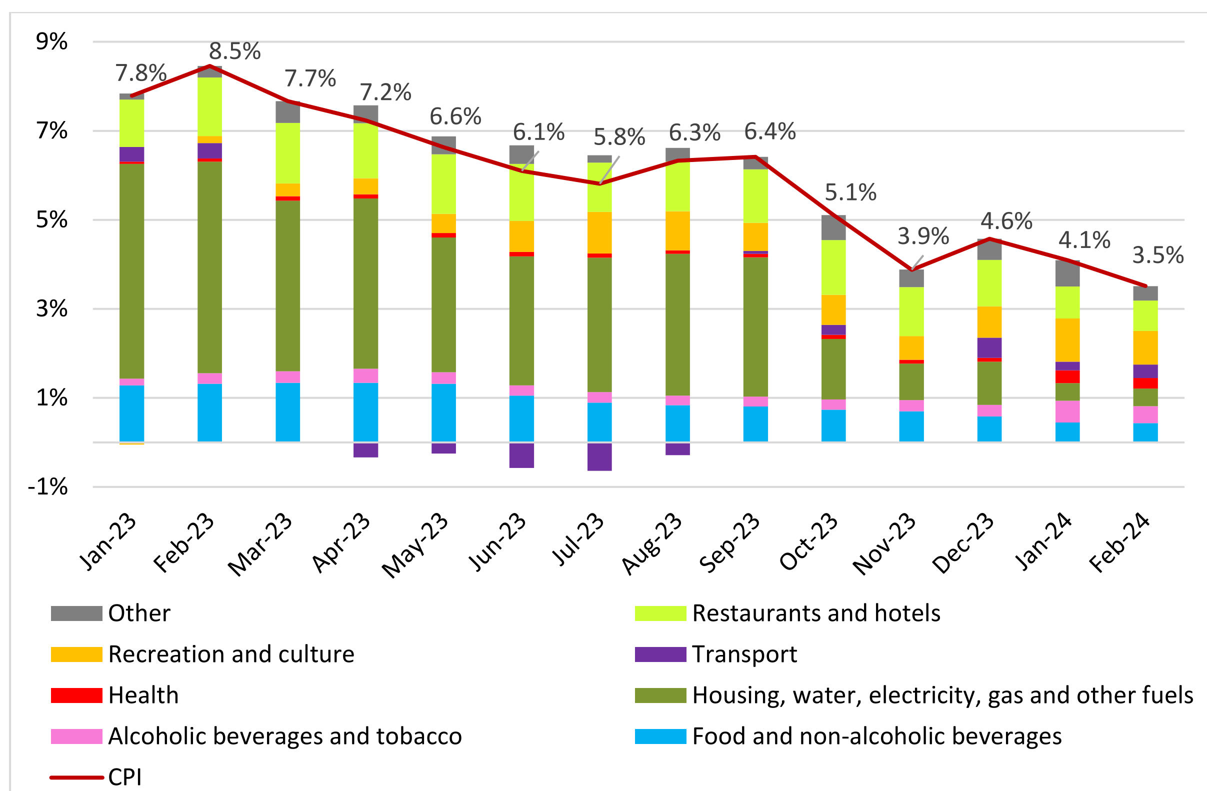
Overall, the rate of inflation, according to the CPI, stands at 3.4 per cent in February 2024. As Figure 11 displays, the main driver of the moderation of inflation is the category ‘Housing, water, electricity, gas, and other fuels’. Energy prices have been declining over time and are almost back to pre-crisis rates of increase (although the levels remain much higher). The highest year-on-year price increase can be found in the ‘Recreation and culture’ sector at 7.1 per cent and in the ‘Restaurants and hotels’ sector standing at 6.3 per cent. The main driver of the price increase within the ‘ Recreation and culture’ sector is package tours, the price of which has risen by 29.4 per cent compared to the previous year. These persisting second-round effects are also reflected in the 4.0 and 3.6 per cent increase in ‘Food and non-alcoholic beverages’ and ‘Alcoholic beverages and tobacco’. Figure 11 shows the different components of the CPI according to the proportion of income that the average Irish household spends on these categories.

To compare inflation among European countries, however, the HICP is used as it excludes mortgage interest, which is currently among the main drivers in the CPI category ‘Housing, water, electricity, gas, and other fuels’ (see Figure 12). In February 2024, the average HICP in the euro area is 2.6 per cent, while the Irish HICP is marginally lower at 2.3 per cent.

Drivers of inflation

A closer look at the price development within the CPI category 'Housing, water, electricity, gas and other fuels' reveals that there are significant differences in price developments among the sub-components. While February 2024 shows the lowest growth rate within the last two years in this category, it is worth taking a closer look at the factors driving this decrease. Deflation has been observed in energy products since October 2023. It is important to recognise that this decline is coming off comparatively high prices in the sector. Therefore, disentangling the Energy component, Figure 12 shows that by February 2024 components that have been driving high inflation throughout 2022 and 2023 are currently experiencing negative price growth, considering the share of income that is spent on those items. Electricity, gas, liquid, and solid fuels are responsible for the slowdown in inflation growth in the CPI category 'Housing, water, electricity, gas and other fuels'.

FIGURE 11 WEIGHTED CPI COMPONENTS (%)

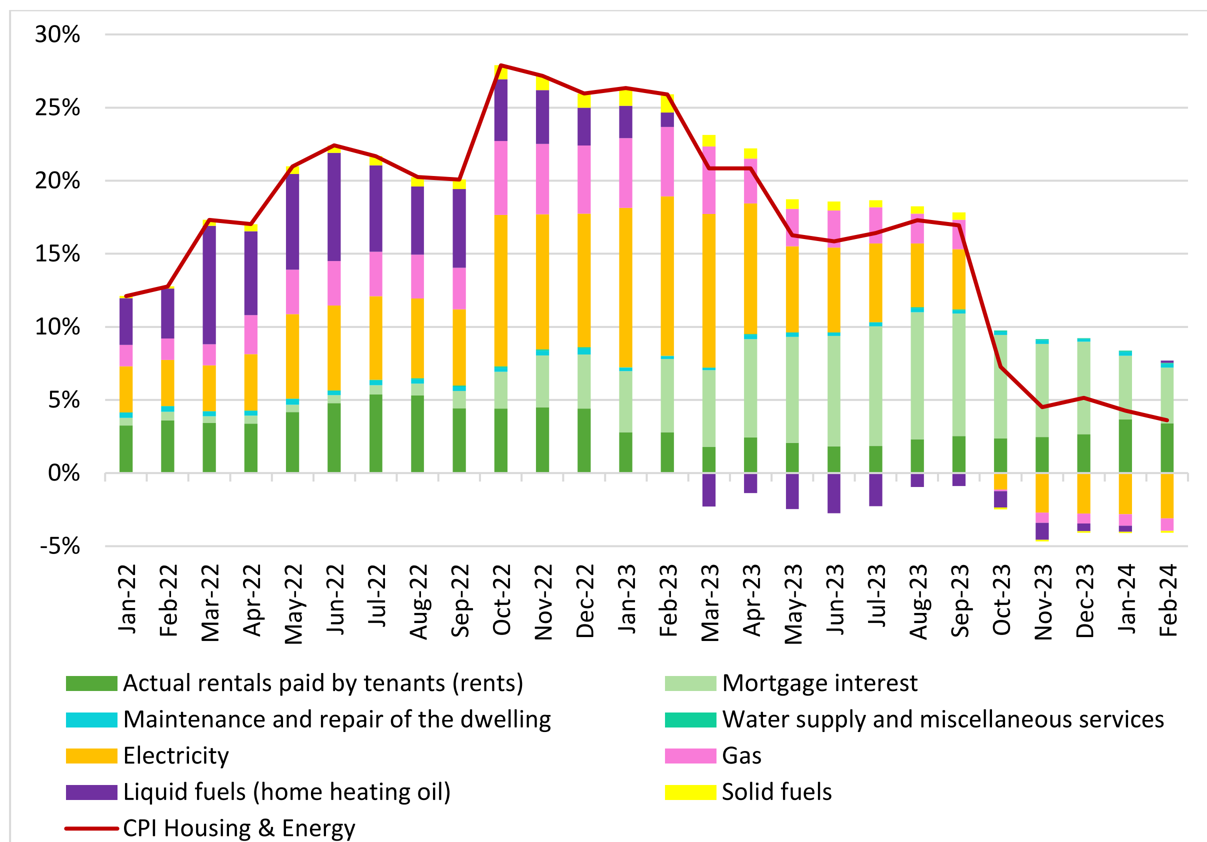


Source: Central Statistics Office.

However, the 'housing' component of this category seems currently to be responsible for the elevated prices. Mortgage interest rates have been a major driver for this category and thus for overall CPI inflation since the end of 2022.

Their growth rate is currently going down but remains high. Additionally, rents also appear to have increased in the beginning of 2024.

FIGURE 12 WEIGHTED CPI COMPONENTS OF THE CATEGORIES 'HOUSING, WATER, ELECTRICITY, GAS, AND OTHER FUELS' (%)

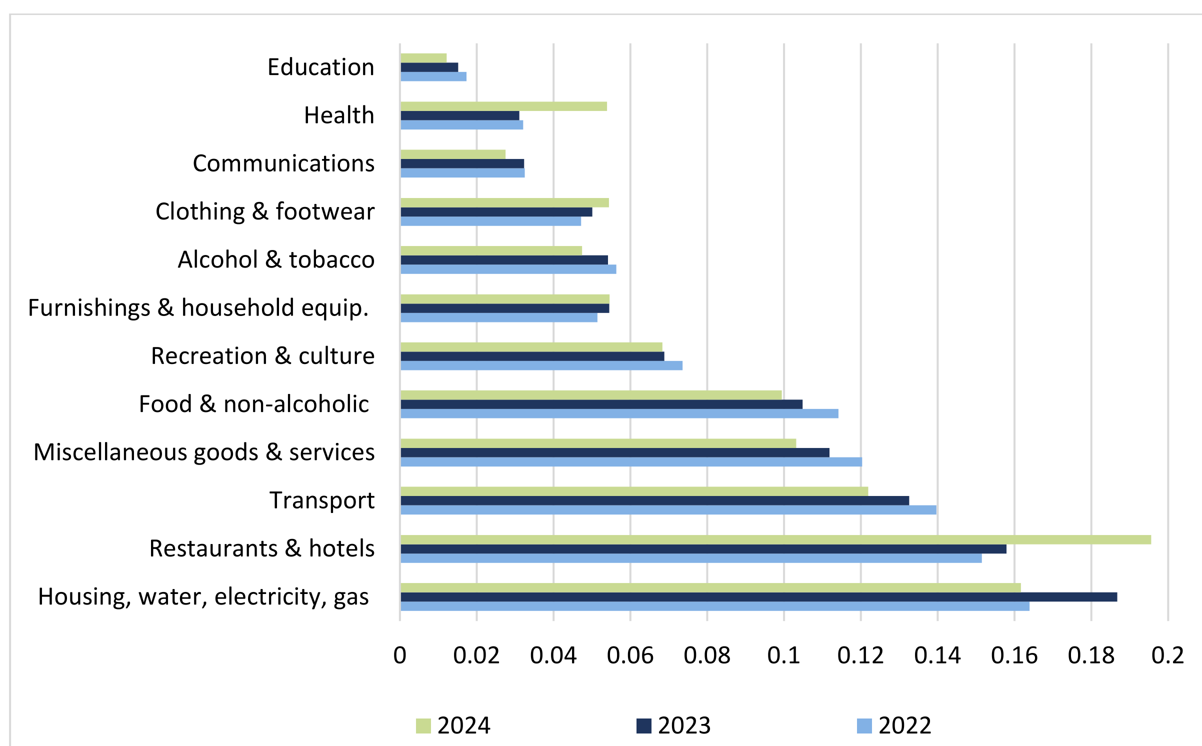


Source: Central Statistics Office.

Change in CPI basket and updated weights

Every four years, the consumption basket used to measure inflation is updated to reflect the consumption patterns of the Irish population over time. In 2024, for example, items such as landline phones, Swiss rolls and digital cameras were removed from the basket, while air fryers, dairy and meat substitutes, and smart watches were added. Taking these changes into account, the basket of goods used to measure inflation now consists of 612 items. To calculate price changes, the Central Statistics Office also examines consumption habits and determines how much households spend on the different categories listed in Figure 13. These behaviours are represented by weights. The more important the good or service in question, the higher the weight. Depending on the spending behaviours of households, these weights change over time and are therefore adjusted yearly. Both the contents of the CPI basket and the weights are decided from information collected in the Household Budget Survey, and are supposed to represent the average Irish household.

FIGURE 13 CHANGE IN CPI WEIGHTS OVER TIME



Source: Central Statistics Office.

Figure 13 shows the change of the CPI weights over the past three years. Categories on which Irish households spend more than in the previous two years appear to be 'Health', 'Clothing and footwear', and 'Restaurants and hotels'. In the latter category, Irish households are likely to spend a higher proportion of their income on visits to restaurants or bars due to the continued increase in prices (rather than visiting a restaurant or bar more frequently). Furthermore, less importance is given to 'Housing, water, electricity, gas' and 'Transport', very likely due to the decrease in energy prices and therefore a lower proportion of the disposable income is now spent on those categories.

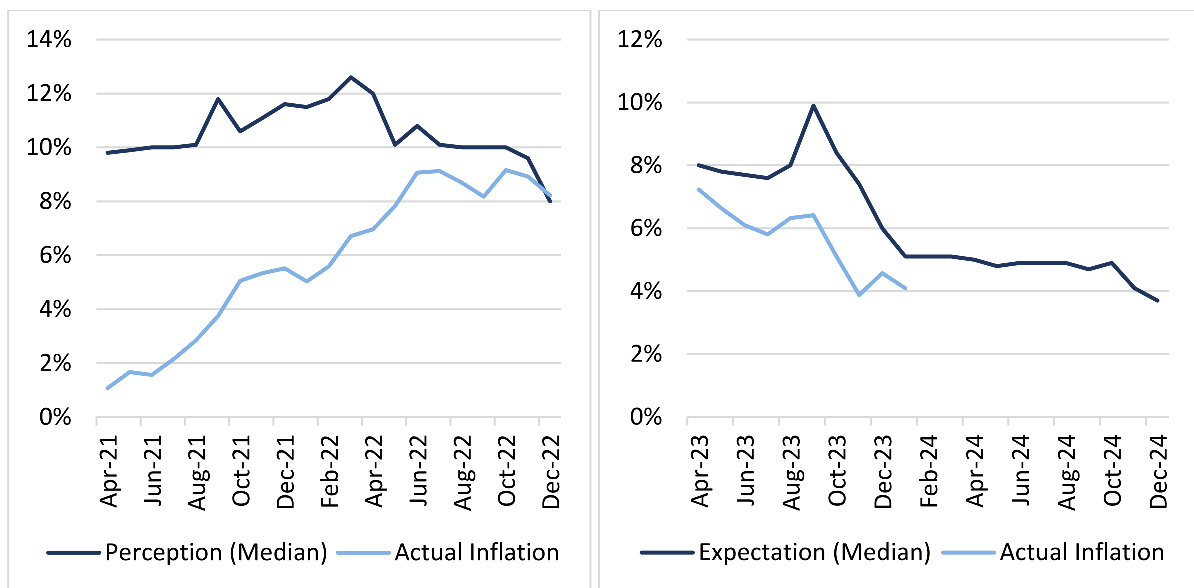
Irish consumers expect moderation in inflation

Despite the ongoing elevated prices, Irish consumers appear to be positive when it comes to inflation in 2024. New sentiment data available from the ECB's Consumer Expectation Survey (CES) provide insights about the perception (previous 12 months) and expectation (upcoming 12 months) of the Irish population on economic indicators such as inflation, housing prices, and income and consumption developments. Figure 14 displays these data by comparing the median perception and expectation of the Irish population on inflation collected to the actual measured inflation numbers. Therefore the two graphs show different time

periods (April 2021 until December 2022 for the perception and April 2023 until December 2024 for the expectation), even though the time of the interview was the same. While the perception figure captures the sentiment on inflation for the previous 12 months, the expectation figure asks for the predicted inflation 12 months ahead – both being collected at the same time.[19]

Initially, the perception recorded in the survey diverged significantly from the actual rate. During periods of elevated inflation, there is a tendency for individuals to perceive the high-cost environment as having persisted longer than it actually has (commonly referred to as recency bias). Over time, however, households' perception of inflation became more and more accurate, and in December 2023 the perception of inflation in December 2022 was lower than the actual inflation figure.

FIGURE 14 INFLATION PERCEPTION AND EXPECTATION FROM THE CES VS ACTUAL INFLATION



Source: Consumer Expectation Survey.

While the expectations were higher than what the actual number turned out to be, the trend appears to be somewhat in line with the observed numbers. Looking at expectations for the next 12 months, it is clear that the interviewees have tended to overestimate price rises. However, there is a clear sentiment amongst households that inflation will reduce in 2024 to below 4 per cent by the end of the year. In Box F, McQuinn uses Irish consumers' expectations vis-à-vis house prices to estimate the user cost of capital in the domestic residential market.

19 For the displayed data the interviewees were asked monthly between April 2022 and December 2023.

BOX F UPDATING THE USER COST OF IRISH HOUSING WITH NEW DATA ON EXPECTATIONS

Introduction

Housing costs have been increasing on a consistent basis in the Irish economy since the post Global Financial Crisis (GFC) recovery. On a cross-distributional basis, Corrigan et al. (2019), for example, have detailed the ongoing challenges faced in Irish society due to increasing house prices and rents. More generally, underpinning the significant policy response to the housing issue, Housing for All, (Department of Housing, Local Government and Heritage, 2021)[20] has been the assumption that increasing housing supply will ceteris paribus result in an easing of housing costs.

User cost of capital

Consequently, it is important to monitor on an ongoing basis key elements of housing costs within the Irish economy to assess how they evolve over the short to medium term. One of the more common tools used to assess house price developments is the user cost of capital approach. The user cost is the notional price an owner-occupier pays for the housing services provided by their dwelling, the rate of return or the cost of owning a house. In general, the user cost of housing is given by a formula which aims to capture the costs and any offsetting benefits from homeownership. The approach can be used to compare the cost of accessing a given bundle of housing services via homeownership rather than renting in the private market.

Himmelberg et al. (2005) construct a variant measure of the user cost of housing; the imputed annual rental cost of owning a home. This measure compares the value of living in a property for a year (the 'imputed rent') and the income lost for not investing in an alternative investment (the 'opportunity cost of capital'). It takes into account differences in taxes, expenses, anticipated capital gains and risk.

$$UC_t = P_t \left(r_t + \delta_t + \tau_t - {\Delta P^e}/{P_t} \right) \quad (1)$$

Where UC_t is the user cost,[21] P_t is house prices, r_t is the nominal mortgage interest rates, δ_t is the natural rate of depreciation of the house, τ_t relates to any property taxes to which the homeowner is liable and P^e is expected house prices.

Variants of this framework applied to housing markets can be found in Blackey and Follain (1995), Murphy (2005), Campbell et al. (2006), Díaz and Luengo-Prado (2008), Gallin (2008), Díaz and Luengo-Prado (2012), Duca et al. (2011), Browne et al. (2013), Cronin and McQuinn (2016) and McQuinn et al. (2021).

By bringing together all the cost outlays of homeownership incurred each period, the user cost approach has the advantage that the impact of different fiscal and financial factors can be isolated and tracked over time.

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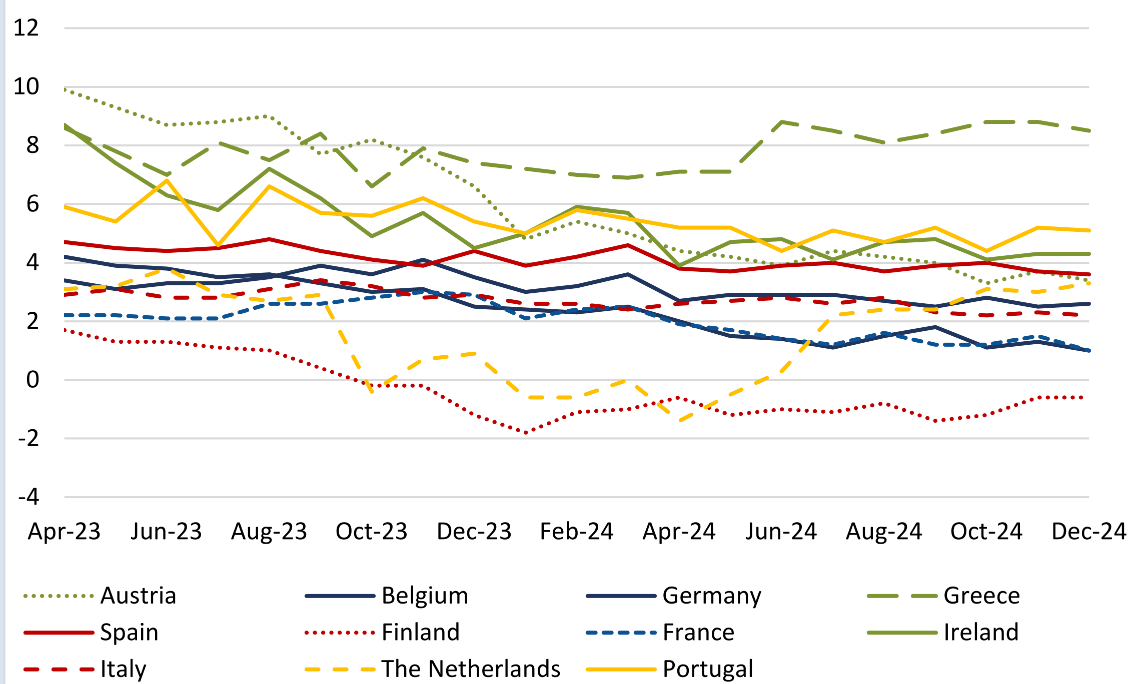
20 Available online at: https://www.gov.ie/en/publication/ef5ec-housing-for-all-a-new-housing-plan-for-ireland/.

21 Himmelberg et al. (2005) and others set the user cost equal to a rent price and arrive at an equilibrium expression for the house price-to-rent ratio by re-arranging it.

A key element of the user cost is expectations of future house prices, P^e. Some applications of the model, such as McQuinn et al. (2021) have used existing series on consumers' expectations of future house prices as a measure for this term. In this Box we adopt a similar approach and use the house price expectations series for the Irish market as published by the European Central Bank (ECB) in their Consumer Expectations Survey.[22] The survey has only recently added data for Ireland and four other euro area countries, having previously had data for six euro area countries. The price expectations for the 11 countries now featuring in the survey are below.[23]

FIGURE F.1 EXPECTED ANNUAL HOUSE PRICE CHANGE: APRIL 2023 – DECEMBER 2024 (%)



Source: ECB Consumer Expectations Survey.

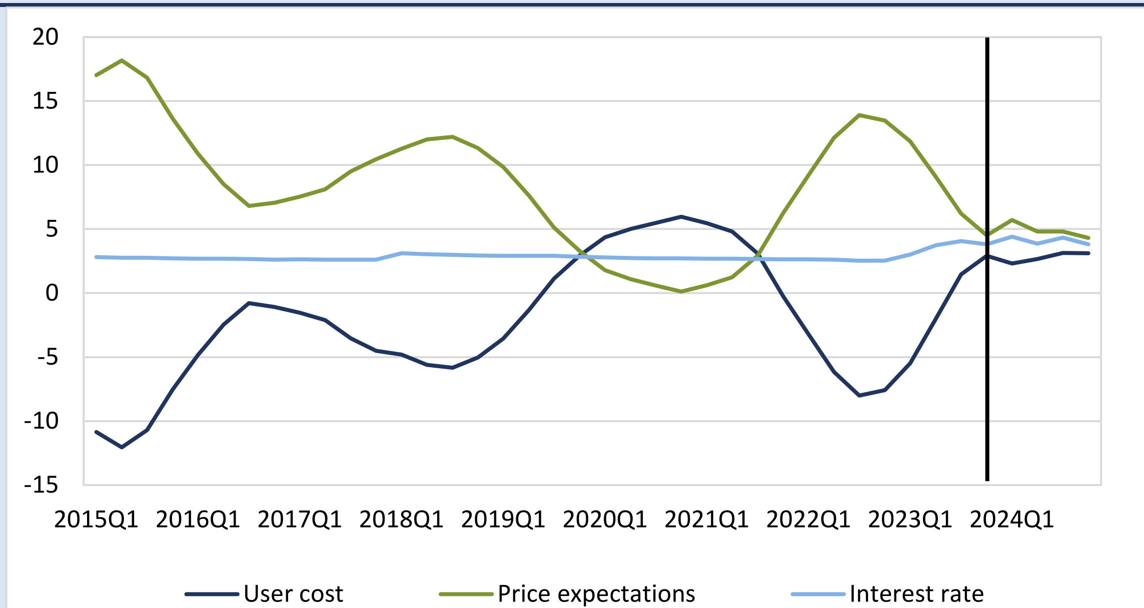
From this, it is clear that, for the period concerned (April 2023 – December 2024), Irish house price expectations are at the upper end of the cross-country distribution; Irish prices are expected to increase by over 4 per cent by the end of 2024. Greece is expected to experience the largest increase in prices, with Finland expected to register negative growth for all of 2024.

We now use these house price expectations as well as similar forecasts for the mortgage interest rate[24] to forecast out the user cost for Irish housing. In Figure F.2, the historical and forecast value for the user cost is plotted. Following Duffy (2011),[25] for the period up until Q4 2023, house price expectations are generated as a rolling four-quarter average. So, for example, the price expectation for Q3 2023 is the average of the period Q3 2022 to

22 See details at: https://www.ecb.europa.eu/stats/ecb_surveys/consumer_exp_survey/html/index.en.html.
23 Expectations are asked 12 months in advance of the actual date in question so the expected price in Q3 2024 relates to a question asked in Q3 2023.
24 Also contained in the ECB Consumer Expectations Survey.
25 Duffy (2011) does a similar exercise.

Q2 2023. From Q4 2023 onwards the price expectations are the ones for Ireland in Figure F.1. The interest rate is the mortgage rate as published by the Central Bank of Ireland.[26] In Figure F.2, both the house price expectation and the interest rate are also plotted to provide an idea as to the contribution of the two series to the underlying cost of housing.

FIGURE F.2 THE USER COST OF CAPITAL FOR IRISH HOUSING: 2015 – 2024 (%)



Source: Quarterly Economic Commentary.

From 2015 onwards, it is clear that changes in house price expectations have been the most influential component of the user cost. The user cost appeared to be negative until mid-2019 when expected house price growth was somewhat greater than the prevailing mortgage interest rate. The user cost became positive when expected house price appreciation slowed considerably from 2020 onwards, however the significant increase in expected prices at the end of the COVID period resulted in the overall user cost becoming negative again.

More recently, as interest rates have increased and expected house price increases have moderated considerably, the user cost is again positive. Looking forward into 2024 (after the vertical black line), it is clear that based on consumers' expectations, the user cost will increase marginally for the rest of the year. This is on the back of moderating expected house price growth and the elevated interest rate environment when compared with the recent past. However, if interest rates were to fall quite quickly as the more general inflationary pressures abate, then the increase in the user cost would slow down somewhat.

Concluding comments

Irish house prices have been increasing on a consistent basis since 2012 after the slump which accompanied the Global Financial Crisis (GFC). Despite the constant growth in prices

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26 See https://www.centralbank.ie/statistics/data-and-analysis/credit-and-banking-statistics/retail-interest-rates for more details.

since then, it is clear that Irish households expect prices to continue to increase through 2024 and that price expectations in the Irish residential market are quite high by European Standards.

Recent increases in interest rates due to the monetary tightening by central banks globally have resulted in the user cost of housing increasing quite sharply through 2023. As rates remain at elevated levels, this will see the user cost increase further in 2024; however, overall, the user cost will probably start to reduce by the end of the year, as interest rates peak and monetary authorities ease their policy stance due to the lower inflationary environment. Irrespective, Irish housing costs look set to continue to increase in the present year.

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This Box was prepared by Kieran McQuinn.

Summary

Overall, CPI inflation is continuing to grow at a moderate pace, mainly driven by second-round effects in the 'Recreation and culture' and 'Restaurants and hotels' sectors, considering the proportion of income that is spent on the different categories. Interest rates are expected to decrease throughout the year, which should have a positive effect on the overall economy and ultimately result in lower rates of inflation.

As energy suppliers continue to cut their prices, we expect the second-round effects to gradually diminish over the course of the year, leading us to forecast that CPI inflation will stabilise at 2.3 per cent in 2024 and then fall to 2 per cent in 2025, while HICP inflation is expected to average 2.4 per cent by the end of 2024 and remain just above CPI inflation at an average of 2.1 per cent in 2025.

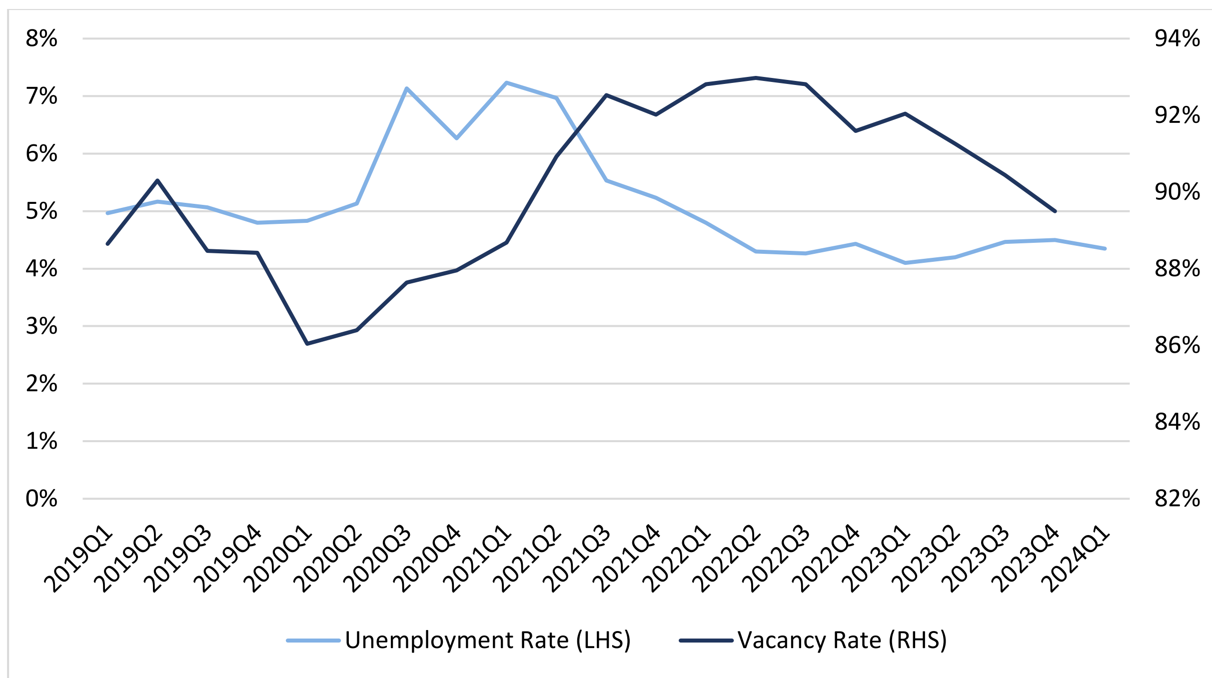
LABOUR MARKET

Unemployment rate steady and labour market at capacity

The seasonally adjusted unemployment rate stood at 4.5 per cent since last October and has fallen to 4.2 per cent in February 2024. In a historical context, this represents a labour market operating at capacity. Throughout 2023, the female unemployment rate remained consistently below male unemployment until September. From September to February 2024, however, the female rate exceeded that of the male rate even though both declined. The last year has seen some notable changes in terms of male versus female unemployment particularly in certain key sectors of the domestic economy.

To provide a more holistic picture of the labour market, Figure 15 shows the unemployment (LHS) and the job vacancy (RHS) rates. While the vacancy rate has been decreasing since the beginning of 2023, the unemployment rate has been relatively static.

FIGURE 15 UNEMPLOYMENT AND VACANCY RATE

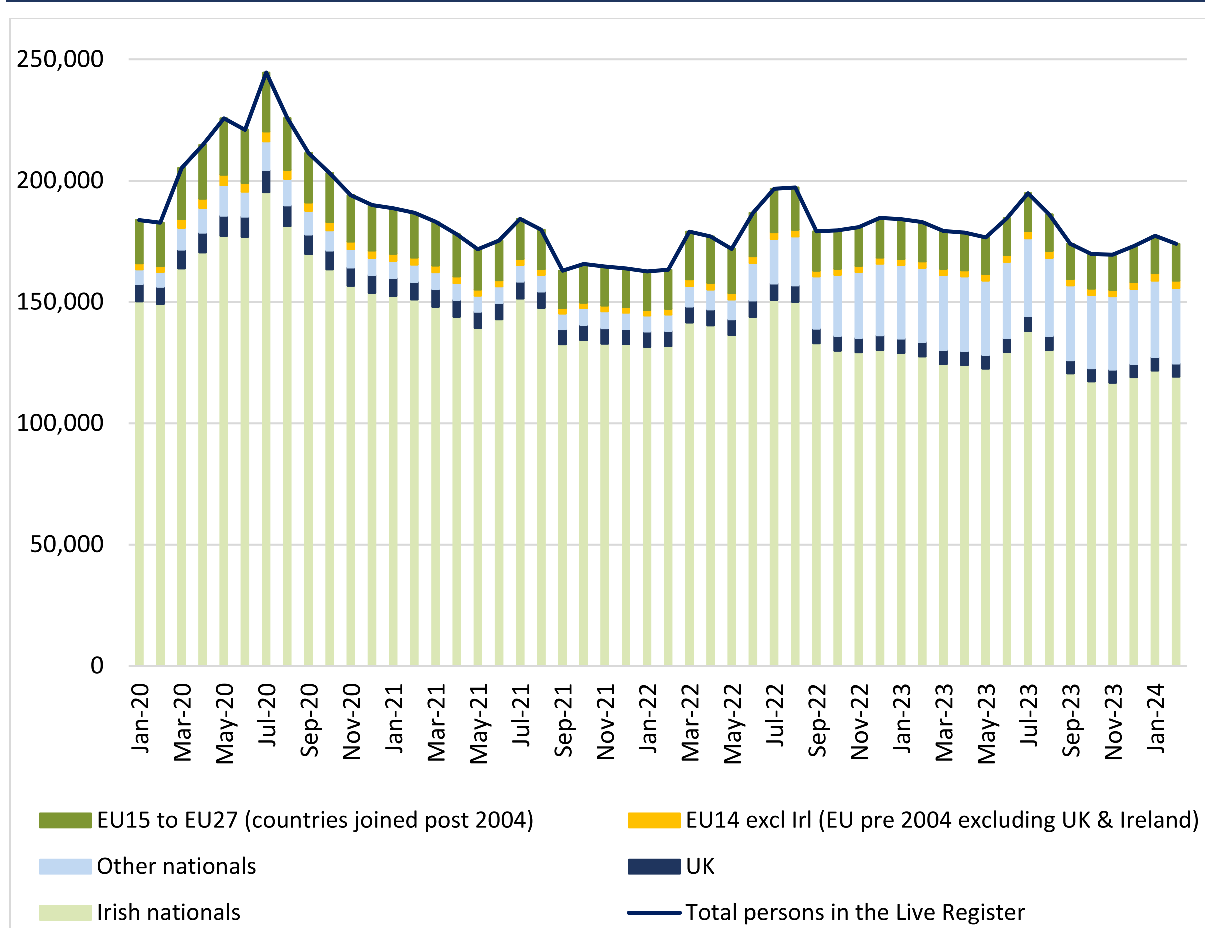


Source: Central Statistics Office.

The decline in the unemployment rate can be attributed to the overall decrease of 1.2 per cent in the Live Register[27] from February 2023 to February 2024. The Live Register encompasses individuals seeking various forms of job support such as Jobseeker's Benefit, Jobseeker's Allowance, and those applying for credited Social Welfare contributions, including individuals arriving in Ireland from Ukraine under the EU Temporary Protection Directive (TPD). Analysing the composition of the Live Register by nationality reveals a notable trend since mid-2022, wherein a larger proportion of individuals categorised under 'other nationalities' – this includes all countries apart from Ireland, the UK, and the EU – have become part of this demographic, thereby including individuals from the Ukraine arriving in Ireland due to the ongoing war. Consequently, the representation of individuals from 'other nationalities' within the Live Register has steadily increased since March 2022 but this increase seems to have moderated, as shown in Figure 16, standing at 1.8 per cent in February 2024. This compares to the substantial increase of 353 per cent in February 2023, which was due to the re-classification of Ukrainians who had come to the country. Figure 16 plots the composition of the Live Register from 2020 to the present.

[27] The monthly Live Register series is used as an indicator to disaggregate the quarterly LFS unemployment series (CSO, 2024).

FIGURE 16 COMPOSITION OF THE LIVE REGISTER OVER TIME



Source: Central Statistics Office.

Vacancies continue to decrease

The number of job vacancies have further decreased in Q4 2023, following a continuous decrease since the peak in Q2 2022. The sector with the highest decrease in vacancies, being 66.7 per cent, is the Arts, entertainment and recreation sector, which was also the one with the lowest absolute number of vacancies in the last quarter of 2023. These vacancies have been filled mainly by men as the male employment increase in this sector increased by 21.6 per cent.

Vacancies in the Construction industry fell by 50 per cent compared to the same time last year. At the same time, the number of employees in this sector fell as well by 2.4 per cent, indicating an overall contraction in the sector. A decline in vacancies is also apparent in the Administrative and support service sector, the Transportation and storage sector, the Industry sector, and to a certain degree also in the Financial, insurance and real estate activities.

Within the construction sector it is clear that there are countervailing forces at play for the residential and commercial sectors. Activity in the former is increasing while output in the latter is contracting. These contrasting trends are likely to be reflected in employment levels in both areas of the construction sector.[28] As Egan et al. (2022) note,[29] in the event of a slowdown in the construction sector, a shift in construction employment from the commercial sector to the residential sector may become apparent.

Overall, construction related activity is being adversely impacted by the general international economic slowdown combined with high interest rates and rising construction costs. Egan et al. (2022) also note that due to the raise in official interest rates within the euro area, there may be increased responsibility on the domestic government to meet the residential housing targets which have been set in 'Housing for All'. Furthermore, given that construction sector capacity is required for critical infrastructure investments and climate adaption measures, the ongoing pressures on the sector will continue. The downturn in commercial construction may actually provide a beneficial re-orientation of the sector to facilitate the expansion of housing output as noted in Barrett (2024).[30]

However, there are some sectors in which the vacancies went up; these are the Accommodation and food service sector, the Public administration and defence sector, the Education sector, and Human health and social work.

Change in employment by sector

The most recent data of the Labour Force Survey show that overall employment has increased by 3.4 per cent in Q4 2023 compared to in Q4 2022. Male employment increased by 2.9 per cent while female employment increased by 4 per cent.

The sectors that witnessed the most substantial year-on-year growth in employment were Education, with an increase of 12.3 per cent, followed by Agriculture, forestry, and fishing at 9.4 per cent, and Professional, scientific, and technical activities at 7.4 per cent. There are differences in employment patterns between men and women, with the strongest increase in male employment being

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28 At present construction employment cannot be broken down by residential and commercial activity.

29 Egan P., Kenny E. and McQuinn, K. (2022). 'Increasing future housing supply: What are the implications for the Irish economy?', Special Article, *Quarterly Economic Commentary*, Dublin: The Economic and Social Research Institute, Winter 2022.

30 Barrett, A. (2024). 'Capacity constraints', Chapter 2 in *The National Development Plan in 2023: priorities and capacity*, Dublin: ESRI, https://doi.org/10.26504/sustat123.

recorded in the category 'Other activities'[31] at 21.1 per cent, while female employment increased most strongly in the area of Professional, scientific, and technical activities at 15.5 per cent. The substantial increase in male employment in the 'Other Activities' category warrants investigation, even though this sector accounts for only slightly more than 3.5 per cent of total male employment. The considerable rise is primarily due to a 21.6 per cent increase in the Arts, entertainment and recreation sector and an 18.9 per cent increase in the Other services sector.

Conversely, there were significant declines in employment in some sectors. The Transportation and storage sector recorded a decline of 4.4 per cent, Administrative and support services fell by 3.8 per cent and there was a decline of 2.4 per cent in Construction. For men, the decline was most pronounced in Industry at 7.2 per cent. For women, on the other hand, the Construction sector recorded the sharpest decline with a fall of 33.1 per cent.

Historically lowest proportion of women in the ICT sector

The ICT sector is arguably one of the most important sectors in the Irish economy. The Central Bank (2023) noted that the ICT sector's share of Gross Value Added (GVA) in Ireland is around three times higher than that in the Eurozone[32] making it a significant driver of economic growth and source of high-skilled employment. Overall, the number of employees in the ICT sector rose by 0.5 per cent in Q4 2023 compared to the previous year, while the number of vacancies fell by 13.3 per cent.

However, looking more closely at this reveals this 0.5 per cent increase consists of an 18.8 per cent decrease in female employees and a 10.3 per cent increase in male employees in Q3 2023 compared to Q4 2022. In absolute numbers this equates to 10,500 women leaving the ICT workforce and 11,400 men joining it over one year.

Historically, on average, the ICT workforce consisted of 66 per cent men and 34 per cent women. This composition has changed over time as can be seen in Figure 17. The share of women employed in the ICT sector is clearly decreasing while consequently the share of men employed is increasing. While in the late 1990s, the ICT workforce consisted of 63 per cent men and 37 per cent women, by the end of 2023 it is composed of 73 per cent men and 27 per cent women which is the lowest share of female employees in the ICT sector since 1998.

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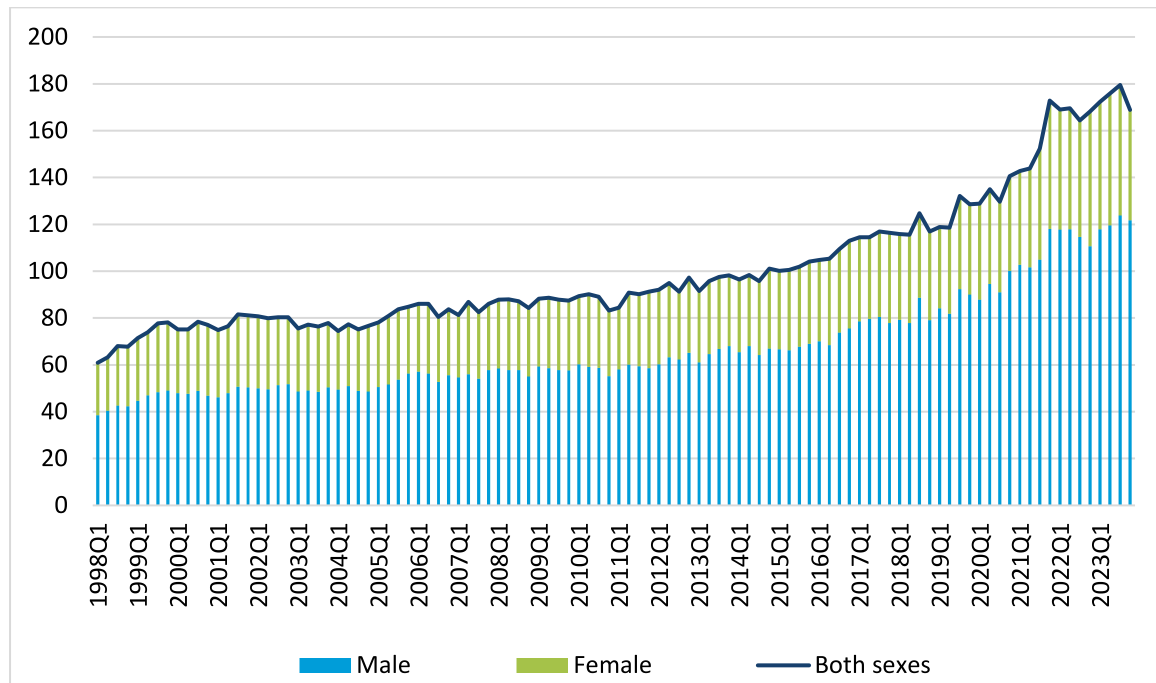
31 According to Eurostat (2008) this category includes several subcategories: Arts, entertainment and recreation, Other service activities, activities of households as employers, and activities of extraterritorial organisations and bodies.

32 Conefrey, T., Keenan, E., O'Grady, M. and Staunton, D. (2023). *The Role of the ICT Services Sector in the Irish Economy*. Quarterly Bulletin Articles, Central Bank of Ireland, 86-105.

The ICT sector employs a highly qualified workforce. According to the Central Bank (2023), it consists of the largest proportion of people with higher education. It has also been identified as the sector with the highest earnings and income tax contributions. As the sector has become more important over time, it has also become more male dominated.

FIGURE 17 NUMBER OF MALE AND FEMALE EMPLOYEES IN THE ICT SECTOR ('000)

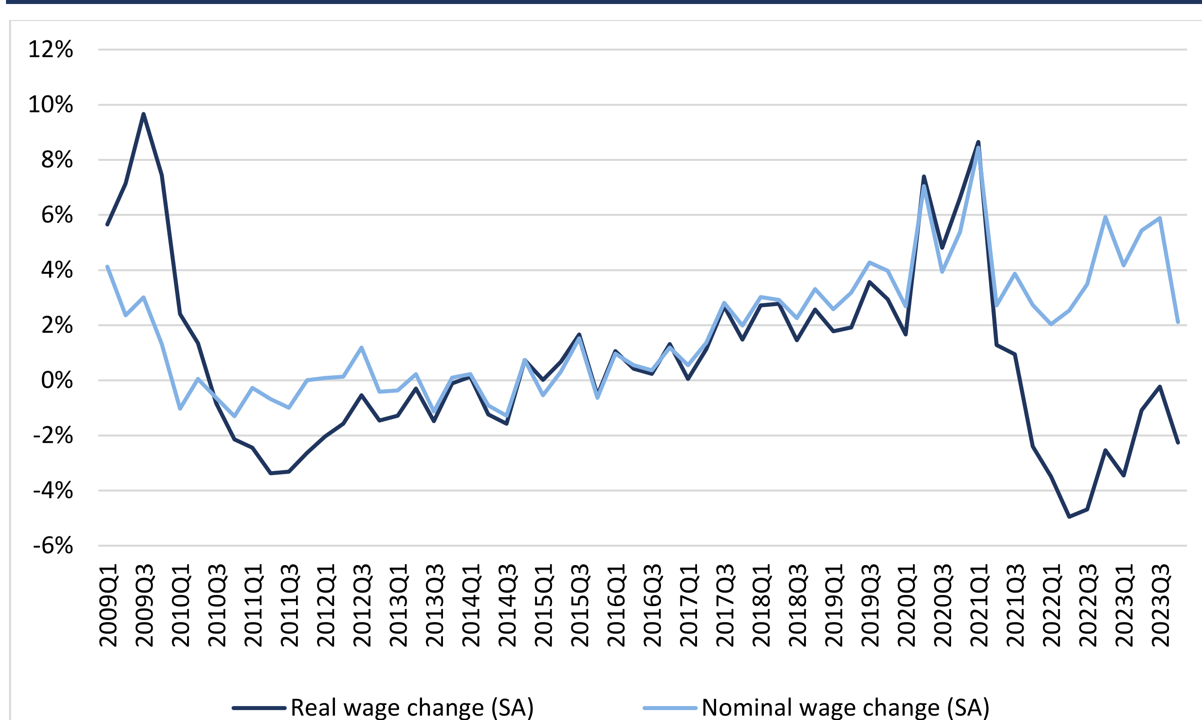


Source: Central Statistics Office.

Real wages

Figure 18 illustrates the fluctuations in real and nominal wages. Real wages almost returned to positive growth by the end of 2023; instead, however, they continued to fall and remained negative. This decline is not solely due to rising inflation, but rather also due to a slowdown in nominal wage growth towards the end of 2023. Although inflation is currently moderating, it remains elevated. Against this backdrop, and given the prevailing high interest rate environment, relief from the cost-of-living crisis may not materialise until later in 2024 when inflation has eased further. Consequently, these data do not point to an emergence in the Irish economy of a wage-price spiral at the present time.

FIGURE 18 REAL VS NOMINAL HOURLY WAGES GROWTH RATES



Source: Central Statistics Office.

Summary

Overall, developments in the labour market reflect the fact that the domestic economy is growing at a more moderate pace but still operating close to capacity. The ongoing decline in vacancies points towards some softening of excess labour demand but the market remains extremely tight as evidenced by the low and stable unemployment rate. Real wages have improved during 2023 but they are still experiencing declines due to a combination of moderate nominal wage increases and the persistence of inflationary pressures. At this juncture, the data do not point towards the emergence of a wage-price spiral.

In 2024, we anticipate the employment figure to rise to 2,787,000 individuals. Additionally, we forecast the unemployment rate to average 4.3 per cent throughout the year. For 2025 we expect unemployment to fall further and reach 4 per cent by the end of the year. Furthermore, assuming a steady increase, the employment number is expected to exceed 2,900,000 by the end of 2025.

PUBLIC FINANCES

Review of National Accounts 2023

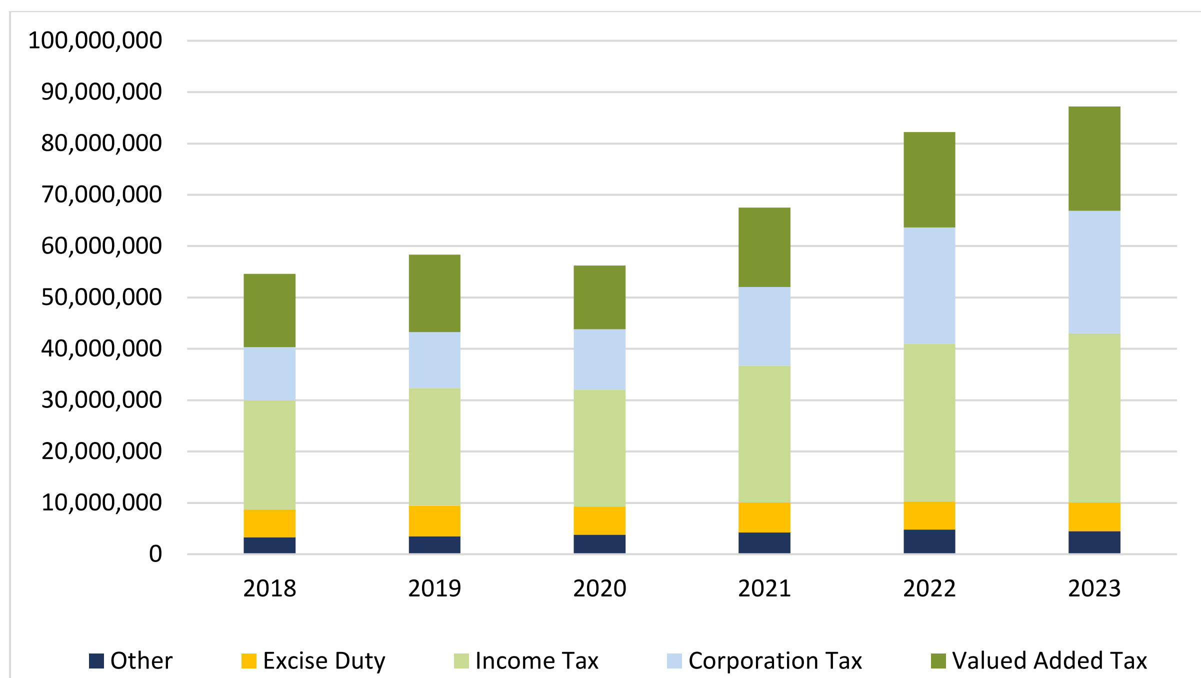
Government revenues continued to grow strongly in 2023 mainly due to increases in income tax, corporation tax and VAT. These three tax headings recorded very

strong growth rates during 2021 and 2022 and grew at a more moderate pace in 2023. This pattern aligns with a broader deceleration observed across various essential indicators, including domestic Gross Value Added (GVA), consumption, and investment. Following two years marked by substantial expansion, there has been a notable slowdown in growth rates across these sectors, reflecting an overarching moderation in economic activity.

Despite this gradual decrease in growth rates, 2023 represents the peak in absolute terms for tax headings such as income tax, corporation tax receipts, capital acquisitions tax and VAT according to the Exchequer receipts.

Figure 19 depicts the composition of tax receipts spanning the last five years, revealing certain changes in its structure.[33] It is evident, for example, that corporation and income tax receipts have claimed a larger share of the overall revenue over the past three years.

FIGURE 19 COMPOSITION OF TAX RECEIPTS 2018-2023 (€)



Source: Department of Finance.

Corporation Tax receipts

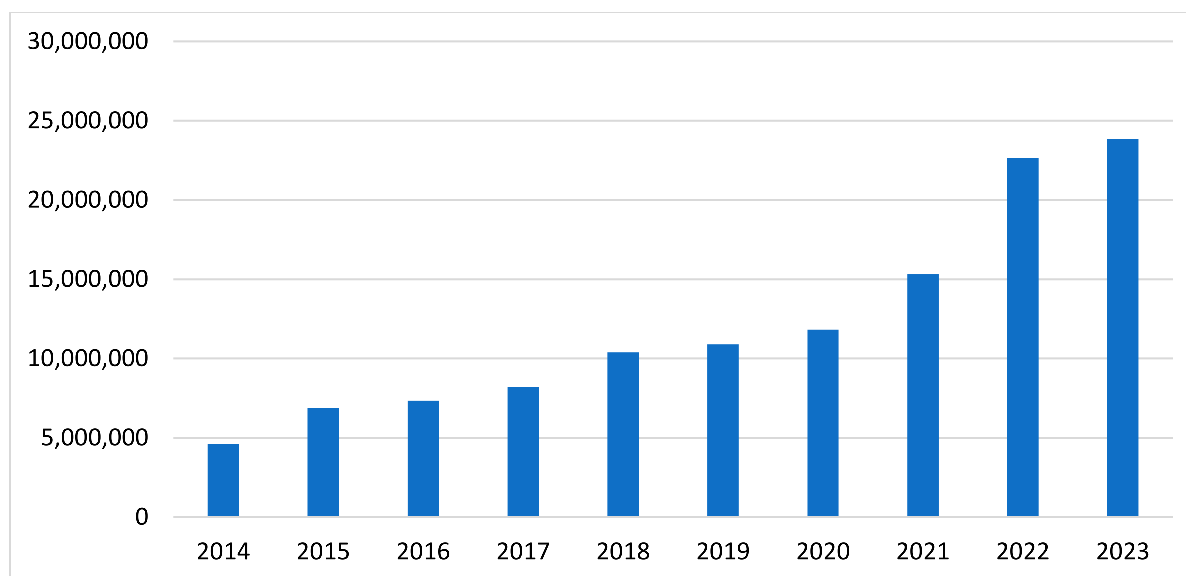
An important source of income for the Irish economy is corporation tax receipts, making up more than 25.9 per cent of overall revenue in 2023. Figure 20 shows

33 The category 'Other' is a sum of Customs, capital gains tax, capital acquisition tax, and stamps.

that, despite the very high levels of corporation tax receipts in 2022, they were exceeded again in 2023.

The annual rate of growth moderated somewhat in 2023 at 5.3 per cent compared to 29.5 per cent in 2021 and 47.7 per cent in 2022. However, Figure 20 shows that this moderation in growth is taking place at a very high level. In this context it is always important to note the relatively high concentration in corporation tax receipts amongst a small number of firms. According to the Revenue Commissioners, the three largest companies in this category together account for around 30 per cent of total tax revenue which makes this tax heading – together with the overall revenues and economy – very dependent on those companies. It has been mentioned in earlier sections that the decline in the headline rate of growth in the economy in 2023 was due to a slowdown experienced by the foreign-dominated sectors which underlines the vulnerability and dependency of the Irish economy on those large corporations. Therefore, as mentioned in the Winter *QEC* 2023, instruments such as the Future Ireland Fund (FIF) and the Infrastructure, Climate and Nature Fund (ICNF) are welcome in order to support future Exchequer expenditures and assure the smooth use of corporation tax receipts.

FIGURE 20 CORPORATION TAX RECEIPTS 2014-2023 (€)



Source: Department of Finance.

General Government Balance

The headline General Government Balance registered a significant surplus in 2023 mainly due to the significant increase in Exchequer taxation receipts. In 2024 and 2025, Exchequer taxation receipts are expected to continue to grow albeit at a more modest pace. If expenditure levels grow in accordance with Budget 2024

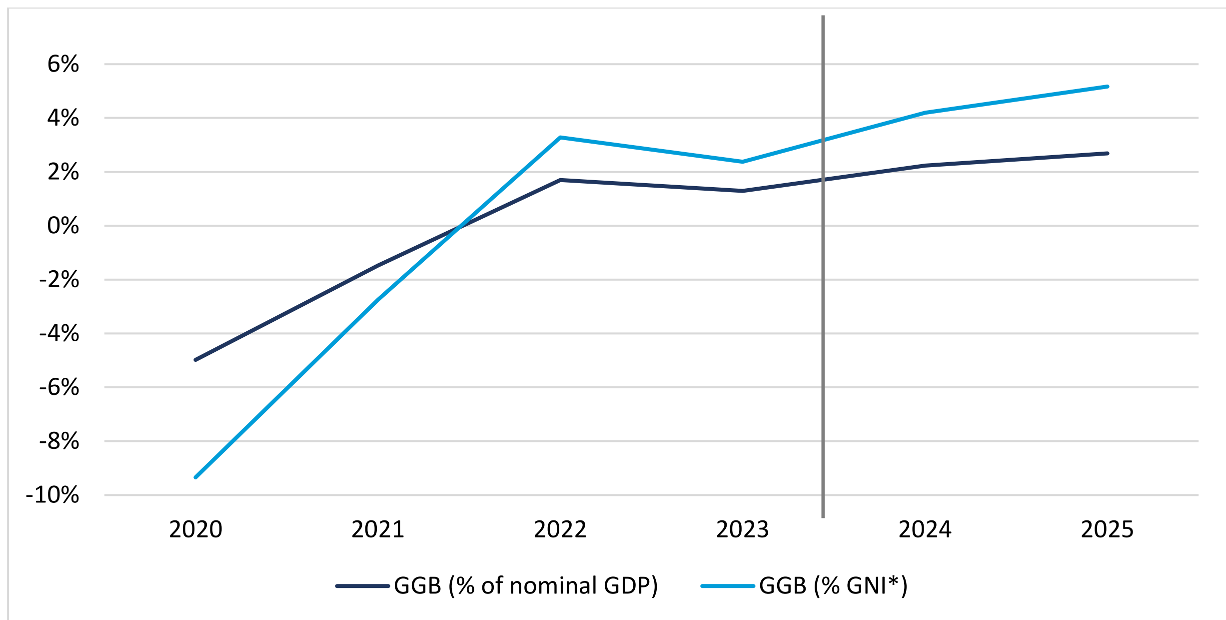
estimates, then a significant surplus in the General Government Balance (GGB) is expected for both years. These predictions are made under the assumption that the contingency reserve outlined in the recent budgets is filled up to the maximum level permissible.

Debt-to-GDP/GNI ratio*

In recent years, there has been a consistent downward trajectory in the Irish debt-to-GDP/GNI* ratio, with projections indicating a continuation of this trend in the foreseeable future. This trend is primarily attributable to the persistent growth observed in the General Government Surplus which – as mentioned before – is anticipated to continue expanding in the coming years. However, a significant contributing factor is also the trend in key economic indicators GDP and GNI*, which have both been increasing significantly since the COVID period.

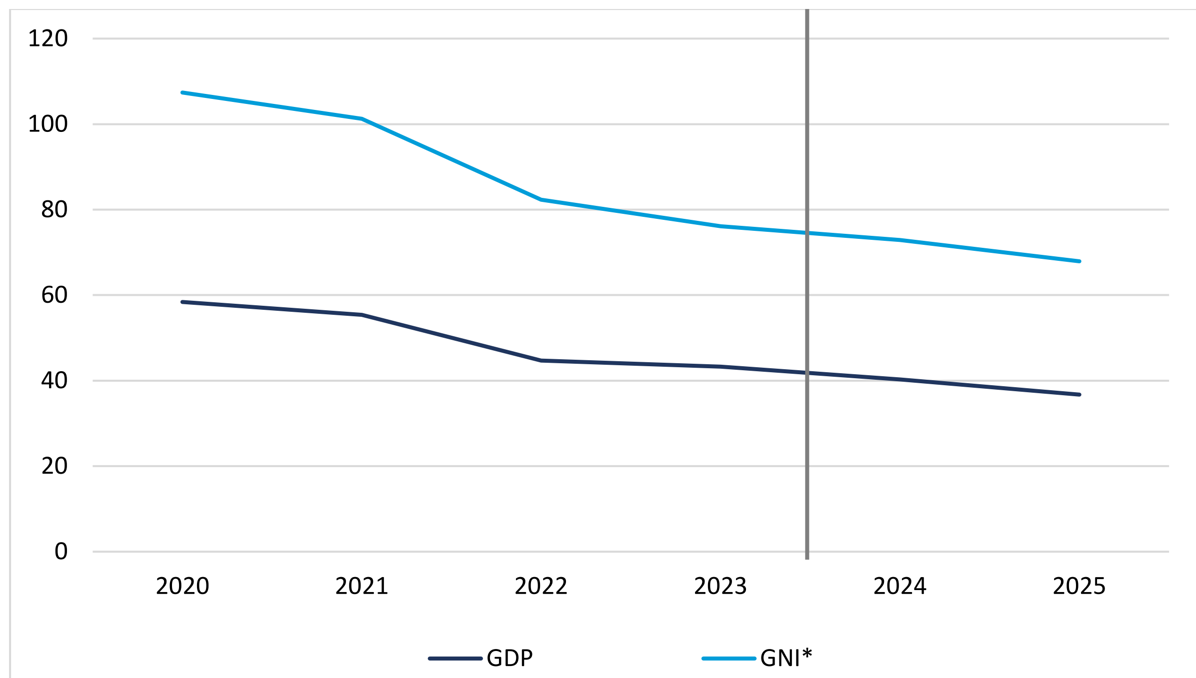
Figure 21 shows the path of the GGB-to-GDP/GNI* ratio from 2020 onwards, including our forecasts for 2024 and 2025, while Figure 22 illustrates the overall debt to both GDP and GNI*.

FIGURE 21 GENERAL GOVERNMENT BALANCE-TO-GDP AND GNI* RATIO



Source: Central Statistics Office and authors' calculations.

FIGURE 22 GOVERNMENT DEBT-TO-GDP AND GNI* RATIO



Source: Central Statistics Office and authors' calculations.

Summary

Overall, the improvement in the public finances is set to continue in 2024 and 2025. The General Government Balance (GGB) is set to increase to over 2 per cent of GDP in both years and, as a result, the overall debt to both GDP and GNI* will decline to 37 per cent and 68 per cent respectively by the end of 2025.

General Assessment

Steady growth expected for 2024 and 2025

While Irish GDP registered negative growth in 2023, most commentators agree that this was not an accurate characterisation of how the underlying economy performed in that year. As often occurs, headline GDP tends to distort the performance of the domestic economy. Recently, this has tended to overestimate the domestic economy's activity; however in the case of the economy in 2023, it actually underestimated the strength of the performance. Modified domestic demand (MDD), which is a more telling indicator of Irish economic performance, grew by 0.5 per cent in 2023. However even this indicator underestimated domestic activity in 2023, as discussed in Box B by Egan in this *Commentary*. This research suggests that the Irish economy is growing at a steadier pace than suggested by the official MDD indicator.

In 2024, we expect both GDP and MDD to grow quite robustly at rates of 2.5 per cent and 2.3 per cent respectively. This reflects an improvement in the performance of the traded sector of the economy which had seen a decline in 2023. Exports, in particular, are expected to increase by 3.3 per cent in 2024, having declined in 2023. Consumption and investment are also set to increase in the present year with investment observing a mild increase after witnessing a significant decline in 2023. Overall, the recovery in GDP in 2024 broadly reflects the impact of 'base effects' in 2023, when both headline investment and exports were influenced by particularly large increases in 2022. Consequently, the 2023 data saw declines which have now smoothed out somewhat as we enter the current year.

In this *Commentary*, we also publish our first forecast for 2025. Next year we continue to expect the Irish economy to grow, with MDD set to increase by 2.5 per cent. The unemployment rate is set to continue to fall back to a historically low rate of 4 per cent by the end of 2025. This means that there will be over 2.9 million people working in the Irish economy at this time. This constitutes an increase of 17 per cent compared with the pre-COVID level in Q4 2019.

Addressing bottlenecks in an economy at full employment

A critical challenge in managing the Irish economy in the period ahead will be dealing with the well documented infrastructure bottlenecks. Recent research by Barrett and Curtis (2024) has outlined the major infrastructural challenges in Ireland, focusing on health, housing and climate transitions in particular. These areas, and others, will need notable capital expenditures in the coming period to

ensure they do not critically erode Ireland's competitiveness and allow the economy to increase its capacity. Indeed, Box D in this *Commentary* by FitzGerald and McQuinn highlights the fact that investment in Ireland is lower than in other peer European economies. However, the pace and scale of any investments will have to be cognisant of capacity in the labour market, which at present is at full employment. With prices beginning to moderate due to external factors, a balance will need to be struck on the timing of critical investments to ensure price pressures are not generated domestically. In this regard, public expenditure restraint on current measures could allow space for investments to take place. Additionally, focusing first on investments with a high import content of capital and low labour requirement may add less to price pressures in the short to medium term.

Balancing competing needs from a successful multinational sector

A second critical challenge for the Irish economy is managing the competing needs of a large and extremely successful multinational sector with the requirements of the domestic economy. Addressing this specific point, the *Commentary* contains a Box by FitzGerald (Box A) which examines the changing structure of the Irish economy. In the Box, FitzGerald updates previous work completed on measuring the underlying pace of growth in the Irish economy. The note uses institutional sector accounts data for 2022 to update previous estimates (FitzGerald, 2023; 2020).[34] Using a preferred approach, which deflates profit outflows in each industrial sector of the economy with individual deflators for that sector, the Box estimates that the Irish economy grew by almost 5 per cent per annum over the period 2013-2022. A lot of this growth is clearly due to the ongoing strong presence of the MNE sector in the domestic economy.

However, the continuing growth of the MNE sector does pose important policy issues. For example, as noted in the Box, the MNE sector may continue to absorb an even greater share of the labour force over the medium term. This could pose challenges for the successful provision of essential goods and services in the economy such as public health, administration, and healthcare. This is particularly the case in terms of the housing sector where a significant increase in investment, and hence construction jobs, is required to meet the various targets established by the Government. This is reinforced by the need to meet climate change targets in areas such as retrofitting and renewable energy.

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[34] FitzGerald J. (2023). 'Understanding the Irish economy', *Quarterly Economic Commentary* Special Article, Economic and Social Research Institute (ESRI), Summer.
FitzGerald J. (2020). 'Understanding recent trends in the Irish economy', *Quarterly Economic Commentary* Special Article, Economic and Social Research Institute (ESRI), Summer.

All of this poses significant questions for the Irish training and educational sector; how best to meet the challenges of the Irish economy over the coming years so that we can simultaneously meet the ongoing need for labour for the MNE sector while also meeting the requirements of domestically provided goods and services. Achieving this balance will be central in securing sustainable growth over the medium term.

International challenges remain but risks marginally lower

Naturally as a small open economy that is highly reliant on exports, Ireland's economy is strongly affected by world demand. In another Box to the *Commentary* (Box C), O'Toole examines the outlook for the global economy and its potential impact on Ireland over the period ahead. Overall, the outlook appears somewhat more positive for 2024 than we expected in the previous *Commentary*; inflation is growing at a much more subdued rate than was the case 12 months ago and this increases the possibility of the main international central banks such as the Federal Reserve and the European Central Bank starting to lower official policy rates in the current year. This should result in greater rates of investment and consumption globally, all of which would benefit the highly internationalised Irish economy.

However, O'Toole also notes the downside risks to the international outlook. The conflict in the Middle East, for example, has resulted in attacks on shipping activity in the approach to the Suez Canal and the Red Sea. As a result, prices for global freight have increased by 120 per cent since October 2023 with 3,500 nautical miles being added per journey and an average of 14 days in shipping time. Amongst the potential fall-out from this are the possibility of higher costs for finished and intermediate goods domestically.

The cost of Irish housing in 2024?

Irish housing costs have risen on a continuous basis since 2012 when house prices had fallen substantially following the impacts of the Global Financial Crisis (GFC). In Box F to the *Commentary* McQuinn avails of new sentiment data collected for Ireland by the European Central Bank (ECB) as part of their Consumer Expectations Survey. This survey now includes data for Ireland as well as ten other euro area countries. The Box uses information on Irish house price expectations for 2024. Amid the 11 countries, expected Irish house prices are amongst the highest, with prices expected to increase by 4 per cent per annum by the end of 2024.

McQuinn uses the house price expectations to update estimates of the user cost of Irish housing. The update indicates that the cost is set to increase through 2024 due to the relatively elevated level of nominal interest rates in the market at

present. However, if central banks ease the monetary tightening which has occurred over the past 18 months, then the increases in the user cost of housing could start to abate. Overall, it is highly likely that housing costs will continue to increase in the Irish economy over the next year. The only sustainable way to reduce these costs is to continue to increase the rate of housing supply in the domestic market.

Box E on housing by Hauser examines the recent findings by Eurostat concerning the under-occupancy of housing across the European Union. Eurostat find that 67 per cent of Irish households live in under-occupied housing. This compares with 33 per cent for the EU average. Hauser concludes that compared with other European countries, housing units in Ireland are, on average, bigger. This circumstance is very likely a product of the high share of houses and small share of apartments, especially in the cities. Ultimately in seeking to provide the additional housing supply required, it is important that policy interventions would incentivise and facilitate the construction of relatively smaller housing units than is historically the case.

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