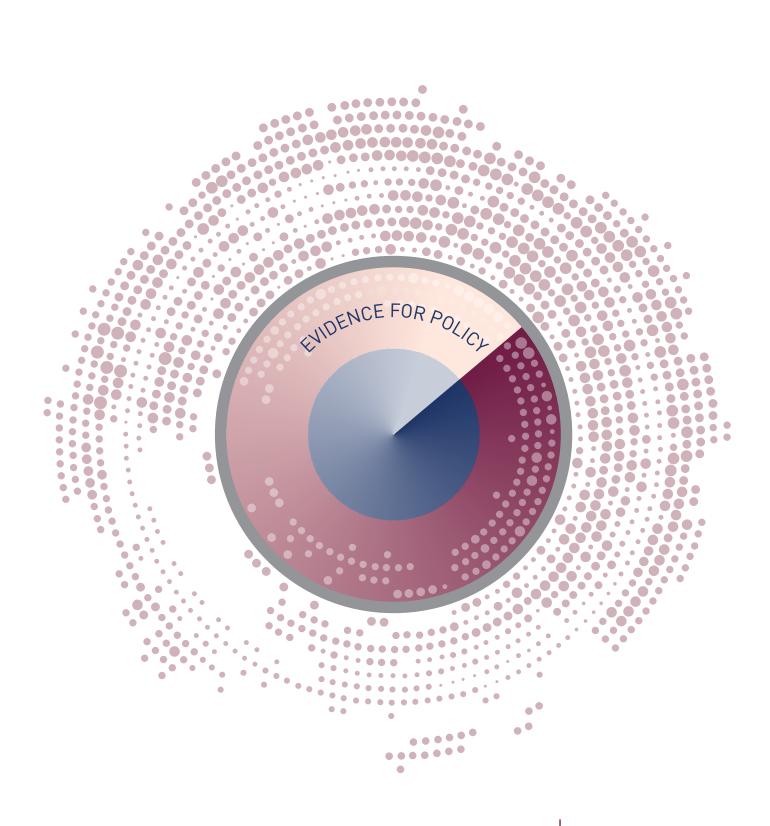
MACRO ECONOMIC FORECASTING December 2023

QUARTERLY ECONOMIC COMMENTARY

WINTER 2023

KIERAN MCQUINN, CONOR O'TOOLE, EOIN KENNY AND LEA HAUSER





QUARTERLY ECONOMIC COMMENTARY

Kieran McQuinn

Conor O'Toole

Eoin Kenny

Lea Hauser

Winter 2023

The forecasts in this *Commentary* are based on data available by 6 December 2023 Draft completed on 6 December 2023

 $\ensuremath{\mathbb{C}}$ 2023 The Economic and Social Research Institute,

Whitaker Square, Sir John Rogerson's Quay, Dublin 2.

ISSN 0376-7191 https://doi.org/10.26504/qec2023win



This Open Access work is licensed under a Creative Commons Attribution 4.0 International License (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly credited.

ABOUT THE ESRI

The mission of the Economic and Social Research Institute (ESRI) is to advance evidence-based policymaking that supports economic sustainability and social progress in Ireland. ESRI researchers apply the highest standards of academic excellence to challenges facing policymakers, focusing on ten areas of critical importance to 21st Century Ireland.

The Institute was founded in 1960 by a group of senior civil servants led by Dr T.K. Whitaker, who identified the need for independent and in-depth research analysis to provide a robust evidence base for policymaking in Ireland. Since then, the Institute has remained committed to independent research and its work is free of any expressed ideology or political position. The Institute publishes all research reaching the appropriate academic standard, irrespective of its findings or who funds the research.

The quality of its research output is guaranteed by a rigorous peer review process. ESRI researchers are experts in their fields and are committed to producing work that meets the highest academic standards and practices. Research quality has also been assessed as part of three peer reviews of the Institute, in 2010, 2016 and 2022.

The work of the Institute is disseminated widely in books, journal articles and reports. ESRI publications are available to download, free of charge, from its website. Additionally, ESRI staff communicate research findings at regular conferences and seminars.

The ESRI is a company limited by guarantee, answerable to its members and governed by a Council, comprising up to 14 representatives drawn from a crosssection of ESRI members from academia, civil services, state agencies, businesses and civil society. The Institute receives an annual grant-in-aid from the Department of Public Expenditure NDP Delivery and Reform to support the scientific and public interest elements of the Institute's activities; the grant accounted for an average of 26 per cent of the Institute's income over the lifetime of the last Research Strategy. The remaining funding comes from research programmes supported by government departments and agencies, public bodies, competitive research programmes, and membership fees.

Further information is available at www.esri.ie.

THE AUTHORS

The *Commentary* is edited by Kieran McQuinn and Conor O'Toole. Kieran McQuinn is a Research Professor and Conor O'Toole is an Associate Research Professor at the Economic and Social Research Institute (ESRI). Lea Hauser and Eoin Kenny are Research Assistants at the ESRI.

Special Articles are published in the *QEC* in order to foster high-quality debate on various aspects of the Irish economy and Irish economic policy. They are subject to refereeing prior to publication.

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.

TABLE OF CONTENTS

THE IRISH ECONOMY – OVERVIEW	1
DOMESTIC AND INTERNATIONAL OUTLOOK – TRENDS AND CHALLENGES	2
Further evidence of slowdown in domestic and international sectors	2
Inflation	13
Labour Market	18
Budget 2024 and moderation in Exchequer receipts	23
GENERAL ASSESSMENT	26

SPECIAL ARTICLE

Distributional impact of tax and welfare policies: Budget 2024	
K. Doorley, L. Duggan, A. Simon, D. Tuda	.30

SUMMARY TABLE

	2022	2023	2024
Output (Real Annual Growth %)			
Private Consumer Expenditure	9.4	3.2	2.5
Public Net Current Expenditure	3.5	0.1	0.8
Investment	5.1	-8.8	1.9
Modified Investment	15.9	-5.4	1.9
Exports	13.9	-2.9	3.2
Imports	15.9	-3.0	3.5
Gross Domestic Product (GDP)	9.4	-2.7	2.3
Gross National Product (GNP)	9.2	2.5	0.7
Modified Domestic Demand	9.5	0.6	2.0
Domestic Demand (excl. Stocks)	6.7	-1.8	2.0
Labour Market			
Employment Levels ('000)	2,548	2,671	2,713
Unemployment Levels ('000)	119	123	121
Unemployment Rate (as % of Labour Force)	4.5	4.4	4.3
Public Finances			
General Government Balance (€bn)	8.6	8.9	9.1
General Government Balance (% of GDP)	1.7	1.7	1.7
Price Developments			
Inflation (CPI)	7.8	6.4	2.9
Inflation (HICP)	8.1	5.3	2.4

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/totaldomesticdemandandmodifiedtota ldomesticdemand/#:~: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 the underlying Irish economy as measured by modified domestic demand (MDD) continues to grow, it is clear that external sources of growth are slowing somewhat.
- Global conditions continue to moderate as households and firms in most Western economies are facing elevated costs of finance through higher interest rates.
- This has implications for the domestic economy given its small and open nature. However, the moderating impact on the Irish economy is compounded by the slowdown in growth rates experienced by sectors which have been central to the recent strong growth performance.
- Exports and investment levels in the domestic economy, for example, have registered negative growth rates in recent quarters principally due to the slowdown in multinational-related activities.
- Despite this, MDD is still growing at a consistent rate of approximately 0.6 per cent, and other indicators such as Exchequer receipts and the labour market variables all indicate resilient domestic growth. We expect MDD to grow at an average of 2 per cent in 2024.
- The recent Budget was a sizeable package with an additional expenditure level of approximately €14 billion being outlined for the coming year. While there were elements in the Budget which were laudable, overall the package was quite stimulatory and would have benefitted from being more targeted in nature.
- This is particularly the case given the persistence observed in the rates of CPI inflation. We now forecast that inflation will be 6.4 per cent in 2023 before falling to a still elevated rate of 2.9 per cent in 2024.
- A Special Article to the *Commentary* by Doorley et al. presents the annual distributional review of the impacts of the Budget. Doorley et al. conclude that the Budget left households across the income distribution better off by just over 2 per cent, with the lowest income quintile benefitting the most by 5 to 6 per cent of disposable income. They also note that policymakers should move away from the use of temporary measures to compensate households for the presence of inflation.

Domestic and international outlook – trends and challenges

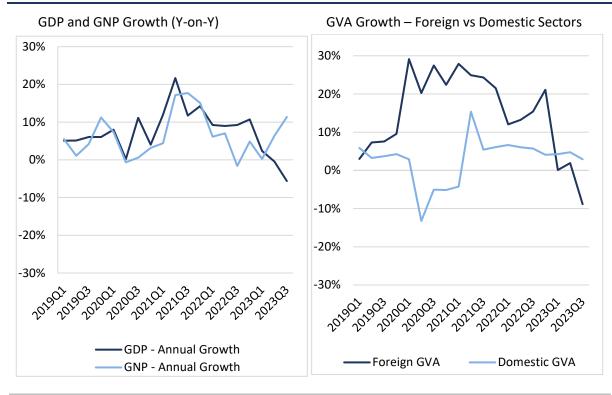
FURTHER EVIDENCE OF SLOWDOWN IN DOMESTIC AND INTERNATIONAL SECTORS

Growth outlook continues to deteriorate on rising headwinds

As indicated in our previous *Commentary*, the broad outlook for the Irish economy appears to have deteriorated as we move through 2023. The slowdown is particularly acute across the sectors of the economy dominated by foreign firms. Figure 1 presents the latest National Accounts quarterly data for a number of indicators: GDP and GNP growth on a year-on-year basis up to the third quarter of 2023, as well as GVA growth for foreign-dominated and domestic-oriented sectors. Following a number of years of strong growth, a consistent downward trend is evident and the fall-off in GDP growth has accelerated through 2023, with Q3 2023 GDP dropping by 5.6 per cent on a year-on-year basis. GNP growth has risen in recent quarters driven by lower levels of multinational profit repatriations (lower net factor outflows).

Figure 1 reviews the trends in the sectoral GVA data. It is clear that the majority of the fall-off has been in the foreign-dominated sectors of the economy. Having experienced high growth throughout the pandemic period, since the end of 2022 GVA in these sectors has been growing at a reduced pace. For domestic sectors, GVA growth has normalised following the period of extreme volatility throughout the pandemic.





The figure again highlights the very clear divergences in performance between the international, export-led FDI sectors and the domestic-oriented sectors of the economy which has been an increasingly evident feature of the Irish economy over the past number of years. The components of GDP growth are captured in Figure 2 which presents the year to date (Q1-Q3 cumulative) year-on-year growth, as well as the annual quarterly growth rate, for consumption, investment, government spending, imports and exports in constant prices.¹ While consumption and government spending are continuing to grow in the year to Q3 it is clear that trade is slowing rapidly and investment is dropping sharply. For the first three quarters of 2023 compared to the same period in 2022, investment is down nearly 9 per cent, exports are down 3 per cent and imports are down 2 per cent. The annualised growth for Q3 2023 is even lower for investment, exports and imports. In terms of the contribution to growth, the lower investment activity is leading to lower capital imports which provide some offsetting impact in terms of the drop in GDP.

¹ For the present year, the sum of the subcomponents of GDP in Figure 1 leads to a larger overall fall in activity than the actual GDP, as a notable increase in physical stocks has been present in the 2023 year-to-date information.

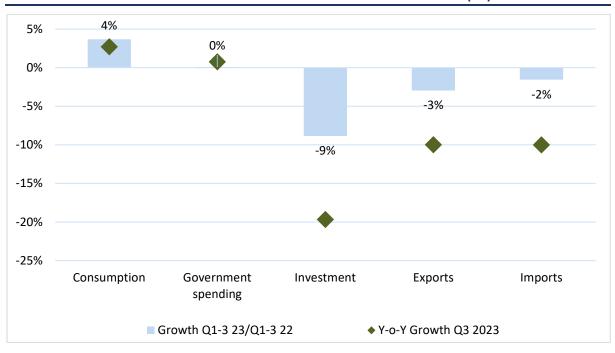


FIGURE 2 COMPONENTS OF GDP GROWTH – YEARLY GROWTH RATES (SA)

FDI-related factors lead to sizable fall-off in exports

The most distinct feature of the decline in Ireland's growth trajectory this year has been the fall-off in exports. Figure 3 presents the trend in export volumes overall and separately for goods and services (both of which account for approximately 50 per cent). There has been a significant decline in overall export growth, from 17 per cent year-on-year in Q3 2022 to a 10 per cent year-on-year decline in Q3 2023. Such a rapid and extensive drop highlights the extremely volatile nature of the Irish traded sector given the importance of the multinational sector. Figure 3 also provides the trends across goods and services exports and it becomes evident that the goods sector is experiencing a significant fall-off in exports while service exports have held up, even recording a turnaround in the past two quarters.

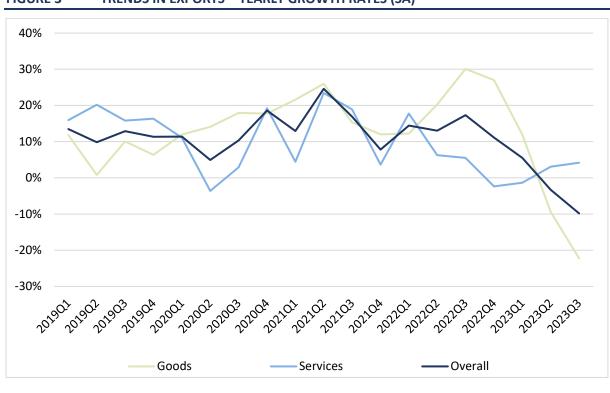


FIGURE 3 TRENDS IN EXPORTS – YEARLY GROWTH RATES (SA)

Table 1 breaks the export data out into several subcomponents. First, services are broken down by computer services, the internationalisation activities of royalties, R&D and leasing, and finally all other services. Goods exports are split out between pharmaceutical activities, other cross-border international trade, and the internationalisation activities related to merchanting, goods for processing etc. The data are in value terms and combine sources across the monthly trade data and the international accounts. Three different figures are presented; column (1) presents the share of total export values for the year to date (cumulative Q1-Q3) in 2023; column (2) presents the year-on-year growth for the year to date compared to the same period in 2022; and (3) presents the growth rate on a year-on-year basis.

For services, computer services account for 31 per cent of all exports and this category has continued to grow rapidly in 2023 on a year-on-year basis for both metrics. This is a welcome development given the general difficulties in the IT sector globally at the start of 2023. Other service activity which accounts for 16 per cent of total exports has grown 4 per cent in the year to date for 2023 but has dropped back somewhat for Q3 2023. Internationalisation activities in the service sector have continued to grow strongly as the year-on-year growth for Q3 2023 was 12 per cent. These data indicate a continued resilient growth outturn for services, dominated by computer service exports.

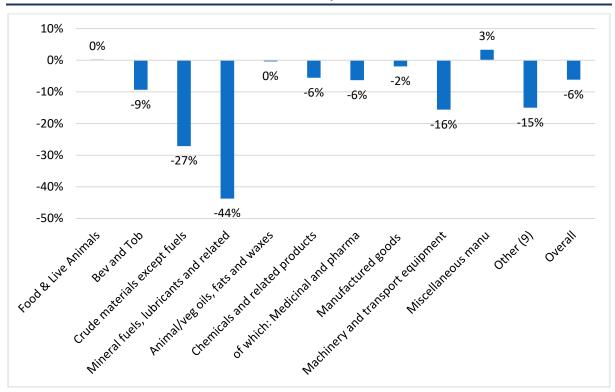
	(1)	(2)	(3)
	Share of Value, 2023	2023 YTD Change	Q3 2023 Change
	%	%	%
Computer Services	31	10	12
Royalties/R&D/Leasing	6	6	12
Other Services	16	4	-3
Total Services	53	7	7
	Share of Value, 2023	2023 YTD Change	Q3 2023 Change
Pharmaceutical and Medicinal	11	-6	6
Other International Trade	18	-5	-20
Merchanting/GfP/CM	17	-13	-42
Total Merchandise/Goods	47	-8	-24
Overall Goods and Services	100	-1	-9

TABLE 1 EXPORT VALUES – SUBCOMPONENT CHANGES

Source: Central Statistics Office.

For merchandise trade, the picture is somewhat more sanguine. Across all the categories presented, trade has fallen sharply on a year-on-year basis for the year to date as well as for the latest quarter. Pharmaceutical exports are down 6 per cent on a year-on-year basis for the first three quarters of 2023, however they recovered some ground in Q3 2023. Other international trade (which relates to other cross-border goods items) is down 5 per cent year-on-year for the first three quarters of the year, and down 20 per cent year-on-year to Q3 2023. An even more dramatic drop is apparent in the internationalisation activities (merchanting, goods for processing etc.) which are down 13 per cent year-on-year for the first three quarters of the year and 42 per cent in the year to Q3 2023. Overall merchandise trade has dropped 8 per cent in value terms for the first three quarters of 2023. While the internationalisation activities are unlikely to have notable employment impacts, the generalised reduction in their export contribution could feed through into corporation tax receipts if company profitability is affected.

To provide further insight into the trend within the cross-border goods trade, Figure 4 takes the overall export of goods by commodity group and compares the total value of exports for the first nine months of 2023 to the same period in 2022. Over this period, export values are down 6 per cent in total. As noted, a large contributor to this is the pharmaceutical sector and other chemicals exports which accounted for nearly 64 per cent of total cross-border goods exports over this period. Exports for these items are down 6 per cent for the nine-month period to September 2023 on an annual basis. However, it is clear goods exports across all commodity groups are beginning to decline, which points towards a softening of international demand across the group of products Ireland exports. Given that goods exports account for approximately half of Ireland's total exports, it is likely that overall exports will fall in 2023. These effects are the main trigger of overall declines in GDP as net trade falls. Given the slowdown in international growth, and the observed decline in Irish exports in the year to Q3 2023, we project exports to fall by 2.9 per cent in 2023 but rebound somewhat to grow by 3.2 in 2024.





Source: Central Statistics Office.

Domestic economy still growing robustly despite slowdown

In terms of the domestic-oriented components of the Irish economy, a somewhat more nuanced picture emerges. A range of indicators points towards a moderation of the growth rate, however there is still a relatively robust degree of growth evident in the underlying economy. Figure 5 presents the growth rate in consumption and modified total domestic demand (MTDD) on a year-on-year basis. While it is clear that MTDD is slowing, consumption is continuing to grow at over 3 per cent. The slowdown in MDD is primarily being driven by a fall-off in investment activity which, even if officially labelled modified, contains certain activities of multinational firms.

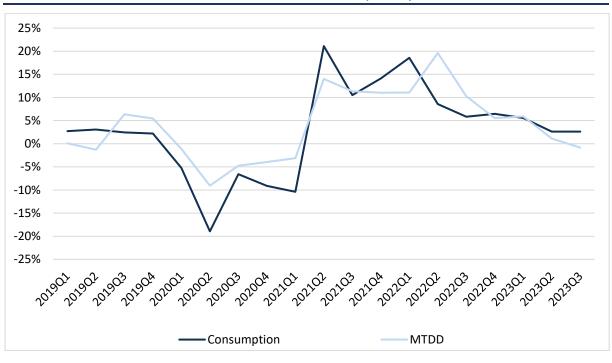


FIGURE 5 TRENDS IN CONSUMPTION AND MODIFIED (TOTAL) DOMESTIC DEMAND

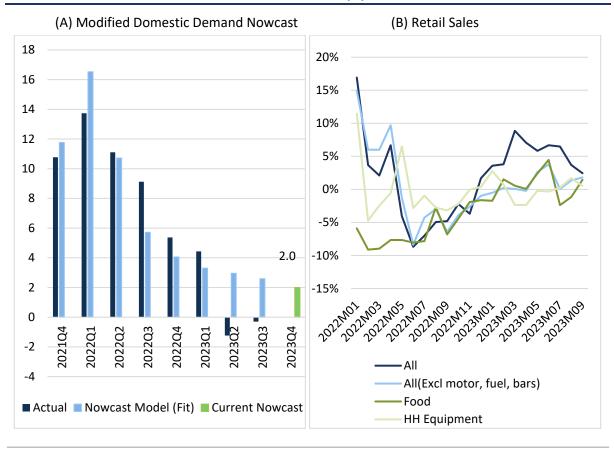
Figure 6 presents the ESRI's Nowcast for modified domestic demand (MDD) that is published on a monthly basis, following an approach outlined in Egan (2023)² as well as the latest data on Retail sales (to September 2023) from the CSO. To recap, modified domestic demand includes household consumption, government spending, and investment excluding aircraft leasing and R&D intangible assets. Figure 6(A) shows the performance of the Nowcasting model compared to actual growth in MDD between Q1 2022 and Q3 2023 as well as the most recent Nowcast for Q4 2023. Based on partial data from October and November, our early Nowcast estimates MDD for Q4 2023 to be 2.0 per cent above its level in Q4 2022. This is down on the 3.1 per cent reported in the Autumn *QEC* which was based on July and partial August data only.

A similar picture is evident from the retail sales data. Figure 6 (B) presents the trend in retail sales for the following categories: all items; all items excluding motor, fuel and bars; food purchases; and household equipment. Overall, there has been a notable slowdown in the growth of retail sales throughout 2023. However, a majority of this decline is accounted for by a fall-back in the motor trade from early year highs. Excluding activity in the motor trade, the other indicators of retail sales are only growing very modestly; growth rates across all series presented are between 1 and 2 per cent on a year-on-year basis.

² Egan, P. (2023) 'Nowcasting domestic demand using a dynamic factor model: the case of Ireland', *Applied Economics Letters*, 30(19), 2711-2716.

Behind these trends, there is likely to be a multitude of factors affecting the trajectory of the domestic economy. This includes the ongoing cost of living challenges which have squeezed real incomes, in particular for lower income households, as well as increasing interest rates and a drop-off in accumulated savings from the pandemic period. There is also a process of adjustment from the COVID-19 pandemic when the growth rate was somewhat exaggerated due to high consumption growth and the substantial performance of key MNE sectors. It is likely that the domestic economy will continue to grow at a more modest pace in the period ahead and we expect consumption growth of 3.2 per cent in 2023 and 2.5 per cent in 2024. For modified domestic demand, we expect growth of 0.6 per cent in 2023 and 2 per cent in 2024.

FIGURE 6 DOMESTIC ECONOMIC DEVELOPMENTS (%)



Source: ESRI (Nowcast) and Central Statistics Office (Retail Sales).

Investment remains muted but housing output rises

In the previous two *Commentaries*, we outlined in detail the headwinds facing companies in terms of their investment expenditure, with elevated financing costs and a deterioration in the global economic outlook as the most pertinent factors. It is becoming increasingly clear that investment expenditure on non-housing related activities, in particular general machinery and equipment, is beginning to drop back in level terms as uncertainties increase and demand wanes. Figure 7 presents the growth rate for various investment categories for: a) the first three

quarters of 2023 compared to the same period in 2022 (blue bar) and b) the yearon-year growth to Q3 2023 (blue triangle). Both modified and overall investment are dropping back sharply by between 5 and 9 per cent respectively. If we separate construction activity from the modified investment figure, the decline increases to 9 per cent which indicates a sharp slowdown in investment expenditure. It must be noted that some of this decline is related to base effects from large investments in 2022 related to multinational activities. Of particular note is the fall-off in construction, which is coming from the non-residential dwellings side. This is likely linked to the slowdown in commercial property investment in Ireland that has been evident in the recent quarters. Dwelling investment (new housing supply) is the only investment category growing, up 8 per cent for the first three quarters of the year relative to the same period in 2022.

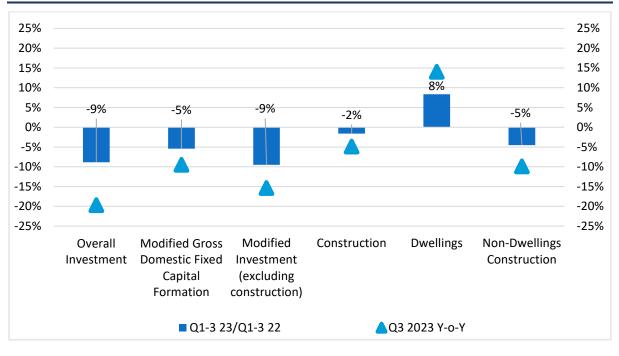
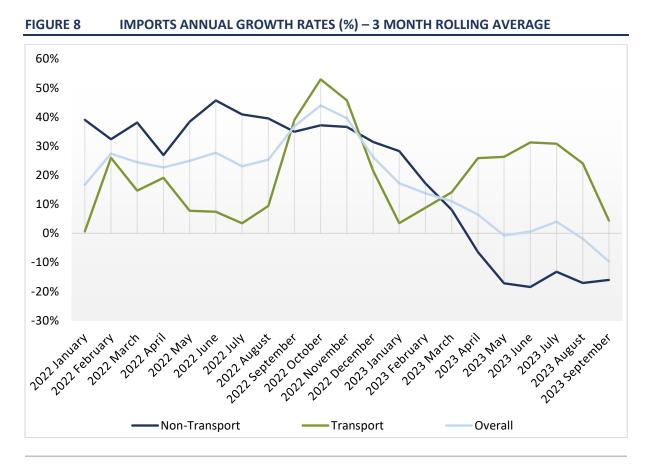


FIGURE 7 INVESTMENT ANNUAL GROWTH RATES (%)

Source: Central Statistics Office.

To gain more insight into the recent decline in investment activity, Figure 8 presents the year-on-year growth in the value of imports of machinery and equipment on a rolling three-month average basis. Given Ireland's economic structure (with limited production of capital equipment domestically), imports are an extremely accurate lens into investment trends. The trends presented are for overall imports of machinery and equipment.



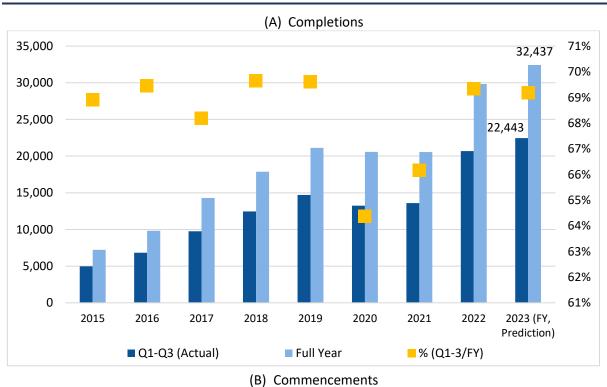
Source: Central Statistics Office.

It is clear from Figure 8 that overall, and across both transport and non-transport capital machinery imports, there has been a fall-back in terms of the purchase of capital items from aboard. The non-transport figure is important in these data as this captures all the typical capital machinery that would be used by enterprises in their production activities. Imports of these goods have been dropping since April 2023 which points towards a generalised slowdown in the overall investment climate.

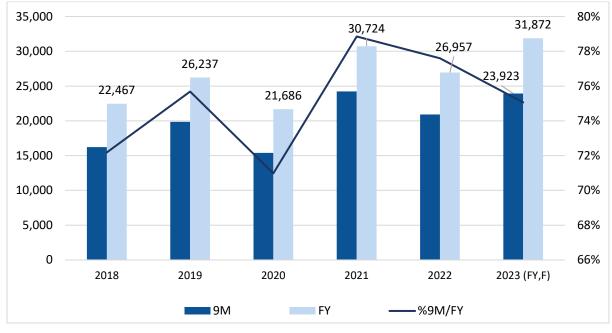
The only investment asset that has countered this trend has been residential housing. There has been a continued and sustained increase in both housing completions and housing commencements throughout 2023. For the first three quarters of 2023, housing completions stood at 22,443 while housing commencements amounted to just under 24,000 residential units. These are presented in Figure 9 (A) and (B). For the first three quarters of 2023, completions have risen by 8.5 per cent on a year-on-year basis while commencements are up 14 per cent year-on-year.

On a historical basis (for the years preceding and since), the end of the COVID-19 pandemic, housing output for the first three quarters of any given year amounted to approximately 70 per cent of the total. These figures indicate that, despite the

headwinds from high materials costs, rising interest rates, general economic uncertainty and a tight labour market, residential construction activity has grown robustly in 2023. Should these conditions continue, and no further increases in interest rates occur or other cost effects materialise, it is likely that housing completions will reach somewhere in the region of 32,000 to 33,000 units in 2023 and 2024.







INFLATION

Inflation moderates due to slowing growth in energy costs

Over the past number of months, inflation has moderated after peaking in 2022 and early 2023, due to the high energy costs primarily caused by the war in Ukraine. In Ireland, CPI inflation in October 2023 was 5.1 per cent compared to October 2022 and 0.3 per cent compared to September 2023.

To better understand the current determinants of inflation, Figure 10 shows the trend in the components of inflation on which households spend the highest shares of their income. Price increases for *Housing & Energy* have not grown as quickly as in previous quarters and have started to moderate in September 2023. However, it is important to mention that the annual growth in energy prices does involve certain base effects, as they peaked in October 2022. Therefore, any year-on-year price comparison in October must take into account that energy prices reached their highest point in the current cycle in October last year. Furthermore, most energy suppliers started to pass on the reduction of wholesale prices to their customers at the beginning of November 2023 which should contribute to a further reduction in overall inflation by the end of the year.

However, inflation in the non-energy related items has proven to be stubborn, especially when it comes to food and non-alcoholic beverages, recreation and culture, as well as restaurants and hotels. This is likely due to second round effects of high energy costs.

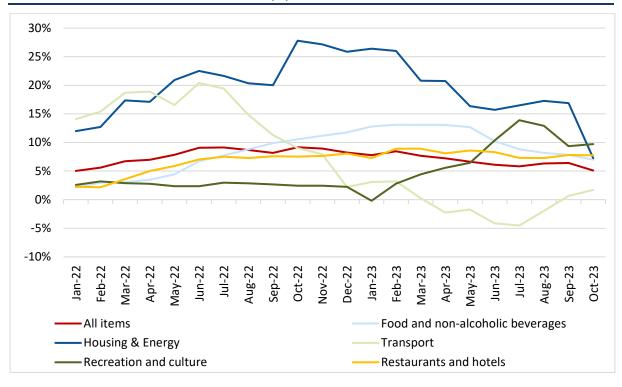


FIGURE 10 YEAR-ON-YEAR INFLATION (%) BY MOST IMPORTANT COMPONENTS

Drivers of inflation

Given the different price developments across the various inflation components, it is important to consider which items are most important in terms of households' expenditure. Therefore Figure 11 displays the weighted components of CPI inflation, demonstrating the contribution of certain components based on both their price increase and the share of income households spend on them.

Figure 11 shows that in 2023 the component *Housing & Energy* was the largest component of household expenditure. Not only do households spend the highest proportion of their income on this component, but the increase in these costs have been the largest, as can be seen in Figure 10. As the *Housing & Energy* component combines two major cost centres for Irish households, the components of this category are shown separately in Figure 12 for clarification.

Furthermore, what is noticeable is that the component *Recreation and Culture* is taking up a larger share as the year evolves. Figure 10 underlines the sharp increase of the price increase since the beginning of 2023.

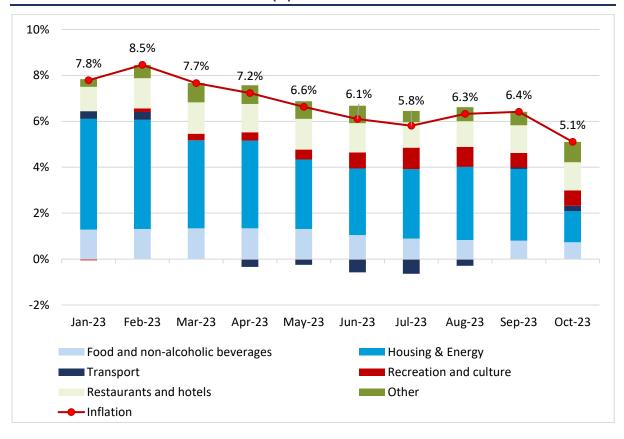


FIGURE 11 YEAR-ON-YEAR INFLATION (%) BY WEIGHTED COMPONENTS

Detangling the Housing & Energy component

Figure 12 shows a breakdown of the inflation component *Housing & Energy* to investigate which elements drive the price developments of this category. Here, too, weights are used that are based on the proportion of household expenditure for certain categories.

The first striking observation is that energy price inflation in October 2023 is negative for the first time since the beginning of last year, being 4.2 per cent lower than in October 2022 and 0.4 per cent lower than in September 2023. Again, since it is a year-on-year comparison, base effects must be considered. Energy prices peaked in October 2022, which means that the negative growth is mainly due to this base effect. The moderation of those costs is clearly displayed in Figure 12, suggesting it is the main driver of the disinflation of the component *Housing & Energy*.

Furthermore, Figure 12 displays how mortgage interest payment inflation grew quickly, and is remaining high, due to the increase in policy rates by the ECB over the past 18 months. The very high annual rates of inflation in mortgage interest have contributed substantially to *Housing & Energy* inflation in 2023.

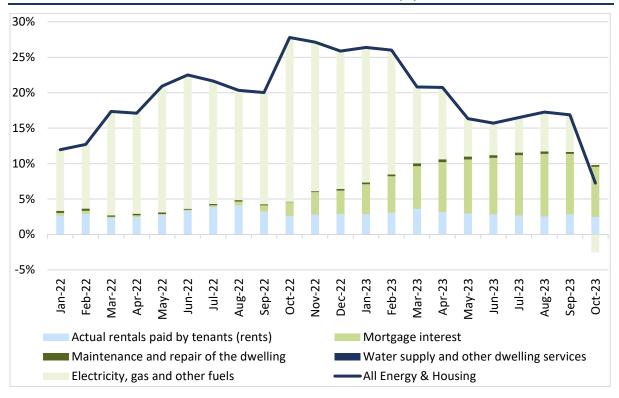


FIGURE 12 YEAR-ON-YEAR HOUSING & ENERGY INFLATION (%) BY WEIGHTED COMPONENTS

Inflation in Ireland compared to the Eurozone

For a better comparison among the euro area countries, the Harmonised Index of Consumer Prices (HICP) is used to measure consumer price inflation. All countries in the EU follow the same methodology which makes this indicator comparable. The HICP follows the same idea as the Consumer Price Index (CPI) with the main difference being the exclusion of mortgage interest.

Figure 13 shows the annual HICP inflation for Ireland and the euro area and, for comparison, the CPI inflation for Ireland. Ireland's HICP is at 3.6 per cent in October 2023 compared to October 2022. The figure clearly shows that HICP inflation in the euro area is on a downward trend and is approaching the 2 per cent target.

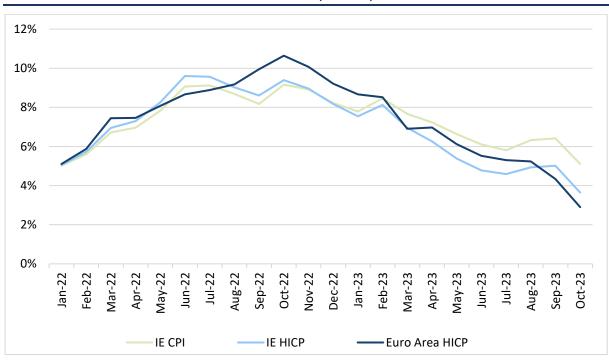


FIGURE 13 DEVELOPMENT OF EURO AREA HICP, IE HICP, AND IE CPI

Sources: Central Statistics Office, Eurostat.

Inflation Outlook

As *Housing & Energy* is the component on which households spend the largest share of their income and it is also the component that has seen the highest increases in 2022 and 2023, the current moderation (or even decrease for some items) in energy prices will dampen inflation at the end of 2023 and 2024. Energy prices should continue to fall in November and December as companies begin to pass on the price reductions to consumers. These energy cost reductions will probably impact other subcomponents of inflation, such as transport, restaurants and hotels, and food.

However, overall, non-energy related price inflation has turned out to be more stubborn than initially expected. Therefore we are revising our forecast for 2023 to 6.4 per cent, and forecast inflation of 2.9 per cent in 2024.

LABOUR MARKET

Unemployment rate increases due to demographic reclassifications

After the strong recovery from the COVID-19 pandemic, the labour market has been operating close to capacity since winter 2022. In Q3 2023 the unemployment rate increased to 4.5 in Q3 2023 and stood at 4.8 per cent in November 2023, after being below 4.3 per cent during the first three quarters of the year, as displayed in Figure 14.

In addition to other factors such as the moderation in international and domestic economic activity, the reasons for this increase in the unemployment rate most likely include a shift in labour force participation, population dynamics and a change in classification by the CSO. In its October release of the Monthly Unemployment Estimate, the CSO provides information on that issue. Ukrainians coming to Ireland due to the ongoing war receive the Working Age Income support. The CSO notes that persons who are registered as recipients of this benefit and meet the relevant criteria will be included in the Live Register which is used to estimate the monthly unemployment rate.

Therefore there has been an increase in the number of people classified as unemployed, resulting in an upward trend in the unemployment rate over recent quarters.



FIGURE 14 UNEMPLOYMENT RATE AND VACANCY RATE (%)

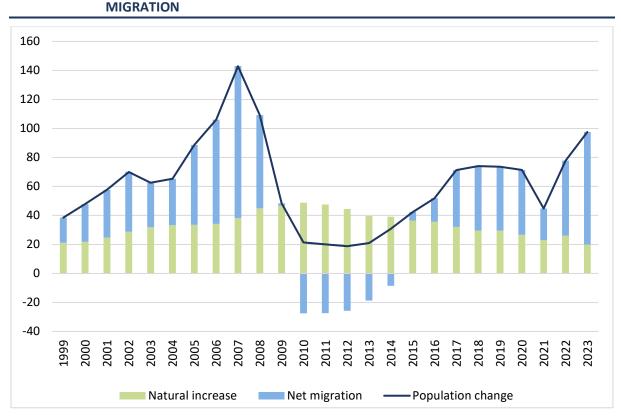
Source: Central Statistics Office.

Note: SA stands for Seasonally Adjusted.

Shifts in population structure

Over and above the impact of the arrivals from Ukraine, the Irish population is growing at a quicker pace than previously expected, as displayed in Figure 15. This graph shows the absolute number of population growth in thousands, and differentiates between natural increase (difference between births and deaths) and net migration (difference between immigration and emigration). Immigration is still lower than at its peak around 2007 but the numbers have visibly increased as the economy has recovered from the global financial crisis (GFC). It should be noted that the figures are estimates for April, which were calculated by the CSO based on the data from the last Census.





Source: Central Statistics Office.

Among other things, the ongoing war in Ukraine contributes to increased net migration. Figure 16 shows the estimated immigration to Ireland by citizenship. What is apparent is that in 2008 the largest share arriving were EU citizens, whereas in 2023 this group is clearly people from countries outside of the EU, Ireland, and the United Kingdom. The CSO's April Population and Migration Estimates noted that around 42,000 Ukrainians have migrated to Ireland, which is likely to be most of the people in the 'All-Countries' group in Figure 16.

Looking more closely, the CSO data demonstrate that since 2016 more women than men have immigrated to Ireland, which could potentially explain the much larger increase in female employment (see Figure 17) among other drivers such as more flexible working opportunities post COVID-19. Looking at the age distribution, 25–44-year-olds are by far the largest group to have moved to Ireland each year since 1987 (except for 2008 and 2009 when the 15–24-year-old cohort was larger). This means that most of the people immigrating to Ireland are of working age and will potentially be part of the workforce. Particularly at a time when there is excess demand for labour in many sectors, this additional increase in the population of working age adds to the productive capacity of the economy.

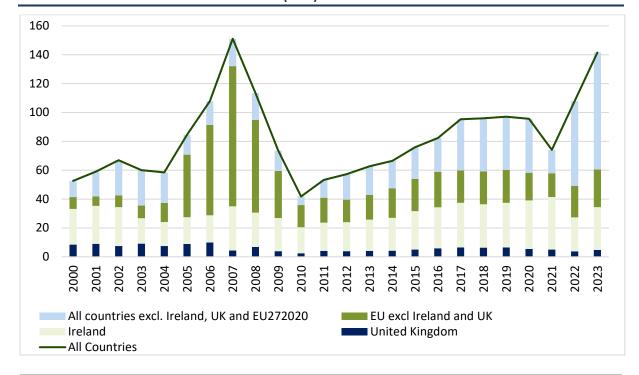


FIGURE 16 ESTIMATED IMMIGRATION ('000) BY CITIZENSHIP

Source: Central Statistics Office.

Vacancy rate declines but remains elevated

While the vacancy rate was very high for most of 2022, it is trending downwards this year. In the third quarter of 2023, the vacancy rate fell to 1.2 per cent after a slight increase at the beginning of the year. The vacancy rate has been above 1 per cent since the beginning of 2021 which is displayed in Figure 14.

More granular data from the CSO reveal that of all the vacancies, the highest share of them is in Public administration and defence making up 17.3 per cent of the vacancies in Q3 2023. This sector and the Human health and social work activities sector are the only ones who have experienced a year-on-year increase in the rate, compared to Q3 2022.

Labour force and employment increase

The increase in working age population is reflected in the Labour Force Survey for Q3 which suggests the labour force increased by 4.0 per cent compared to Q3 2022. Female employment has increased by 6.0 per cent whereas male employment has increased by 2.3 per cent. The data also reveal that in Q3 2023 there were more people employed in Ireland than ever before. Figure 17 displays this clearly, namely the strong recovery from COVID-19, and shows that employment is continuously growing ever since. These findings underline the argument that unemployment is mainly increasing due to re-classification of those deemed to be unemployed and not due to a decline in labour demand.

Further data included in the Labour Force Survey indicate that between the 15-24 years, 25-44 years, and 45 and older age groups, the middle age group has seen a relatively strong increase in employment numbers, after stagnating since the second quarter of 2022. The employment figures for the oldest age group have fallen slightly.

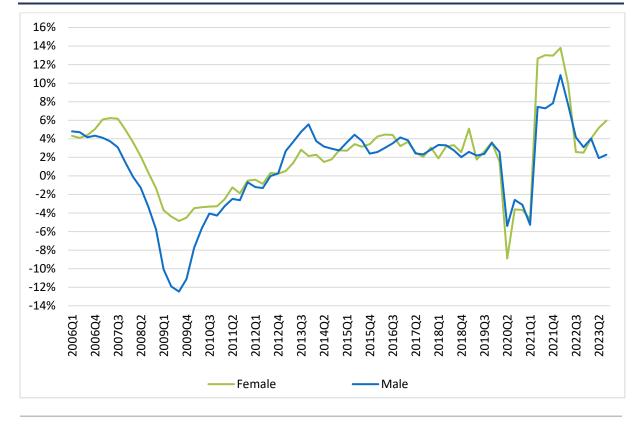


FIGURE 17 SEASONALLY ADJUSTED YEAR-ON-YEAR EMPLOYMENT GROWTH (%) BY SEX

Source: Central Statistics Office.

Wages and inflation

Figure 18 displays the comparison between the year-on-year development of seasonally adjusted real and nominal hourly wages. The figure clearly shows that

real wages have been falling since the end of 2021 due to high inflation. It should be noted that the decline in 2021 did include certain base effects, as wage increases in Q4 2020 were exceptionally high. It can also be seen that after a period of decline, real wages returned to positive growth in Q3 2023.

The importance of adjusting wage data for inflation becomes clear in Figure 18, as the difference can be significant. While real and nominal wages evolve in a very similar way between 2013 and the beginning of 2021, in times of high inflation they follow completely different paths.

Despite inflation moderating and decreasing vacancies, the possibility of tight labour markets leading to wage pressure still remains. The high employment numbers show that the labour market is acting at capacity, which is why wage pressure remains high.



FIGURE 18 REAL VS NOMINAL HOURLY WAGE YEAR-ON-YEAR GROWTH (%)

Source: Central Statistics Office.

Labour Market Outlook

Although some headline indicators, such as GDP, international trade and investment hint towards a slowdown in economic activity, employment is still growing in the Irish economy. This underlines the difference between the headline indicators and the actual performance of the domestic economy.

As inflation is moderating, it is likely that wages will grow again in real terms, which should have a positive effect on household spending in the quarters ahead, and in general stimulate the domestic economy.

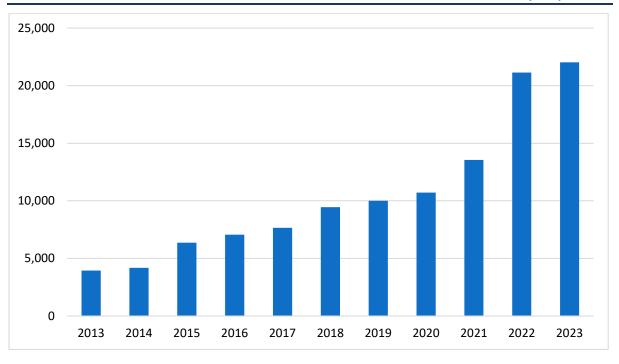
The recent increase in the unemployment rate appears to be due to the reclassification of the population structure based on the indicators used for the trend forecast according to the CSO. It seems that those labour force increases are accompanied by higher employment too. Therefore we do not expect the unemployment rate to grow much further. We leave our forecast for 2023 at 4.4 per cent and expect it to go down next year to 4.3 per cent.

BUDGET 2024 AND MODERATION IN EXCHEQUER RECEIPTS

Growth continues in CT income tax and VAT but at a slower pace

The developments of taxation revenues this quarter are somewhat reflective of the overall narrative of the Irish economy. Total cumulative tax receipts for the year are 5.8 per cent higher than the same period last year, which is a \leq 4.5 billion increase. This increase is being driven primarily by income tax, VAT and corporation taxes. Income tax for January-November stood at \leq 30.3 billion which is \leq 2.1 billion more than January-November 2022, while VAT stood at \leq 20.1 billion, which is \leq 1.6 billion higher than the same period last year.

Although the growth in corporation tax had faltered in the previous three months, strong returns in November of \notin 6.3 billion now bring the cumulative tax take for the year for this category to \notin 22 billion, which is a \notin 0.9 billion or 4.2 per cent increase over the same period in 2022. Income tax and VAT have continued to grow as unemployment remains low and consumption increases, however the pace of growth in 2023 is somewhat less than the two previous years. The same pattern is evident when it comes to corporation tax, where the large increases that have been seen in 2021 and 2022 have moderated somewhat in 2023. However, even with this lower rate of growth in corporation taxes, the level remains historically high, as illustrated in Figure 19.





Source: Department of Finance.

Budget 2024

Budget 2024 is similar in many ways to that of 2023. The overall package between core and non-core expenditure levels is almost €14 billion. Importantly, the Budget has been framed against continued growth in the domestic Irish economy, historically low unemployment and with domestic inflation still at quite elevated rates. Doorley et al. (2023) in a Special Article to the *Commentary*, conduct an analysis of the distributional implications of the Budget.

Overall, the Budget provided considerable support for households and businesses given the ongoing cost of living pressures. The overall tax package in the Budget was worth ≤ 1.3 billion. There were also further energy credits given to aid with the continued difficulties in the energy market. Many one-off payments were extended to those in receipt of certain benefits and further supports were also introduced for childcare.

One of the main points of note in Budget 2024 for the public finances was the creation of the Future Ireland fund and the Climate and Nature fund, which aim to set money aside to allow for long-term planning and investment in infrastructure as well as the green and digital transitions.

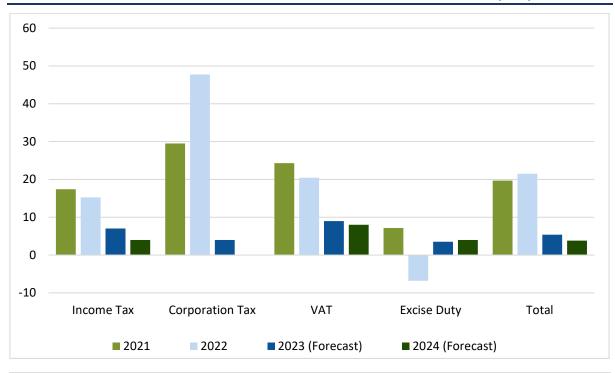


FIGURE 20 GROWTH RATE AND FORECASTS OF MAIN TAXATION HEADINGS ('000)

Sources: Department of Finance and authors' calculations.

Public finances outlook

Overall, the public finances continue to be in a strong position, with strong growth in income tax and VAT, and levels of corporation tax remaining high, despite growth actually declining in 2023. Exchequer tax receipts are expected to increase by 5.4 per cent and 3.8 per cent in 2023 and 2024, respectively. The forecasts of the main tax headings can be seen in Figure 20.

This will see the State's debt position continue to improve, with debt ratios declining. The debt-to-GDP ratio and debt-to-GNI* ratios are expected to decline to 43.1 and 79.6 per cent in 2023, respectively. In 2024, debt-to-GDP is forecast to decline to 40.3 per cent, while debt-to-GNI* is forecast to be 76.5 per cent.

General Assessment

Current expected outlook

Global economic conditions continue to moderate as 2023 comes to an end. The continued higher interest rate environment due to the ongoing presence of inflation is having a contractionary impact across Western economies in terms of taming household demand and investment decisions by firms. This is resulting in the global economic activity easing considerably.

This trend, along with certain Irish-specific factors, means that both the external demand and investment channel are somewhat weakened. Since the inception of the COVID-19 pandemic and its immediate aftermath, the Irish economy has experienced strong growth owing to the significant domestic presence of large FDI firms, in particular firms in the pharmaceutical and ICT sectors. Naturally, however, this growth has started to abate over the past six to nine months. Therefore, when combined with the global slowdown, the rates of change for headline indicators in the Irish economy are now negative.

On the other hand, modified domestic demand (MDD) which captures consumption and modified investment is still registering positive growth and is set to increase by 0.6 per cent in 2023 and by 2 per cent in 2024. Consequently, while GDP has generally tended to overstate the degree of growth in the domestic economy, at present it actually understates the degree of activity in the domestic economy. Our forecasts indicate that GDP will now contract by 2.7 per cent in 2023 before increasing again by 2.3 per cent in 2024. Much of the decline in GDP is being driven by a significant moderation in exports of goods particularly from the pharmaceutical sector.

The labour market continues to perform in a robust manner, a fact which underscores the resilience of the underlying economy. While unemployment has increased since the summer, this reflects an increase in unemployment levels due to the Ukrainian situation rather than a particular weakening in economic activity. The present inflow of people into the labour force is a welcome development as it eases some of the constraints which were emerging in the domestic economy as the unemployment rate approached 4 per cent. Reflecting the slowing of global demand and the moderation in growth rates of certain key multinational sectors, the amount of job vacancies in the Irish labour market, which had reached record heights, is now declining.

Population growth and its implications

Recent demographic figures released suggests that the pace of population growth is somewhat larger than had been previously expected. There are a number of reasons for this; the pace of growth in the domestic economy has attracted a significant degree of net inward migration while the war in the Ukraine has seen a further rise in population over and above what had previously been forecast.

A significant increase in population has significant implications across a number of areas not least of which is the demand for housing. As has been previously documented in the *Commentary* and other ESRI publications, housing supply has struggled to keep apace with the surge in demand which has accompanied the recovery of the domestic economy after the global financial crisis (GFC). While housing output has increased in the current year, demographic factors are likely to have pushed the level of housing demand further than past estimates. The 2022 Census of Population, and new migration data, provide an opportunity to revisit previous estimates, with work in this space currently underway in the ESRI. It is critically important that any revised estimates be evidence-based and subject to peer-review and academic scrutiny. Any revised estimates notwithstanding, it is likely that housing supply will need to continue increasing for the foreseeable future to cater for the growing population.

Budget 2024

The recent Budget was a particularly generous package with overall expenditure for 2024 set to increase by approximately €14 billion. This comes in the form of both core and non-core expenditure although the level of non-core expenditure has risen sharply in recent years. The substantial increase in expenditure comes at a time when rates of inflation in the domestic economy have remained stubbornly high. We have revised upwards our forecast for inflation for both 2023 and 2024.

The distributional impact of the tax and welfare changes in Budget 2024 are analysed in a Special Article to the *Commentary* by Doorley et al. Overall, it is clear that the Budget leaves most households better off, with the lowest income quintile of the distribution receiving the largest increase in percentage terms. While the progressive nature of the Budget is to be welcomed, it is clear from the analysis that the permanent measures announced in the Budget alone would have resulted in an increase in income levels across the distribution. Therefore, the once-off measures introduced have compounded the stimulatory impact on general incomes. The Budget would have benefitted from being more targeted in nature; this would have led to welfare support going to those in most need and would have had a less inflationary impact overall. The investment funds announced in the Budget are to be welcomed for two main reasons; first they reinforce the budgetary discipline of delineating Exchequer returns between those revenue streams which are deemed to be sustainable in nature and those that are not. The latter are then used to fund the different investment vehicles. This is particularly the case given the slowdown in the rate of growth in corporation tax receipts observed in 2023.

Secondly, as noted in previous *Commentaries*, Irish capital investment has been particularly pro-cyclical even by European standards over the past 25 years. Therefore, the presence of these funds should help to ensure that investment in the economy by the State is less dependent on the economic cycle going forward.

Special Article

This Article has been accepted for publication by the Institute, which does not itself take institutional policy positions. Special Articles are subject to refereeing prior to publication. The author is solely responsible for the content and the views expressed.

DISTRIBUTIONAL IMPACT OF TAX AND WELFARE POLICIES: BUDGET 2024*

Karina Doorley, Luke Duggan, Agathe Simon, Dora Tuda¹

ABSTRACT

In this Special Article we analyse the distributional impact of Budget 2024. Similar to last year, many reforms in this budget were temporary measures specifically aimed at combatting cost of living pressures. Compared to a baseline pegged to wage growth, we estimate that Budget 2024 will leave households across the income distribution better off, by 2.1 per cent of disposable income on average. The lowest income quintile of households experiences the largest relative gain (5-6 per cent of disposable income) but the lowest cash gain (€13-€17 per week). Much of the income gain is driven by temporary measures, although there are above-wage-growth increases to many permanent parameters of the tax-benefit system too. We show that from 2020 to 2024, permanent changes to the tax and welfare system have resulted in small average income losses (-0.5 per cent of disposable income) compared to policy changes pegged to wage growth. We suggest that policymakers should move away from the use of temporary measures to compensate households for rising prices and should consider the adequacy of welfare payments to provide an appropriate standard of living at current market prices.

1. INTRODUCTION

Budget 2024 commits to extra expenditure of ≤ 12.3 billion. This additional expenditure is comprised of a package of once-off measures worth ≤ 2.3 billion, a core budget package of ≤ 5.2 billion with the remaining ≤ 4.8 billion allocated to non-core expenditure.

Given high but stabilising inflation and the full employment outlook in Ireland (McQuinn et al., 2023), restraint in spending was urged by the Irish Fiscal Advisory Council, among others, amidst concerns that a large budgetary package could further fuel inflation (Irish Fiscal Advisory Council, 2023). Nevertheless, the government has exceeded its own 5 per cent spending rule with Budget 2024,

^{*} https://doi.org/10.26504/QEC2023WIN_SA_Doorley.

¹ Funding from the ESRI's Tax, Welfare and Pensions Research Programme (supported by the Departments of Public Expenditure and Reform; Employment Affairs and Social Protection; Health; Children, Equality, Disability, Integration and Youth; and Finance) is gratefully acknowledged. We are grateful to the CSO for facilitating access to the Survey of Income and Living Conditions (SILC) Research Microdata File used to construct the database for the SWITCH tax-benefit model and to the Irish Social Science Data Archive for facilitating access to the Household Budget Survey used in the ITSim model.

increasing expenditure by 6.1 per cent in 2024, citing the need to compensate households for the rising cost of living.

In this Special Article, we examine the tax and welfare measures announced in Budget 2024. We begin by outlining and assessing the taxation measures in Section 2, followed by an examination of the social welfare measures in Section 3. Section 4 presents our analysis of the distributional impact of these measures using SWITCH – the ESRI tax and benefit microsimulation model – and ITSIM, the indirect tax model jointly developed by the ESRI and the Department of Finance. We also estimate the cumulative impact of tax and welfare reforms announced to date by the coalition Government over the period 2021 to 2024. Section 5 concludes.

2. TAXATION MEASURES

Table A.1 in the Appendix lists the main taxation measures announced in Budget 2024 alongside the full-year cost estimated by the Department of Finance.

2.1 Income tax

Most income tax credits rose in nominal terms and the proportional increase of around 5.5 per cent was above both the ESRI's forecast rate of inflation (3.2 per cent) (McQuinn et al., 2023) and the Central Bank of Ireland's forecast increase in compensation per employee (5 per cent) in 2024 (Central Bank of Ireland, 2023). This amounts to an effective tax cut as these credits are worth more to taxpayers in real terms, while a lower share of aggregate earnings will be exposed to the top 40 per cent rate of tax.

By contrast, the freeze to many Pay Related Social Insurance (PRSI) and Universal Social Charge (USC) thresholds in nominal terms amounts to an effective tax increase for many taxpayers. This will be partly counteracted for some taxpayers by the reduction in the 4.5 per cent USC rate to 4 per cent but compounded by the small increase of 0.1 percentage points to all PRSI rates.

The income tax standard rate cut-off (SRCO: the point at which the higher income tax rate of 40 per cent begins to apply) rose by $\leq 2,000$ for a single adult, from $\leq 40,000$ to $\leq 42,000$, and by a proportionate amount for married couples and civil partners. This represents a proportionate rise of 4.8 per cent, above forecast inflation but just below forecast wage growth.

2.2 Taxation and housing

The Government also announced a range of tax measures aimed at addressing issues relating to housing. The income tax credit for private renters, introduced in

32 | Quarterly Economic Commentary – Winter 2023

Budget 2023, was increased from a maximum of \notin 500 to a maximum of \notin 750 per person per year for those eligible and living in unsupported private rental accommodation. It was also extended to parents who pay for rented accommodation for their student children. The credit will benefit middle income households most as households need to earn enough to incur a tax liability to benefit from the credit.

A new temporary Mortgage Interest Tax Relief was also announced for homeowners with an outstanding mortgage balance of between \in 80,000 and \in 500,000 at the end of 2022. This relief is mainly available to holders of tracker and variable rate mortgages and amounts to 20 per cent of the increased interest paid in 2023 compared to 2022. This relief is capped at \in 1,250. Like the rental tax credit, this relief will mainly benefit middle- and higher-income households as there are very few households in the lowest two-fifths of the income distribution with tracker or variable rate mortgages (Byrne et al., 2023).

A temporary rental income tax relief is also being introduced to support private landlords. The stated aim of this relief is to prevent private landlords from leaving the market. However, the evidence on whether or not this is actually happening is quite mixed. Data from the Residential Tenancies Board (RTB) point to fewer registered tenancies since 2016 while data from the Census suggest the opposite.⁴ In addition, as shown by RTB data and discussed by NESC (2023), there is evidence that taxation is not a primary reason for landlords leaving the market in Ireland.⁵ The new relief, of 20 per cent, will be available against an increasing sum of rental income between 2024 and 2027, provided the landlord keeps their rental property in the market between 2024 and 2027. The relief will be worth up to €600 in 2024, rising to €800 in 2025 and €1,000 in 2026 and 2027. Given the absence of evidence on whether or not landlords might respond to this measure by staying in the market, it is possible that much of the estimated €160 million expenditure on this policy will be deadweight.

The Minister for Finance also announced in increase in the rate of the Vacant Homes Tax, which will increase from three to five times a property's existing base Local Property Tax liability. This tax is a welcome supply-side measure and among the recommendations of the Commission on Taxation and Welfare (2022). However, given robust demand for housing combined with long-standing supply constraints, it is likely that despite this measure, the demand-side policies

⁴ 2023-10-10_opening-statement-niall-byrne-director-residential-tenancies-board_en.pdf (oireachtas.ie).

⁵ Among 53 landlords who had recently sold their property, just 6 per cent cited high taxation as a reason for selling. Among 128 landlords who intended to sell in the near future, tax was cited by 25 per cent as a reason for selling.

mentioned above will increase demand for housing, putting pressure on house prices.

2.3 Indirect tax

There was a well-flagged increase to the carbon tax of €7.50/tonne of carbon and an increase in the excise duties on tobacco products, amounting to an extra €0.75 on a packet of 20 cigarettes. Other indirect tax measures announced include the zero-rating of VAT on audiobooks, ebooks and solar panels on schools. Some costof-living measures which were due to expire in 2023 were extended. Reductions in VAT from 13.5 to 9 per cent for gas and electricity were extended until the end of October 2024. The reduction in (non-carbon) excise duties was also extended until the end of March 2024, while the 20 per cent reduction to public transport will continue for the whole of 2024.

3. SOCIAL WELFARE MEASURES

The Budget also included many changes to social welfare parameters alongside a number of temporary measures aimed at cushioning household incomes from supply-side driven inflation (Table A.1 in the Appendix).

As part of the permanent package, personal rates of payments for social welfare schemes were increased by ≤ 12 per week, with proportionate increases to qualified adult increases. Weekly payments for a qualified child increased by ≤ 4 , and the Working Family Payment income limits increased by ≤ 54 per week. For most social welfare recipients, these increases are relatively larger than forecast wage growth of 5 per cent in 2024 (Central Bank of Ireland, 2023). However, since retirement age payments tend to be higher than working age payments in nominal terms, the undifferentiated ≤ 12 increase represents a below-forecast wage growth increase for this group.

The National Childcare Scheme (NCS) saw an increase in the universal subsidy rate from ≤ 1.40 per hour to ≤ 2.14 per hour, effective in September 2024. This is likely to increase the demand for (subsidised) formal childcare over informal childcare, which is currently unsubsidised.⁶ It also has the potential to increase female labour supply (Doorley et al., 2023a). The income limits and rates of payment of the income assessed component of the NCS were not adjusted and have not been adjusted since its introduction in 2019. Given household income growth since then, it is likely that some households have lost eligibility for the more generous income assessed subsidy.

⁶ As discussed in Doorley et al. (2023b), the NCS is likely to be extended to childminders over the next three years which may alleviate some of these demand pressures.

Maintenance grant rates for those in receipt of student grants were also increased and the student contribution fee will be abolished for certain recipients of student grants from September 2024.

The welfare package in the Budget also included temporary welfare and universal payments to mitigate inflation-induced strain on household finances. Three universal energy credits were announced, payable in November 2023, January 2024 and February 2024. This is a significant fiscal outlay, totalling \notin 900 million. A double Child Benefit payment will also be made on 1 December 2023. Additionally, one-off lump sum payments for recipients of certain social welfare benefits were announced, with payment occurring during December 2023. Those in receipt of Working Family Payment, Disability Allowance, Carer's Support Grant, Blind and Invalidity Pension will receive a \notin 400 lump sum, while those in receipt of the Living Alone and Fuel Allowance receive \notin 200 and \notin 300 respectively. Two double payments of most social welfare schemes were also announced: the usual 'Christmas bonus' and a second double payment in January 2024. The temporary reduction in the student contribution fee for third-level students, announced in Budget 2023, was repeated in Budget 2024.

4. DISTRIBUTIONAL IMPACT ANALYSIS

We use SWITCH⁷ – the ESRI's tax benefit microsimulation model – and ITSim – an indirect tax microsimulation tool jointly developed by researchers at the ESRI and the Department of Finance – to assess the combined impact of taxation and welfare policy changes on households' incomes. The range of policy reforms modelled is detailed in the Appendix. SWITCH is linked to data from the 2019 Survey of Income and Living Conditions (SILC), the primary source of information on household incomes collected annually by the CSO. The data are reweighted to be representative of the 2019 population (in terms of demographics, employment, income and social welfare) and uprated to reflect price and income growth between 2019 and the year of analysis. The scale, depth and diversity of this survey allows it to provide an overall picture of the impact of the policy changes on Irish households, which cannot be gained from selected example cases. ITSim estimates the indirect taxes (VAT and excise duties, including carbon taxes) paid by Irish households on the basis of their reported expenditure, collected by the CSO's nationally representative Household Budget Survey (HBS) in 2015-2016.⁸

⁷ See Keane et al. (2023) for a description and validation of the SWITCH model.

⁸ Income is uprated to 2024 levels using earnings indices and expenditures are uprated to 2024 levels using price growth indices.

Given the range of temporary and permanent measures announced as part of Budget 2024, we prepare a number of base and reform scenarios to estimate the distributional effect of Budget 2024. These are summarised in Panel A of Table 1. We distinguish between (i) permanent policy changes between 2023 and 2024; (ii) the additional effect of temporary measures announced as part of Budget 2024 and occurring in 2023 and (iii) temporary measures occurring in either 2023 or 2024.

We also set up a baseline and reform scenario (Panel B of Table 1) which presents a more medium-term picture. We estimate the effect of permanent policy changes only between 2020 and 2024 on the distribution of income compared to a scenario in which 2020 policies were pegged to wage growth.

In each case, we compare to a scenario in which policy parameters of the direct tax and welfare system are indexed in line with actual and or forecast wage growth (Table 1). As argued by Bargain and Callan (2010) and Callan et al. (2019), this provides a distributionally neutral benchmark against which to assess policy reforms. For the indirect tax system, we index our baseline scenario in line with price growth which is a more appropriate indexation factor for expenditure. Our baseline scenarios do not include temporary measures since these do not make up part of the permanent policy system.

We use SWITCH to calculate households' social welfare entitlements, tax liabilities and net incomes under each system. ITSim calculates households' VAT and excise liabilities.

	Panel A: 2023-2024				Panel B: 2020-2024	
	Base 1	Ref 1 w/o temp	Ref 1 w 2023 temp	Ref 1 w 2024 temp	Base 2	Ref 2 w/o temp
Policy	2023	2024	2024	2024	2020	2024
Indexed to	2024	-	-	-	2024	-
Indexation factor direct tax and welfare*	5%	-	-	-	18.9%	-
Indexation factor indirect tax*	3.2%	-	-	-	20.2%	-
Temporary policies included?**	No	No	Yes - those occurring in 2023	Yes - those occurring in 2023 and 2024	No	No

TABLE 1 SUMMARY OF BASELINE AND REFORM SCENARIOS

Sources: * We use CSO data on annualised quarterly average weekly earnings and the Central Bank of Ireland's 2024 forecast for increase in compensation per employee to index the direct tax and welfare system. We use CSO data on CPI growth until 2023 and forecasts from the ESRI's *Quarterly Economic Commentary* for CPI growth in 2024 to index the indirect tax system.

** Temporary policy measures introduced in Budget 2024 to be paid at the end of 2023 and beginning of 2024, e.g. energy credit, double social welfare payments, additional fuel allowance payments.

4.1 The distributional effect of Budget 2024

Figure 1 shows the distributional effect of changes to indirect tax, direct tax and welfare, the NCS and temporary measures announced as part of Budget 2024 compared to an indexed 2023 policy system. We show permanent changes to the direct tax and welfare system separately to the effects of temporary measures that take effect in 2023 and 2024.

We estimate that households will experience a rise in real income of 2.1 per cent on average in 2024 as a result of Budget 2024. This gain is mainly driven by temporary measures. The effect is split between permanent changes to the direct tax and welfare system (0.45 percentage points), temporary changes to the direct tax and welfare system taking effect in 2023 (0.67 percentage points) and 2024 (0.73 percentage points), and changes to indirect taxation (0.24 percentage points). Changes to the NCS have a negligible effect on real household disposable income on average.

Both permanent and temporary measures are progressive in relative terms. We estimate that households located in the lowest fifth of the income distribution will experience a larger rise in real incomes – of 5-6 per cent of disposable income – than households located in the highest fifth of the income distribution. In cash terms, however, households in the lowest fifth of the income distribution can expect gains of 13-17 per week (676-884 per annum), compared to gains of 18-20 per week (936-1,040 per annum) for households in the upper fifth of the income distribution. By this measure, Budget 2024 is neither strongly

progressive nor regressive: the effect is somewhat uniform in cash terms across deciles, with slightly higher gains for households in deciles three and ten.

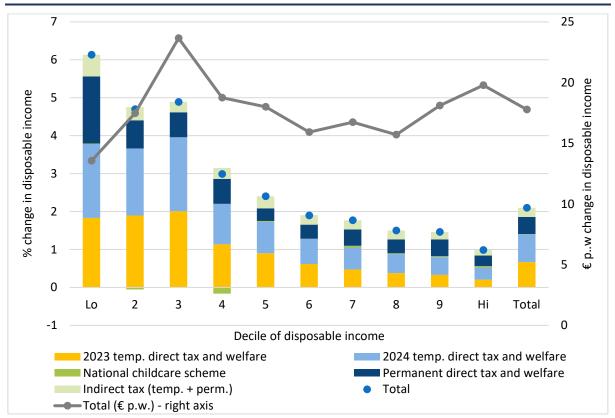


FIGURE 1 DISTRIBUTIONAL IMPACT OF BUDGET 2024 COMPARED TO INDEXED 2023 POLICIES

Source: Authors' calculations using ITSim linked to the 2015-2016 Household Budget Survey uprated to 2024 prices, and SWITCH run on 2019 Survey of Income and Living Conditions data, uprated to 2024 income levels.

Notes: Deciles are based on equivalised household income, using CSO national equivalence scales.

4.2 The effect of Budget 2024 by household type, gender and disability status

We further examine the distributional impact of Budget 2024 by household type, gender and disability status. All results relate to the *Base 1 – Reform 1 with 2024 temporary measures* scenario, meaning that all temporary policies are excluded from the indexed 2023 baseline but are included in the reform.

Figure 2 displays the impact of direct tax and welfare measures and indirect tax policies of Budget 2024 by household type. All types of household benefit on average from temporary measures in Budget 2024, especially single retirement age households and lone parent households. These household types disproportionately gain from lump sum welfare top-ups and double payments compared to other household types, due to their low average labour market attachment. The distribution of gains from permanent changes to the tax and welfare system are a little more uneven across household types.

working-age households benefit from permanent tax and welfare reforms while retirement age households do not. This is because the increases in both contributory and non-contributory state pensions, while identical in cash terms, are lower in relative terms than increases to working age payments. They are also lower in relative terms than forecast wage growth while the increases in payments for working-age individuals are above forecast wage growth. Consequently, retirees fare relatively worse as a result of permanent changes to the tax-benefit system compared to their working-age counterparts.

4.00 3.50 % change in disposable income 3.00 2.50 2.00 1.50 1.00 0.50 0.00 -0.50 Single working-age w/o Retirement age couple Working-age couple w/o Working-age couple with Single retirement age F Lone parent children children children Temporary Permanent

FIGURE 2 DISTRIBUTIONAL IMPACT OF BUDGET 2024 BY HOUSEHOLD TYPE COMPARED TO INDEXED 2023 POLICIES

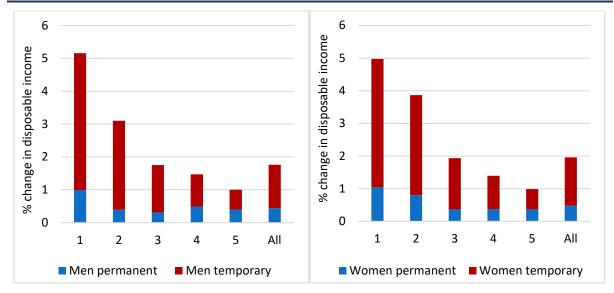
Source: Authors' calculations using ITSim linked to the 2015-2016 Household Budget Survey uprated to 2024 prices, and SWITCH run on 2019 Survey of Income and Living Conditions data, uprated to 2024 income levels.

Figure 3 shows the estimated effects of direct tax and welfare policy changes from Budget 2024 by gender.⁹ For this analysis, we assume that income is split evenly between individuals in a couple. Compared to a wage-adjusted budget, our analysis suggests that Budget 2024 measures affected men and women similarly. Women in lower income quintiles tend to gain more from temporary measures while men and higher income quintiles tend to gain more from permanent measures. This

⁹ It is not possible to estimate the gender impact of indirect tax changes using ITSIM as expenditure data are collected at the household level.

reflects the lower labour market participation of women which makes their income more sensitive to welfare reform and less sensitive to taxation reform.





 Source:
 Authors' calculations using SWITCH run on 2019 Survey of Income and Living Conditions data, uprated to 2024 income levels.

 Notes:
 Income is assumed to be fully shared between members of a couple. Quintiles are based on equivalised household income, using CSO national equivalence scales.

Figure 4 shows the estimated effects of the Budget 2024 direct and tax measures¹⁰ by disability status.¹¹ We identify households with disabilities as those in which there is at least one member who self-declares to have a medical condition which limits them in their daily activities. Permanent measures disproportionately benefit households without disabilities, resulting in an average increase in disposable income of 0.5 per cent, compared to an increase of 0.4 per cent for those with disabilities. Temporary measures more than compensate for this differential however and result in higher gains (2.6 per cent) for households with disabilities compared to households without disabilities (1.2 per cent).

¹⁰ ITSIM does not currently allow the estimation of indirect taxation measures by disability status.

¹¹ The precise definition we employ in the SILC data is to identify those who respond positively to the following two questions as having a disability:

⁻ Do you have any chronic physical or mental health problem, illness, or disability?

⁻ Are you hampered [limited] in your daily activities by this physical or mental health problem, illness, or disability?

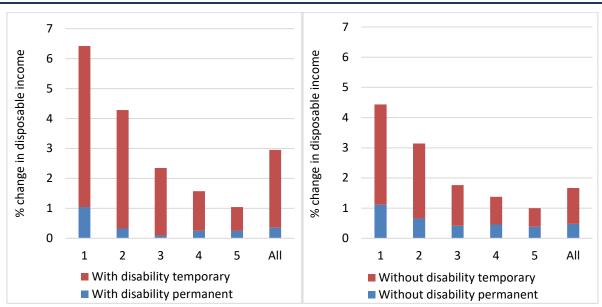


FIGURE 4 DISTRIBUTIONAL IMPACT OF BUDGET 2024 (DIRECT TAX AND WELFARE) BY DISABILITY STATUS COMPARED TO A WAGE INDEXED 2023 POLICY

 Source:
 Authors' calculations using SWITCH run on 2019 Survey of Income and Living Conditions data, uprated to 2024 income levels.

 Notes:
 Households with disabilities are those in which there is at least one adult with a chronic health condition or disability which limits them in their daily life. Quintiles are based on equivalised household income, using CSO national equivalence scales.

4.3 The effect of Budget 2024 on income inequality and AROP rates

Figure 5 (and Table A.2 in the Appendix) shows the impact of Budget 2024 on income inequality, as measured by the Gini Index, and at risk of poverty (AROP) rates. Compared to a system adjusted for wage inflation, there is a slight reduction (0.1 percentage points) in the Gini Index. This change is entirely driven by temporary measures.

AROP rates decrease across all groups of the population, with the most pronounced declines observable among the elderly and people with disabilities. This outcome is also driven by temporary measures. Some of these subgroups would experience an increase in AROP rates if we considered only permanent measures. This highlights the reliance of these groups on social welfare payments, many of which were subject to temporary lump sum payments but which saw permanent increases below the rate of forecast wage growth.

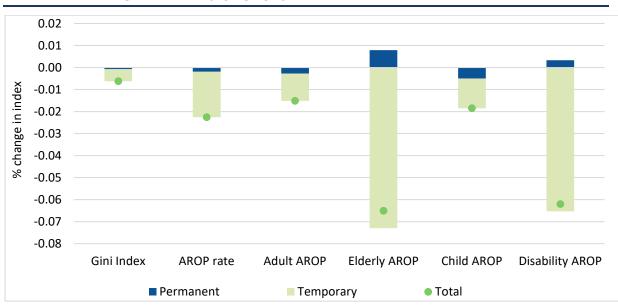


FIGURE 5 IMPACT OF BUDGET 2024 ON INCOME INEQUALITY AND POVERTY COMPARED TO WAGE-INDEXED 2023 POLICIES

 Source:
 Authors' calculations using SWITCH run on 2019 Survey of Income and Living Conditions data, uprated to 2024 income levels.

 Notes:
 The poverty rate is calculated based on a poverty line equal to 60 per cent of median equivalised disposable income. The CSO equivalence scale is used. Working age defined as aged 18-65 and children as those under age 18. People with disabilities are identified as those who self-report to have an illness or disability which limits them in their daily activities.

4.4 The effect of permanent policy reform 2020-2024

We next consider how the outlook for households may change if temporary policies are not repeated in future budgets. To do so, we compare a 2024 policy system without temporary policies to an indexed 2020 system (see Panel B of Table 1). This shows how changes to the permanent tax and welfare system have affected real income over the last four years. Direct tax and welfare policy parameters in the baseline are indexed by 18.9 per cent, matching wage growth that has and is forecast to occur in 2021, 2022, 2023 and 2024, while indirect tax policy parameters are indexed by 20.2 per cent, reflecting actual and forecast CPI growth between 2020 and 2024.

Figure 6 shows the effects of permanent policy changes in Budget 2024 compared to an indexed 2020 policy scenario. On average, households lose 0.5 per cent of disposable income. Income losses are regressive as, apart from the lowest income decile, lower-income deciles experience the greatest erosion in real income. Losses are between 1 and 1.5 per cent in deciles two to six and taper out in higher income deciles. There are small average gains across the income distribution resulting from reforms to indirect taxes and the NCS. The average losses, therefore, are overwhelmingly driven by changes to the direct tax and welfare system. This illustrates that permanent changes to the direct tax and welfare system over the last four years have not kept pace with current and forecast wage growth on average.

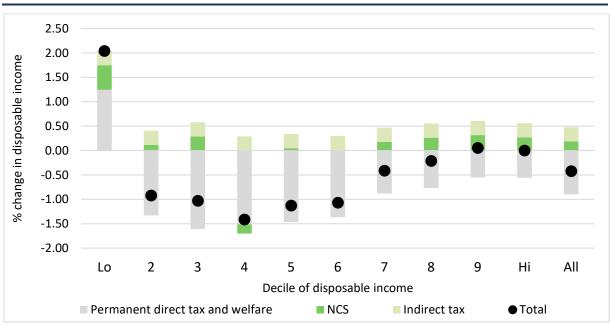


FIGURE 6 DISTRIBUTIONAL ANALYSIS 2020-2024 WITHOUT TEMPORARY MEASURES

Source: Authors' calculations using ITSim linked to the 2015-2016 Household Budget Survey uprated to 2024 prices, and SWITCH run on 2019 Survey of Income and Living Conditions data, uprated to 2024 income levels.

Notes: Deciles are based on equivalised household income, using CSO national equivalence scales.

Comparing Budget 2024 without temporary measures to a wage-indexed 2020 policy setting conveys the magnitude of the challenge that will be faced if policymakers wish to maintain household living standards once temporary policies lapse. Compared to indexing tax and welfare policies in line with wage growth since 2020, Budget 2024 leaves households worse off on average. Except for the first decile, losses are greater for low-income households, suggesting that permanent above-wage-growth changes to welfare in particular will be needed to maintain the real incomes of these households when temporary measures expire.

5. CONCLUSION

Budget 2024 is substantial in scale, introducing a range of permanent changes to the tax and welfare system as well as a suite of temporary cost-of-living measures. We estimate that these will result in average gains to real income for households next year. The package of tax cuts, welfare increases, one-off payments and indirect tax cuts is worth around 2 per cent of household disposable income on average, with higher gains for low-income compared to high income households.

The total budgetary package is progressive in relative terms and our research estimates that it will result in reductions in the at-risk-of-poverty (AROP) rate of most groups, compared to a budget pegged to income growth. However, this reduction is accomplished mainly though the temporary measures in the budgetary package. For example, without the one-off measures, the AROP rate for elderly households would actually increase by close to 1 percentage point. With inflation moderating and wages growing strongly, policymakers should now consider moving away from one-off payments and benchmarking social welfare payments to provide more certainty to those dependent on them.

We assessed the distributional impact of Budget 2024 on two equality grounds: gender and disability. We estimate that Budget 2024 provides higher income gains for households with disabilities compared to households without disabilities. However, this is wholly due to the package of temporary measures. Looking at permanent measures alone, we estimate that households without disabilities gain slightly more in real terms than households with disabilities. Budget 2024 is mostly gender-neutral, with both men and women gaining 2 per cent of disposable income on average.

While Budget 2024 ensures that households will, on average, be insulated relative to a wage-adjusted benchmark, the temporary nature of many of the measures targeted at low-income households this year and in previous years means an erosion of the real purchasing power of structural rates of payments within the social welfare system over the last four years. In addition, over successive Budgets, rates of welfare payments have been incremented by fixed amounts. This translates to ad-hoc proportionate increases for different cohorts in receipt of welfare. If this pattern of increase continues, it will erode the relativities implicit in the social welfare system and weaken the link between rates of payment and income adequacy.

REFERENCES

- Bargain, O. and T. Callan (2010). 'Analysing the effects of tax-benefit reforms on income distribution: a decomposition approach', *The Journal of Economic Inequality*, 8, pp.1-21.
- Byrne, D., F. McCann and E. Gaffney (2023). 'The interest rate exposure of mortgaged Irish households', *Central Bank of Ireland, Financial Stability Notes*, Vol. 2023, No.2.
- Callan, T., C. Keane and M. Regan (2019). Assessing the distributional impact of budgetary policy: the role of benchmarks and indexation, Budget Perspectives 2020/2.
- Central Bank of Ireland (2023). 'Quarterly Bulletin: QB3 September 2023'.
- Commission on Taxation and Welfare (2022). Foundations for the Future: Report of the Commission on Taxation and Welfare.
- Department of Finance (2022). Budget 2023 Economic and Fiscal Outlook.
- Doolan, M., K. Doorley, M. Regan and B. Roantree (2022). 'Distributional impact of tax and welfare policies: Budget 2023', *QEC Special Article*, Dublin: ESRI.
- Doorley, K., D. Tuda and L. Duggan (2023a). *Will Childcare Subsidies Increase the Labour Supply of Mothers in Ireland?* (No. 16178). Institute of Labor Economics (IZA).
- Doorley, K., D. Tuda and L. Duggan (2023b). *Extending the National Childcare Scheme to childminders: Cost and distributional effect,* No BP2024/3, Papers, Economic and Social Research Institute (ESRI).
- Irish Fiscal Advisory Council (2023). Pre-Budget 2024 Statement, September 2023.
- Keane, C., K. Doorley, T. Kakoulidou and S. O'Malley (2023). 'SWITCH: A Tax-Benefit Model for Ireland Linked to Survey and Register Data', *International Journal of Microsimulation*, International Microsimulation Association, Vol. 16(1), pp. 65-88.
- McQuinn, K., C. O'Toole and E. Kenny (2023). *Quarterly Economic Commentary: Autumn 2023*, Economic and Social Research Institute.
- NESC (2023). Private Rental in Ireland, NESC Council Report, February 2023.

APPENDIX

TABLE A.1 REFORMS MODELLED IN DISTRIBUTIONAL ANALYSIS

Taxation	Cost, €m	Modelled
Income Tax		
€100 increase to tax credits, €200 increase to Incapacitated Child tax credit, and rise in Standard Rate Cut Off ¹²	1,135	\checkmark
Increase Rent Tax Credit to $\mathbf{\in}750$ and extension of eligibility to students in 'digs' ¹³	88	\checkmark
Universal Social Charge		
USC second band increase from €22,920 to €25,760, USC 4.5% rate reduced to 4%	365	\checkmark
Extension of reduced USC rate for Medical Card holders	35	\checkmark
Housing		
Help to Buy amendments and extension to 31 Dec 2025	181	
Increase in Vacant Home Tax to five times Local Property Tax charge	-1	
Rental Income Relief for landlords of up to €3,000	160	\checkmark
Amendment of Defective Concrete Products Levy	-7	
Carbon Tax		
+€7.50 per tonne of carbon	-152	\checkmark
Excise Duties		
+€0.75 on a packet of 20 cigarettes	-68	\checkmark
VAT		
Zero VAT on audiobooks and ebooks	3	
Zero VAT for solar panels in schools	0.5	
Increase fund for VAT Charity Compensation Scheme	5	
Misc.		
Flat rate compensation per centage for farmers reduced from 5% to 4.8%	-18	
Revision of Bank Levy for 2024	-200	
Extension of Vehicle Registration Tax relief for battery electric vehicles to 31 Dec 2025	30	
Once-off cost-of-living measures		
Extension of Mineral Oil Tax (excise on fuel) rate reduction to 31 March 2024	122	\checkmark
Extension of 9% VAT rate for gas and electricity to 31 Oct 24		\checkmark
Introduction of one-year mortgage interest relief	125	
Extension of Benefit in Kind relief of \pounds 10,000 and tapering mechanism for electric vehicles	*	
		Contd.

¹² Incapacitated Child Tax Credit increase not modelled.

¹³ Extension to students in 'digs' not modelled.

TABLE A.1 CONTD.

Welfare	Cost, €m	Modelle
General		
+€12 (under 66) welfare payments, proportionate increase for qualified adults	461.4	\checkmark
+€12 (over 66) welfare payments, proportionate increases qualified for adults		\checkmark
+€4 for qualified child		√
Norking Family Payment		
+€54 per week to income thresholds		\checkmark
Domiciliary Care Allowance		
Increase personal rate by €10 per month	7.6	\checkmark
Increase in income disregard for Carer's Allowance to €450 for singles (€900 for couples)	19.2	\checkmark
National Childcare Scheme		
Universal subsidy increased from €1.40/hour to €2.14/hour	162	\checkmark
Misc.		
€450 increase in Income disregard for Carers Allowance recipients	19.2	\checkmark
Extension of Child Benefits to 18 years-olds in full-time education	21.6	\checkmark
Free School Books Scheme	42	\checkmark
Extension of Hot School Meals from April 2024	42.5	
Pay-related jobseeker's benefit from Dec. 2024	5.0	
Extension of Free Travel Scheme	8.5	
Student Grant Scheme		
Once-off cost-of-living measures		
3x €150 household energy credits	900	\checkmark
Fuel Allowance €300 lump sum	123	\checkmark
Child Benefit double month	179	\checkmark
Living Alone Allowance €200 lump sum	47	\checkmark
Working Family Payment €400 lump sum	18	\checkmark
Disability Allowance, Carer's Support Grant, Blind & Invalidity Pension €400 lump sum		\checkmark
€100 lump sum for Increase for a Qualified Child (IQC) recipients	37	\checkmark
Double week for all long-term weekly welfare schemes		\checkmark
Foster Carer Allowance double payment		J
Other measures (Higher education student contributions, school transports, State exam fees etc.)	2 250	\checkmark

Source:

Budget 2024 Expenditure Report and Budget 2024 Tax Policy Changes. Costs are in millions of euros per annum and are mostly full year costs for 2024. Some small schemes are excluded. * indicates no costing was available. Notes:

Inequality/poverty	Indexed 2023 permanent policies	Budget 2024 without temporary measures	Budget 2024 with temporary measures		
Gini Index	0.273	0.272	0.267		
AROP rate	0.139	0.137	0.117		
Adult	0.124	0.121	0.109		
Elderly	0.162	0.170	0.097		
Child	0.166	0.161	0.148		
Disability	0.233	0.236	0.171		

TABLE A.2SIMULATED INCOME INEQUALITY AND AROP RATES IN 2024 WITH AND WITHOUT
TEMPORARY MEASURES

Source: Authors' calculations using SWITCH run on 2019 Survey of Income and Living Conditions data, uprated to 2024 income levels.

Notes: The poverty rate is calculated based on a poverty line equal to 60 per cent of median equivalised disposable income. The CSO equivalence scale is used. Working age defined as aged 18-65 and children as those under age 18. People with disabilities are identified as those who self-report to have an illness or disability which limits them in their daily activities.

Whitaker Square, Sir John Rogerson's Quay, Dublin 2 Telephone **+353 1 863 2000** Email **admin@esri.ie** Web **www.esri.ie** Twitter **@ESRIDublin**

