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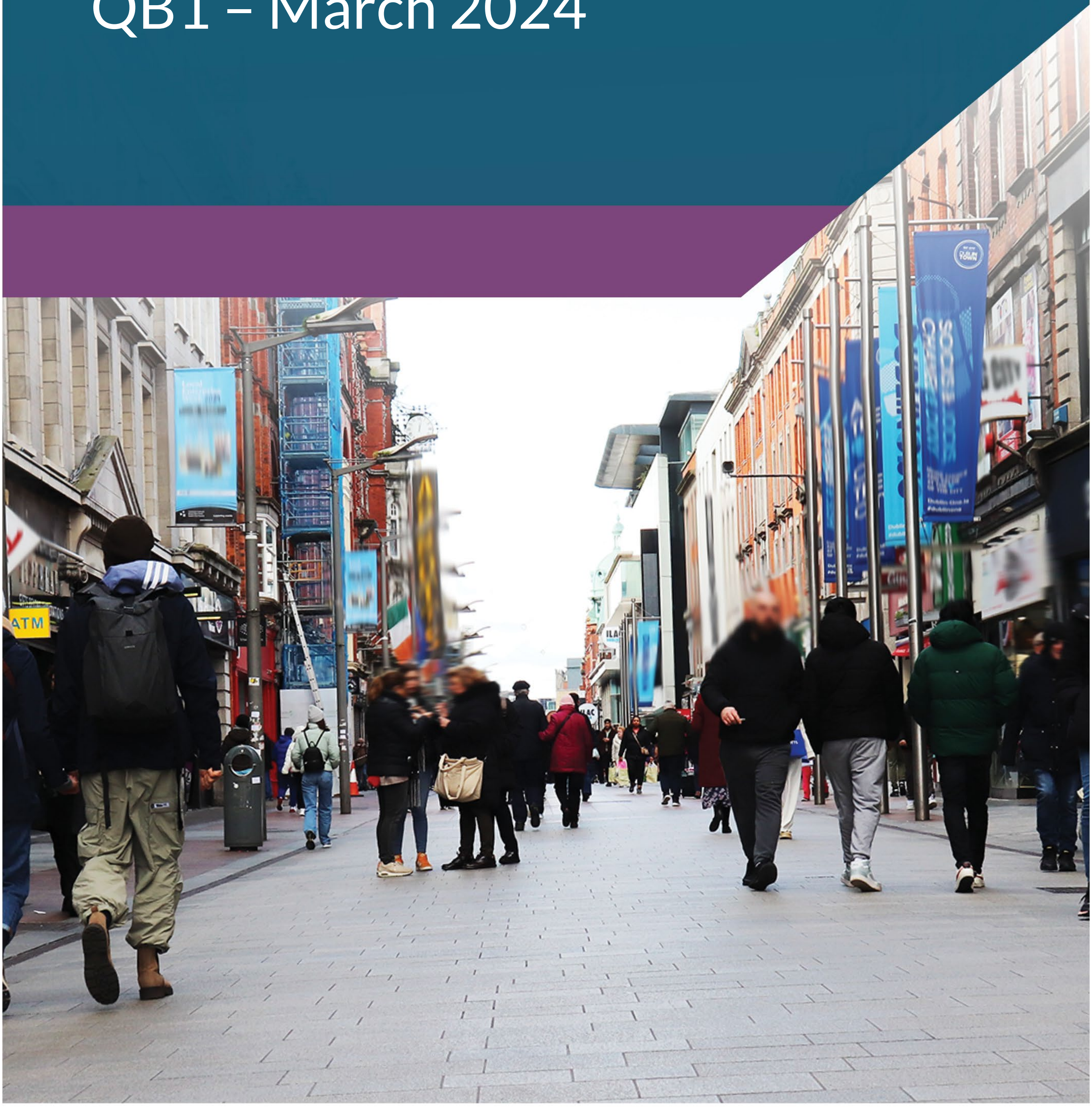

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Notes

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2. Unless otherwise stated, statistics refer to the State, i.e., Ireland exclusive of Northern Ireland.

3. In some cases, owing to the rounding of figures, components do not add to the totals shown.

4. The method of seasonal adjustment used in the Bank is that of the US Bureau of the Census X-11 variant.

5. Annual rates of change are annual extrapolations of specific period-to-period percentage changes.

6. The following symbols are used:

e	**estimated**
n.a.	**not available**
p	**provisional**
. .	**no figure to be expected**
r	**revised**
–	**nil or negligible**
q	**quarter**
f	**forecast**

7. Data on euro exchange rates are available on our website at www.centralbank.ie and by telephone at +353 (0)1 224 5800.

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Comment

Global headwinds and domestic capacity constraints temper the outlook for growth of the Irish economy. The process of headline disinflation has progressed significantly as external price pressures have passed. However, domestic price developments – especially in the services sector – have been more persistent. Higher interest rates - both here and abroad – are weighing on demand conditions. With a moderate growth momentum in the domestic economy anticipated out to 2026, increased focus turns to enhancing supply side conditions to bolster resilience and support sustainable growth in living standards.

Domestic economic activity, as measured by Modified Domestic Demand (MDD), increased only marginally last year. This mostly reflected a normalisation of activity from the extraordinary growth in physical investment in Ireland by multi-national enterprises (MNEs) in 2022. The Irish resident pharmaceuticals and, in part, the information & communications technology (ICT) sector also saw output and export activity reverting to more normal levels following the pandemic-related boost to their activities.

Less clear to parse, however, is the relative role of global cyclical headwinds, in the form of tighter monetary policy, and structural changes through re-orienting value chains in light of geopolitical tensions on the performance of Ireland's externally-focussed economy in 2023. This uncertainty remains as one looks at prospects over the medium term, with global growth anticipated to be relatively weak. Meanwhile, the domestically oriented economy is forecast to grow by 2 per cent on average per annum over the forecast horizon, with consumer spending growing at a moderate pace while the outlook for domestic investment is more constrained.

Amidst the sometimes conflicting signals that economic data for Ireland can provide, the continuing resilience of the labour market is a more reliable gauge of the economy. The unemployment rate remains low, despite the headline economic activity data, and has not risen in a manner suggesting an imminent contraction in underlying economic activity (Box C). While remaining

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relatively tight, an easing of vacancy rates and slowing employment growth point to a labour market adjusting to cruising speed from being at full tilt.

Underneath the aggregate picture, some sector-specific challenges present themselves. Businesses still exposed to the United Kingdom are adjusting to the long-anticipated implementation of new trading rules (Box D). Labour supply shortages remain significant in the public service, financial and other professional services sectors. Meanwhile, the decline in average hours worked per employee, a long-running phenomenon, seems to have accelerated since the pandemic. This has wide-ranging implications - across household incomes, business costs, productivity and growth prospects - and the drivers of this phenomenon require further understanding. As overall employment growth eases, and labour force growth is destined to be underpinned by inward migration, continuing to retain and increase the supply of labour with the appropriate skills comes to the fore, both for individual businesses and for the economy as a whole.

Against this backdrop the forecasts in this *Bulletin* foresee average wage growth per employee outstripping inflation over the forecast horizon, supporting a rise in household purchasing power and underpinning growth in consumption. Recent survey evidence points to a higher proportion of people expecting higher earnings, with the pace of expected increase in earnings also rising (BoxE). Partly absorbing higher wage rates and other labour costs, rather than fully passing these on to consumer prices will be important in containing domestic inflationary pressures over the medium term. In order for this to be achieved in the economy as a whole, productivity growth and profit margins will have to adjust accordingly, which they have displayed the capacity to do so in the past (Box F). Monitoring developments in these issues, in particular in comparison with the rest of the euro area, will be important so as to inform domestic policy choices that enhance competitiveness and support sustainable growth in Irish living standards.

The process of headline disinflation in Ireland has to date progressed faster than previously anticipated. In the main this reflects the abatement of externally-driven price pressures. In Ireland, the outlook for headline HICP inflation has been revised down to 2 per cent in 2024. In contrast, more domestically-driven price developments, such as services price inflation, is proving more sticky and the expectation remains for it to only gradually decline over the forecast horizon.

The most recent outlook from ECB staff forecasts euro area inflation continuing to ease to 2 per cent in 2025. At its March meeting, the Governing

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Council maintained policy rates at their current levels. Keeping policy rates at their current level for a sufficient duration is considered appropriate to make a substantial contribution to euro area inflation returning to the 2 per cent medium-term target in a timely manner. The Governing Council continues to follow a data-dependant approach to determine the appropriate level and duration for rates to be in restrictive territory.

Considered choices are necessary for domestic policy to support macro-financial stability over the near-to-medium term. Maintaining an overall appropriate fiscal stance that does not unnecessarily aggravate any remaining imbalances between domestic demand and supply conditions can align with achieving near and longer-term priorities. Ensuring the economy has the capacity to absorb the necessary public and private investment in infrastructure to address the challenges of housing and climate change, and at the same time safeguarding fiscal sustainability requires more active consideration. This includes considering (1) the relative role of specific tax and expenditures while maintaining overall fiscal sustainability, (2) effectively prioritising investment delivery while being mindful of the most effective ways that public investment can crowd-in private, and (3) initiating reforms where appropriate to better facilitate investment delivery. Credibly achieving this aim also needs to acknowledge other known pressures on the public finances, such as those related to the ageing of the population. At the same time, reforms to better enable and support businesses and households' own investment choices are coming more to the fore. The economy faces constraints in contending with near and medium term priorities. A sustainable response to the challenges of housing, climate change, related infrastructure needs in energy, transport, water and communications, alongside the ageing of the population, requires a renewed focus on innovation, human capital development and productivity growth.

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An Timpeallacht Gheilleagrach

Tá an t-ionchas maidir le fás gheilleagar na hÉireann maolaithe ag constaicí domhanda agus ag srianta acmhainne intíre. Tá dul chun cinn suntasach déanta maidir le próiseas an fhrithbhoilscithe ó tharla go bhfuil brúnna seachtracha praghsanna imithe i léig. Ar a shon sin, tá forbairtí intíre maidir le praghsanna - go háirithe in earnáil na seirbhísí - níos seasmhaí. Tá rátaí úis níos airde - anseo agus thar lear - ag cur isteach ar dhálaí éilimh. I bhfianaise go meastar go mbeidh fuinneamh measartha faoin bhfás ar an ngeilleagar intíre suas go dtí 2026, tá béim níos mó á leagan ar dhálaí soláthair a fheabhsú chun athléimneacht a neartú agus chun tacú le fás inbhuanaithe ar chaighdeáin mhaireachtála.

Níor tháinig ach méadú beag anuraidh ar ghníomhaíocht eacnamaíoch intíre, arna thomhas le hÉileamh Modhnaithe Intíre. Léirigh sé seo go príomha normalú ar ghníomhaíocht i ndiaidh fás urghnách ar infheistíocht fhisiciúil in Éirinn ag fiontair ilnáisiúnta (MNEanna) in 2022. I gcás cuideachtaí cógaisíochta lonnaithe in Éirinn agus, go páirteach, i gcás earnáil na seirbhísí teicneolaíochta faisnéise is cumarsáide (TFC), d'fhill gníomhaíocht aschuir agus onnmhairíochta ar ghnáthleibhéil, i ndiaidh an bhorrtha a chonacthas faoina gcuid gníomhaíochtaí de thoradh na paindéime.

Tá sé níos deacra, áfach, miondealú a dhéanamh ar an tionchar a bhí ag constaicí timthriallacha domhanda, i bhfoirm beartais airgeadaíochta níos daingne, agus athruithe struchtúracha trí atreorú slabhraí luacha i bhfianaise teannas geopholaitiúil, ar ghníomhaíocht na coda sin de gheilleagar na hÉireann a raibh béim sheachtrach aige in 2023. Tá an éiginnteacht seo ann i gcónaí ag breathnú ar na hionchais don mheántéarma, i bhfianaise go meastar go mbeidh fás domhanda sách lag ann. Ag an am céanna, meastar go dtiocfaidh fás 2 faoin gcéad ar an meán in aghaidh na bliana ar an gcuid sin den gheilleagar a mbíonn béim intíre aici, agus go mbeidh caiteachas tomhaltóirí ag fás ar luas measartha fad a a bheidh an t-ionchas don infheistíocht intíre níos srianta.

I bhfianaise na gcomharthaí contrártha a chuireann sonraí eacnamaíocha na hÉireann ar fáil uaireanta, is tomhais níos iontaofa ar an ngeilleagar é

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athléimneacht leanúnach an mhargaidh saothair. Tá an ráta dífhostaíochta íseal i gcónaí, d'ainneoin na sonraí príomha a bhaineann le gníomhaíocht eacnamaíoch, agus níl méadu tagtha air a thabharfadh le fios go bhfuil an bhunghníomhaíocht eacnamaíoch ar tí a cúngaithe (Bosca C). Cé go bhfuil siad sách cúng go fóill, tá maolú ag teacht ar rátaí folúntais agus moilliú ar fhás fostaíochta, rud a thugann le tuiscint go bhfuil an margadh saothair ag feidhmiú ar ghnáthluas anois seachas ar lánluas.

Taobh thiar den íomhá iomlán, tá roinnt dúshlán ann i gcónaí a bhaineann le hearnálacha ar leith. Gnóthaí atá neamhchosanta i gcónaí ar an Ríocht Aontaithe, tá siad ag dul in oiriúint do chur chun feidhme na rialacha trádála nua a rabhthas ag súil leo le fada. Tá ganntanas suntasach soláthair saothair sa tseirbhís phoiblí, san earnáil airgeadais agus in earnálacha seirbhísí gairmiúla eile. Ag an am céanna, is cosúil go bhfuil luasghéarú tagtha ar an laghdú ar na meánuaireanta a oibrítear in aghaidh an fhostaí, feiniméan atá ann le fada, ó thráth na paindéime i leith. Bíonn impleachtaí fadréimseacha aige seo - d'ioncam na dteaghlach, do chostais gnóthaí, d'ionchais maidir le táirgiúlacht agus fás - agus ní mór tuiscint níos fearr a fháil ar spreagthaí an fheiniméin seo. De réir mar a mhaolóidh fás fostaíochta foriomlán, agus de réir mar a thiocfaidh inimirce chun tosaigh mar bhonn taca faoin bhfás ar an lucht saothair, is gá leanúint de sholáthar lucht saothair cuí-oilte a choinneáil agus a mhéadú le haghaidh gnóthaí aonair agus le haghaidh an gheilleagair ina iomláine.

I bhfianaise an méid sin, tuartar sna réamhaisnéisí san *Fhaisnéis Ráithiúil* seo go mbeidh boilsciú á shárú ag meánfhás pá in aghaidh an fhostaí thar thréimhse na réamhaisnéise, rud a thacóidh le méadu ar chumhacht ceannaigh na dteaghlach agus a bheidh mar bhonn taca faoin bhfás ar thomhaltas. Tugann fianaise nua ó shuirbhéanna le déanaí go bhfuil cion níos airde daoine ag súil le tuilleamh níos airde, agus go dtapóidh luas an mhéadaithe mheasta ar thuilleamh (Bosca E). Beidh sé tábhachtach rátaí pá níos airde a iompar go páirteach seachas iad a chur ar aghaidh ina n-iomláine chuig praghsanna tomhaltóirí sa chaoi go gcuirfear srian le brúnna boilscitheacha intíre thar an meántéarma. Chun an méid seo a bhaint amach ar fud an gheilleagair, is gá don fhás táirgiúlachta agus do chorrlaigh brabúis iad féin a oiriúnú dá réir, agus tá sé léirithe roimhe seo go bhfuil de chumas acu é sin a dhéanamh (Bosca F). Beidh sé tábhachtach faireachán a dhéanamh ar fhorbairtí maidir leis na saincheisteanna sin, go háirithe i gcomparáid leis an gcuid eile den limistéar euro, chun bonn eolais a chur faoi roghanna beartais intíre lena bhfeabhsófar iomaíochas agus lena dtacófar le fás inbhuanaithe ar chaighdeáin mhaireachtála in Éirinn.

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Tá dul chun cinn níos tapúla ná mar a bhíothas ag súil leis á dhéanamh maidir le próiseas an fhrithbhoilscithe phríomha in Éirinn. Tríd is tríd, léiríonn sé seo laghdú ar na brúnna ar phraghsanna ón taobh seachtrach. In Éirinn, tá athbhreithniú anuas déanta ar bhoilsciú príomha ICPT go 2 faoin gcéad in 2024. I gcodarsnacht leis sin, is cosúil go bhfuil forbairtí praghais arna spreagadh ón taobh intíre, amhail boilsciú ar phraghsanna seirbhísí, níos deacra le réiteach agus meastar nach laghdóidh sé ach de réir a chéile thar thréimhse na réamhaisnéise.

San ionchas is déanaí ó fhoireann BCE, tuartar go leanfaidh an maolú ar bhoilsciú an limistéir euro go 2 faoin gcéad in 2025. Ag a cruinniú i mí an Mhárta, choinnigh an Chomhairle Rialaithe rátaí beartais ag a leibhéil reatha. Meastar gur iomchuí rátaí beartais a choinneáil ag a leibhéal reatha ar feadh tréimhse leordhóthanach chun rannchuidiú le boilsciú an limistéir euro a thabhairt ar ais ar mhodh tráthúil chuig sprioc mheántéarmach 2 faoin gcéad. Leanann an Chomhairle Rialaithe de chur chuige bunaithe ar shonraí a leanúint chun an leibhéal agus tréimhse iomchuí a chinneadh i dtaca le rátaí sriantacha.

Tá roghanna tomhaiste ag teastáil chun go dtacóidh beartas intíre le cobhsaíocht macra-airgeadais sa ghearrthéarma agus sa mheántéarma. Is féidir gnóthú tosaíochtaí gearrthéarmacha agus fadtéarmacha a ailíniú le staid fhioscach iomchuí fhoriomlán nach ngéaróidh gan ghá aon mhíchothromaíochtaí idir an t-éileamh intíre agus dálaí soláthair. Maidir lena chinntiú go bhfuil de chumas ag an ngeilleagar an infheistíocht riachtanach phoiblí agus phríobháideach i mbonneagar a iompar chun dul i ngleic le dúshláin na tithíochta agus an athraithe aeráide, agus inbhuanaitheacht fhioscach a chosaint ag an am céanna, is gá breithniú níos géire a dhéanamh air seo. Ciallaíonn sé sin breithniú a dhéanamh ar an méid seo a leanas (1) ról cánacha sonacha agus caiteachas, fad a chothabhálfar inbhuanaitheacht fhioscach fhoriomlán, (2) tosaíocht a thabhairt go héifeachtach do sheachadadh infheistíochta fad a chuirfear san áireamh na bealaí is éifeachtaí inar féidir le hinfheistíocht phoiblí infheistíocht phríobháideach a chruinniú isteach, agus (3) athchóirithe a thosú nuair is iomchuí chun seachadadh infheistíochta a éascú. Chun an aidhm seo a bhaint amach i gceart, is gá brúnna eile atá ar eolas maidir leis an airgeadas poiblí a chur san áireamh, amhail na cinn sin a bhaineann le daonra atá ag dul in aois. Ag an am céanna, táthar ag díriú ar athchóirithe lena gcumasaítear do ghnóthaí agus do theaghlaigh a roghanna infheistíochta féin a dhéanamh agus lena dtacaítear leis na roghanna sin. Tá srianta ar an ngeilleagar ó thaobh dul i ngleic le tosaíochtaí gearrthéarmacha agus meántéarmacha. Chun freagairt inbhuanaithe a thabhairt do na dúshláin a bhaineann le tithíocht, leis an athrú aeráide, le

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riachtanais ghaolmhara bonneagair i bhfuinneamh, in iompar, in uisce agus i gcumarsáid, mar aon le daonra atá ag dul in aois, is gá béim athnuaite a leagan ar an nuálaíocht, ar fhorbairt caipitil dhaonna agus ar fhás táirgiúlachta.

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The Irish Economy

Overview

The domestic economy continues to grow in early 2024, but weak external demand and domestic capacity constraints are expected to weigh on the pace of growth over the forecast horizon. Exports produced in Ireland declined in 2023 but should recover in 2024 and beyond, driven by a return to growth in pharmaceutical trade. Modified Domestic Demand (MDD) is forecast to grow from 2024 to 2026 by 2 per cent per annum on average, underpinned by continuing growth in consumer spending and residential construction. Developments in several forces currently restraining economic growth influence the outlook out to 2026, namely the transmission of monetary policy, sectoral developments in the pharmaceuticals and ICT sectors and capacity constraints in the domestic economy.

Domestic factors have become the dominant influences on inflation as externally-driven price pressures have faded. The latter is particularly evident in energy inflation. In contrast, services inflation remains above 5 per cent and is projected to decline only gradually out to 2026. A continuation of declining price pressures for energy and non-energy goods is expected to reduce headline inflation to 2 per cent for 2024. More persistent domestic price pressures – as reflected in services inflation – are forecast to result in core inflation exceeding the projection for headline inflation out to 2026.

Low unemployment with rising labour force participation and continued net inward migration indicate that the labour market is operating at full capacity. Employment growth has slowed, but the unemployment rate remains close to all-time lows. Contingent on our projections for modest economic growth, the unemployment rate is expected to average 4.5 per cent out to 2026. Tight labour market conditions are forecast to underpin nominal wage growth of 4.7 per cent per annum on average from 2024-2026.

Risks to the growth outlook are tilted to the downside, with risks to the inflation outlook broadly balanced. The large supply-demand imbalances that characterised the economy in 2021 and 2022 have been gradually resolved to date in an orderly way with inflation falling, unemployment staying low and wage pressures being contained. Several risks, if realised, could cause the economy to deviate from the current projected path of stable growth and lower inflation. With geopolitical tensions remaining elevated, energy prices could diverge from their current downward trend, putting renewed upward

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pressure on inflation. A more protracted period of low growth in the global economy than currently envisaged also presents downside risk to the Irish growth outlook. Increases in labour costs above productivity could generate excessive domestic inflationary pressures. Delayed progress in addressing capacity constraints in housing and other infrastructure could generate higher and more persistent price and wage inflation and damage competitiveness. A downturn in the pharmaceutical or ICT sectors would weaken net exports, domestic investment, tax revenue and economic activity more broadly relative to the central forecasts.

Table 1: Macroeconomic Projections for the Irish Economy
(annual percentage changes unless stated)

		2023	2024f	2025f	2026f
Constant prices	Modified Domestic Demand	0.5	2.2	1.9	2.0
	Gross Domestic Product	-3.2	2.8	3.5	3.3
	Personal Consumer Expenditure	3.1	3.2	2.9	1.9
	Public Consumption	1.7	0.7	0.2	2.5
	Gross Fixed Capital Formation	2.9	4.8	-2.6	0.9
	Modified Gross Fixed Capital Formation	-7.1	0.7	1.0	1.6
	Exports of Goods and Services	-4.8	3.0	5.3	5.2
	Imports of Goods and Services	0.4	3.3	3.9	4.8
Total Employment (% change)		3.4	1.6	1.5	1.5
Unemployment Rate		4.3	4.6	4.5	4.5
Harmonised Index of Consumer Prices (HICP)		5.2	2.0	1.8	1.4
HICP Excluding Food and Energy (Core HICP)		4.4	3.0	2.1	1.7
Compensation per Employee		4.5	5.3	4.6	4.1
General Government Balance (% GNI*)		2.7	2.5	3.8	3.8
'Underlying' General Government Balance (% GNI*)[1]		-1.2	-1.2	0.2	0.2
General Government Gross Debt (%GNI*)		78.4	73.6	69.7	66.2
Revisions from previous Quarterly Bulletin					
Percentage points	*Modified Domestic Demand*	*-1.0*	*-0.3*	-	-
	Gross Domestic Product	*-1.9*	*0.3*	*-1.0*	*-0.9*
	HICP	-	*-0.3*	*-0.3*	-
	Core HICP	-	*0.1*	*0.2*	-

[1] 'Underlying' General Government Balance excludes estimates of excess corporation tax receipts.

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Recent Developments

Gross Domestic Product (GDP) declined by 8.7 per cent in annual terms in Q4 2023, driven by a contraction in the MNE sector. The fall in GDP can be attributed to a sharp decline in net exports (Figure 1). Exports fell 4.8 per cent in 2023 while import volumes grew 0.4 per cent. The decline in physical exports was driven by lower activity in the pharmaceutical sector (Figure 2). The fall in the value of physical exports is predominantly driven by falling exports to markets outside the EU and UK. Gross Value Added (GVA) decreased in sectors dominated by foreign-owned firms by 10.1 per cent year-on-year in 2023 Q4, while GVA in domestic sectors continued to grow (Figure 3). Output from the Industry sector fell 7.7 per cent in Q4 2023 compared to Q3 2023, with a large decline in contract manufacturing activity (i.e. goods produced abroad on behalf of Irish resident firms). GDP in 2023 declined by 3.2 per cent compared to 2022.

Modified Domestic Demand (MDD) shows signs of slowing growth, as investment activity normalises. MDD grew 0.5 per cent in real terms in 2023, following strong post-pandemic growth of 9.5 per cent in 2022. MDD has contracted year-on-year for three successive quarters and by 0.4 per cent in Q4 2023. This is largely driven by a contraction in modified investment following a number of large one-off investments in 2022 (Figure 4). Personal spending increased by 3.1 per cent in 2023, but was flat quarter-on-quarter in Q4. Personal consumption now stands at 10.2 per cent higher than the pre-pandemic peak in 2019. The outturn for MDD has been lower than estimates based on the growth in employment and the Bank's Business Cycle Indicator (BCI) since late 2022, and especially over the last three quarters of 2023 as MDD developments have been dominated by the base effects from large investment outlays in 2022.

Headline consumer price inflation has fallen sharply but core inflation remains higher and more persistent. In year-on-year terms, headline HICP inflation decreased to 2.2 per cent in February according to the flash estimate, down from 2.7 per cent in January. Energy and food (excluding alcohol and tobacco) inflation rates are expected to be -6.3 and 3.7 per cent, respectively, in the year to February. On a monthly basis, consumer prices are estimated to have risen by 0.9 per cent in February 2024. On the basis of the latest full set of HICP data available for January 2024, HICP excluding energy and food (core) stood at 3.8 per cent. While annual services inflation ticked up to 5.5 per cent from 5.2 per cent in December 2023, monthly inflation was negative at -1.5 per cent. This reflects monthly declines in Transport services (-10.5 per cent) and

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Package holidays and Accommodation (-9.2 per cent) services. Services inflation remains the key driver of headline inflation (Figure 5). Inflation for non-energy industrial goods (NEIG) fell sharply to just 0.1 per cent in January. NEIG prices declined in the month to January by 3 per cent, reflecting January sales. Energy prices generally continue to contribute negatively to headline inflation. Food inflation, including alcohol and tobacco, slowed but remains elevated. CPI inflation stood at 4.1 per cent in January, with the positive gap between it and the HICP measure remaining broadly stable. Recent PMI survey data suggest renewed increases in input and, to a lesser extent, output prices in the manufacturing sector. Input prices and prices charged in the services sector are increasing at a faster pace, mostly reflecting higher wage costs (Figure 6).

The labour market remains tight with the monthly unemployment rate at 4.5 per cent in January 2024 on a seasonally-adjusted basis. The unemployment rate remained low and stable over Q4 2023 though wider measures of labour slack such as part-time under unemployment have increased in recent quarters (Figure 7). Revisions to the monthly series have resulted in the previous 18-month high of 4.8 per cent in October 2023 being adjusted downwards to 4.5 per cent. Employment continues to grow, although the pace of growth has slowed from 6 per cent year-on-year in December 2022 to 2 per cent year-on-year in December 2023, as measured by the CSO's monthly employee payroll index. This slowdown is also reflected in labour demand proxied by Indeed job postings data with the index down 20 per cent year-on-year in January 2024 (Figure 8). The participation rate in 2023 Q4 was 65.4 percent, up 0.7 percentage points year-on-year. High frequency data on posted wages (from jobs site Indeed) point to a moderation in wage growth over recent months. The year-on-year increase in posted wages slowed from 5.5 per cent in March 2023 to 3.7 per cent in December.

The Central Bank's Business Cycle Indicator (BCI) shows that steady growth in domestic economic activity has continued. The BCI shows a positive start to 2024 with the January estimate indicating that domestic activity is growing above its long-term average rate (Figure 9). Personal consumption, consumer sentiment, and tax revenue made a positive contribution to the BCI in January, while the labour market and PMIs made negative contributions. The pick-up in the BCI in December was due to an unusual spike in traditional sector output, not reflective of the longer- term trend.

Consumer sentiment and personal consumption continue to be robust, with both increasing in December. The Credit Union Consumer Sentiment Index

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increased to 70.2 in February 2024, up from 55.6 a year previously (Figure 10) and the highest reading since February 2022. The latest figures show signs of resilience amid easing cost of living pressures and robust employment. Consumer spending continued to grow. The volume of retail sales grew 3.8 per cent year-on-year in December, the thirteenth successive month of year-on-year growth (Figure 11). Total card spending, including ATM withdrawals, was €8.5 billion in December, up 23 per cent on the same period last year.

Recent data points to weakness in investment, led by declines in the multinational sector. Headline investment increased by 2.9 per cent in 2023, buoyed by an increase in R&D related services imports and trade in intellectual property in the final quarter. Modified investment, which attempts to exclude some of the distortions related to globalisation, was significantly weaker, falling by 7.1 per cent in 2023 as machinery and equipment and commercial construction declined from exceptional levels in 2022. Machinery and equipment investment excluding aircraft leasing declined by 9.8 per cent last year. The decline in machinery and equipment investment likely relates to significant plant-specific investments by the multinational sector in recent years coming to a conclusion. Housing investment posted stronger gains in 2023, with new dwelling investment up 9.4 per cent for the year, and up 12.4 per cent in Q4 year-on-year. House completions numbered 32,695 units last year, up 10 per cent on the previous year. Recent developments in some of the soft data for non-residential investment point to continued weakness as illustrated by the manufacturing, services and construction PMIs (Figure 12).

Exchequer data for 2023 showed increases in each of the main tax heads, despite overall revenue growth being slightly below expectations in the second half of the year. Total tax revenue grew by 6 per cent (€5bn), with income tax and VAT receipts continuing to be supported by low unemployment and high demand. Having recovered from a slowdown in receipts in the middle of the year, corporation tax revenue recorded further growth but at a lower rate than in 2022. Gross voted government expenditure was 6.7 per cent higher (€5.9bn) on an annual basis, with both current and capital spending increasing. Tax receipts remained robust in the first two months of 2024 – increasing by 5.5 per cent on an annual basis – while Exchequer spending was higher than expected based on *Budget 2024*.

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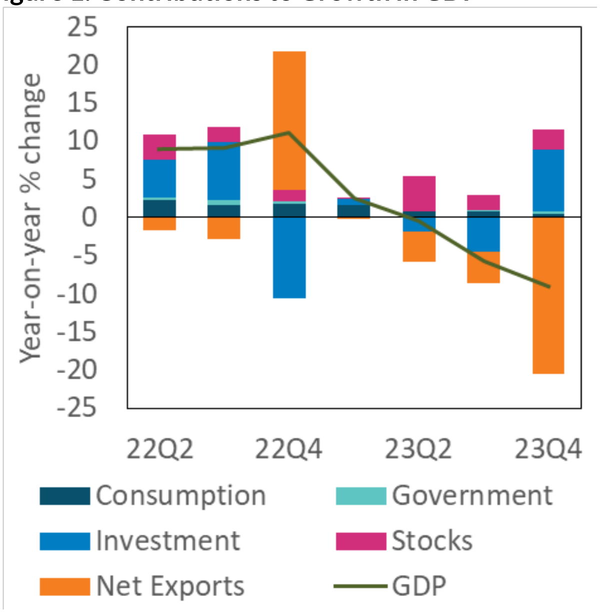
GDP growth turned negative in 2023 driven by a decline in exports

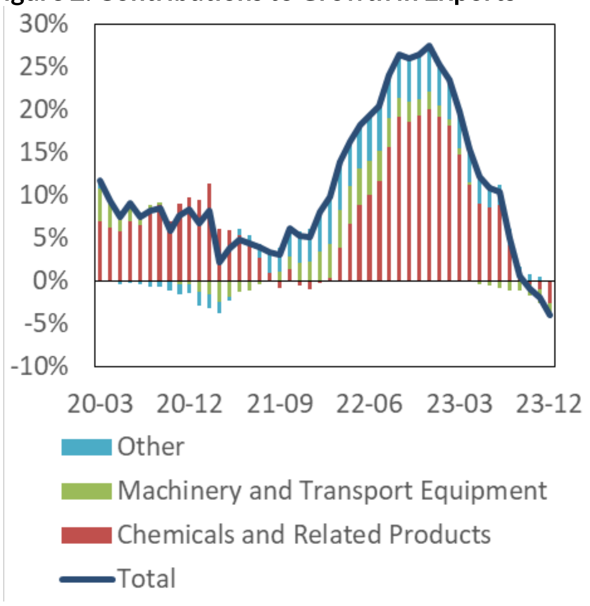
Figure 1: Contributions to Growth in GDP



Source: CSO

The fall in exports has been driven by weak pharmaceutical exports

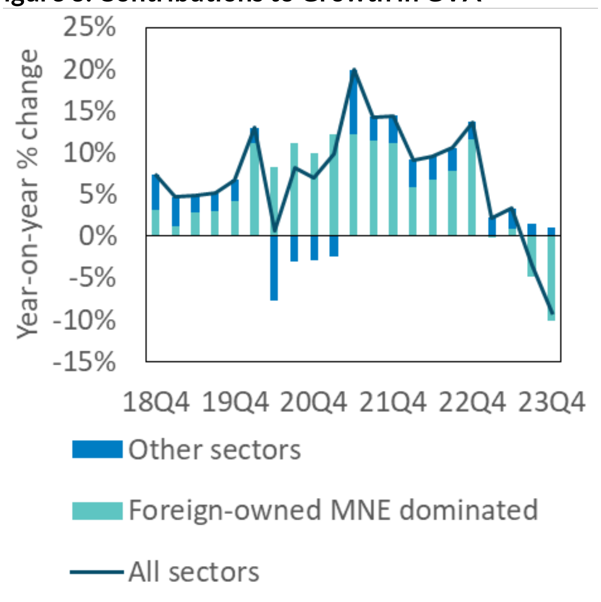
Figure 2: Contributions to Growth in Exports



Source: CSO

GVA retracted sharply in MNE-dominated sectors, while continuing to grow in domestic sectors

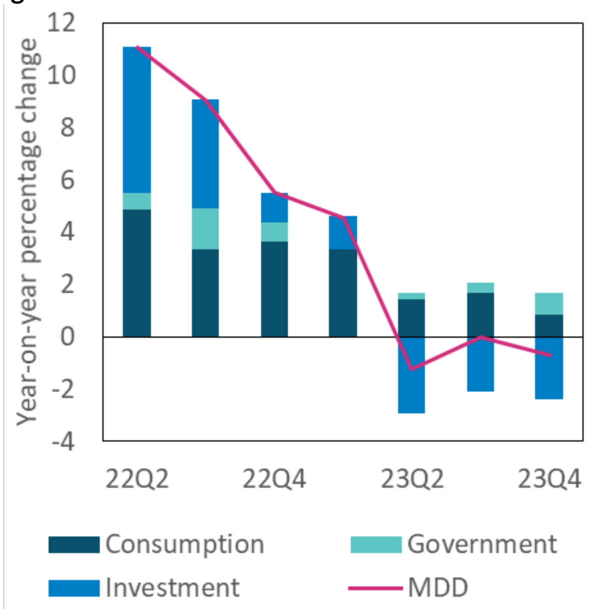
Figure 3: Contributions to Growth in GVA



Source: CSO

MDD growth was weak in 2023 due to base effects of extraordinary investment growth in 2022

Figure 4: Contributions to Growth in MDD



Source: CSO

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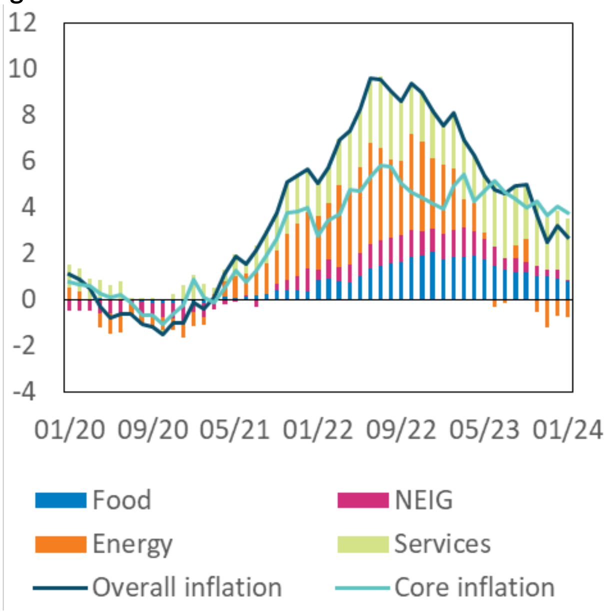
Headline inflation has been falling, though core inflation remains elevated, driven by services inflation

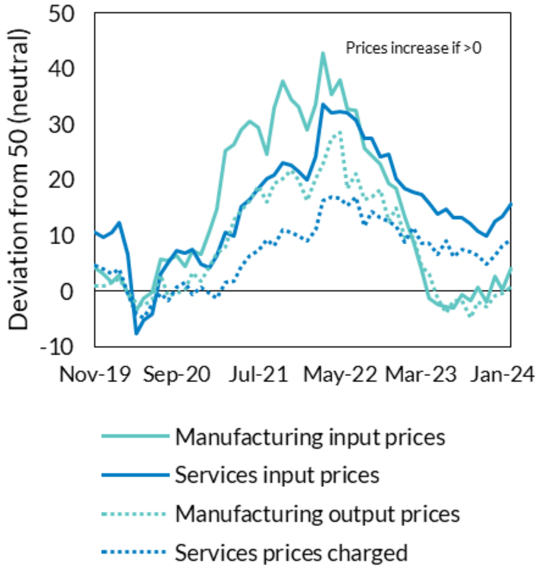
Figure 5: Contributions to headline inflation



Source: Eurostat

PMI survey suggests increasing price pressures, especially in the services sector

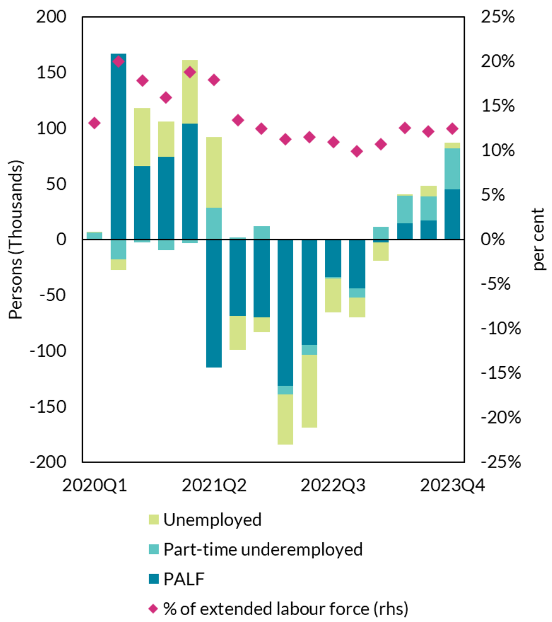
Figure 6: PMI Input and output prices



Source: Refinitiv, CBI calculations. Notes: last data point is February 2024

Unemployment remains steady though wider measures of labour slack increased in 2023

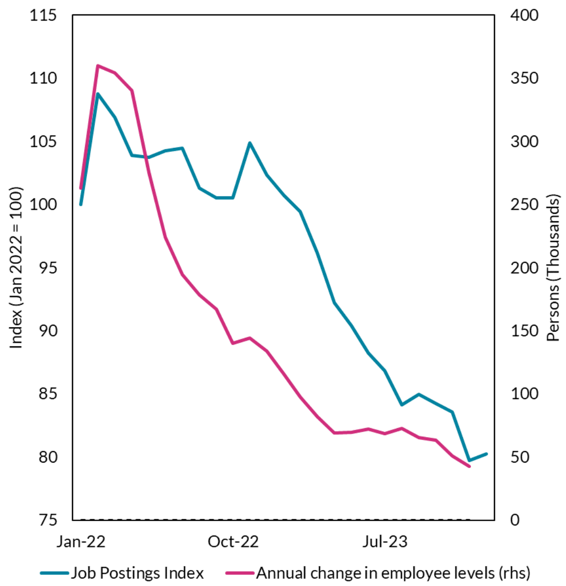
Figure 7: Annual changes in labour slack measures



Source: CSO
Note: Part-time under employed are those who wish to work additional hours and are available to do so. The Potential Additional Labour Force are those available for work but not seeking work and have a closer attachment to the labour force than other inactive persons

Labour demand continues to slow reflecting weaker growth in employee levels

Figure 8: Indeed Job Postings Index and Annual Change in Payroll Employee Levels



Source: CSO and Indeed

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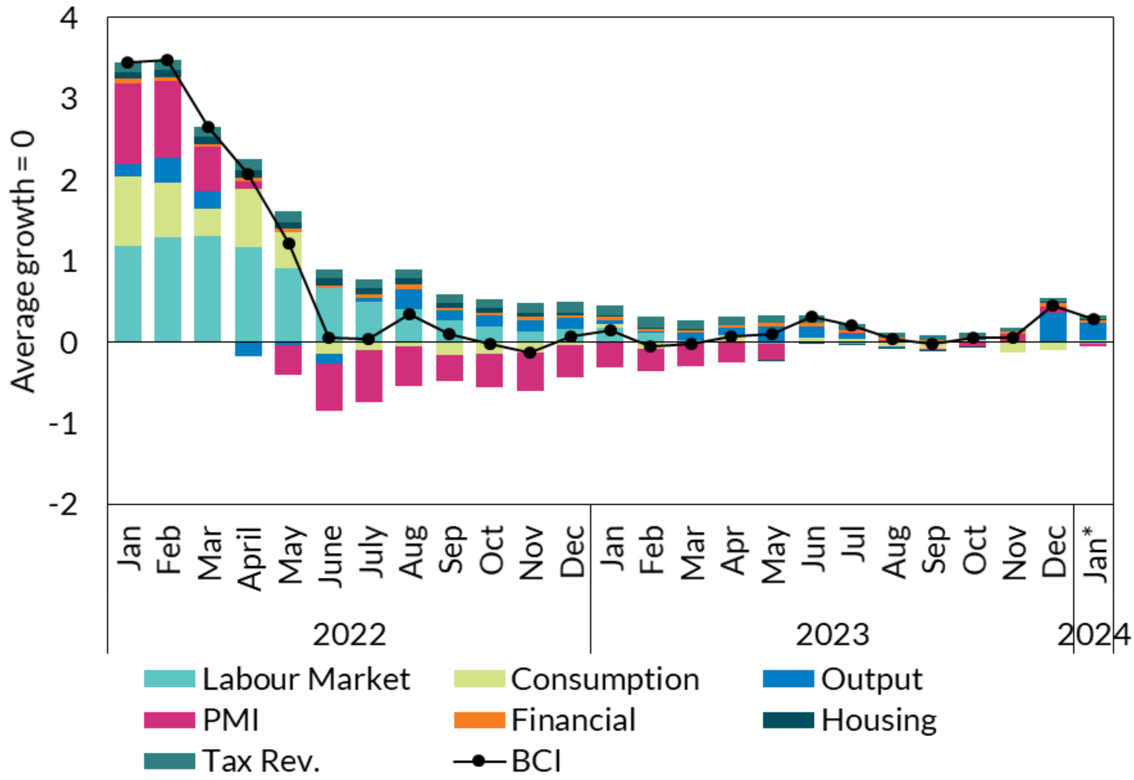
The domestic economy is likely to be growing in line with its medium-term capacity

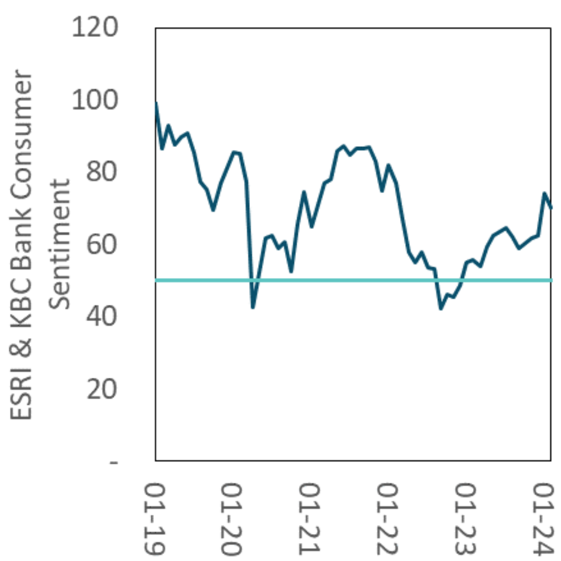
Figure 9: Central Bank's Business Cycle Indicator (BCI), (Jan 2022 – Jan 2024)



Source: Central Bank of Ireland
Note: As at 28 February 2024. Jan 2024 remains a provisional estimate as measures of industrial production are not yet available

Consumer sentiment continues to rebound

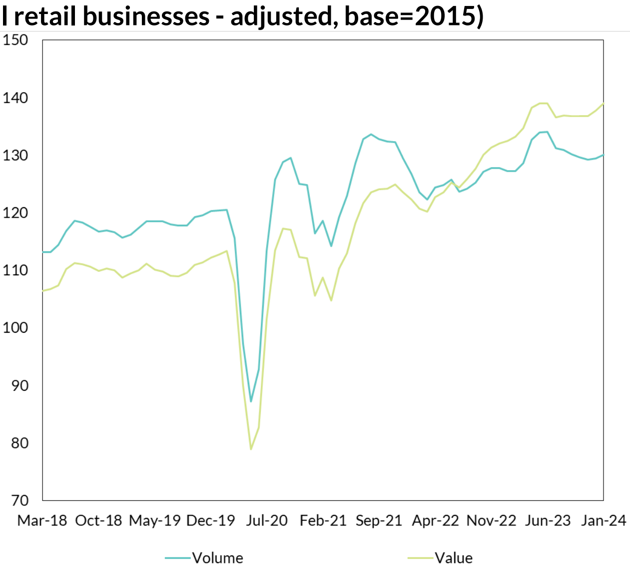
Figure 10: Consumer sentiment index



Source: Credit Union

Retail sales rising modestly in year-on-year terms

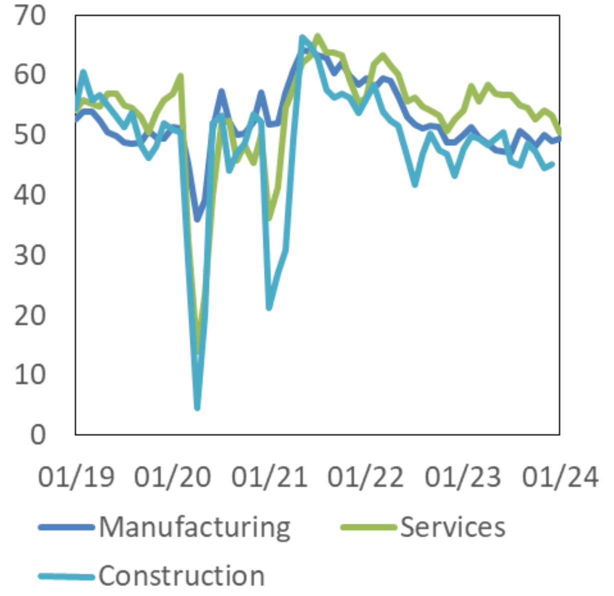
Figure 11: Retail Sales Index (3 month moving average, all retail businesses - adjusted, base=2015)



Source: CSO

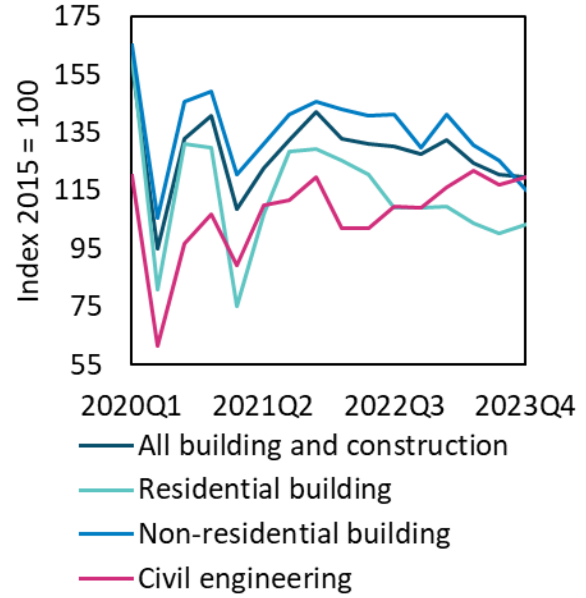
PMIs show stable activity in the manufacturing and services sectors, with weakness in the construction sector as the decline in commercial activity outweighs the uptick in residential.

Figure 12: Purchasing Managers' Indices (PMIs)



Source: AIB and BNP Paribas.

Figure 13: Index of Building and Construction



Source: CSO Building and Construction Index

Consumption

Consumption was flat in the final quarter of 2023, but supportive conditions should underpin growth in 2024. Near-term conditions remain similar to those prevailing at the time of the last *Bulletin*. Falling inflation and a recovery in real incomes, combined with a robust labour market and ongoing fiscal supports (notably further energy credits and an increase in core social protection spending introduced in Budget 2024) suggest conditions in 2024 should support consumption growth. Consequently, the forecast for annual consumption growth in 2024 is 3.2 per cent. This is down 0.6 percentage points from the last *Bulletin.* This reflects largely a mechanical change due to data revisions and the weakness of consumption in Q4 2023, as opposed to a material adjustment in the projected path.

Looking further ahead, households' purchasing power should rise, despite more fixed rate borrowers rolling onto higher interest rates. Price pressures should continue easing over the forecast horizon, improving the real income position of households. This is expected to be the main driver of the consumption outlook. While more fixed rate borrowers will roll onto higher interest rates over time, Central Bank research estimates that by the end of 2024, 30 per cent of mortgage accounts currently outstanding will remain unaffected by rising rates. This will drop to 22 per cent by end 2025. With the exception of tracker rate borrowers, the pass through of monetary policy to

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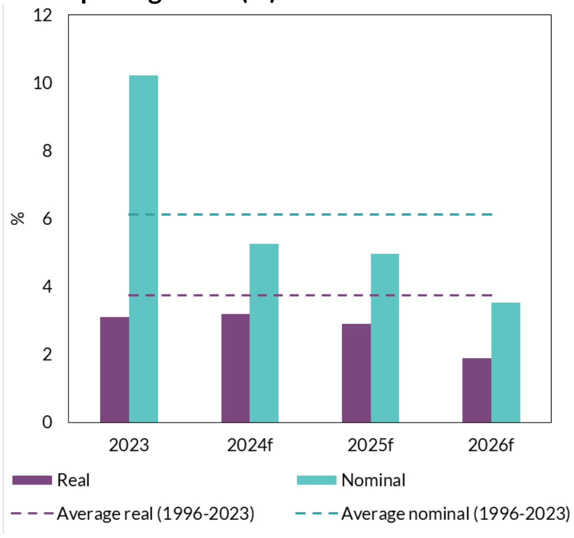
household interest rates has been relatively modest.[2] At the same time, Census 2022 data indicates only 29 per cent of households have any form of mortgage debt. This suggests higher borrowing costs are unlikely to materially affect the path of consumption compared to other factors.

A moderation in employment growth, relatively contained growth in wage rates, and the assumed removal of broad-based fiscal supports are expected to act as a constraint on consumption growth in 2025 and 2026. Consequently, the forecasts for growth in 2025 and 2026 are revised down slightly from the last *Bulletin* to 2.9 and 1.9 per cent respectively. These projections indicate a weaker pace of consumption growth compared to historical averages, but reflect the expectation that income growth will moderate in 2025 and 2026 (Figure 14). While the household savings rate is close to its long-term average, there remains a substantial stock of excess savings in aggregate, part of which may be drawn upon further to support consumption growth (Figure 15). An increasing share of those excess savings are now being invested in financial assets other than deposits. Larger gains in nominal earnings, or more household dis-saving pose the largest potential upside risk to the consumption outlook out to 2026.

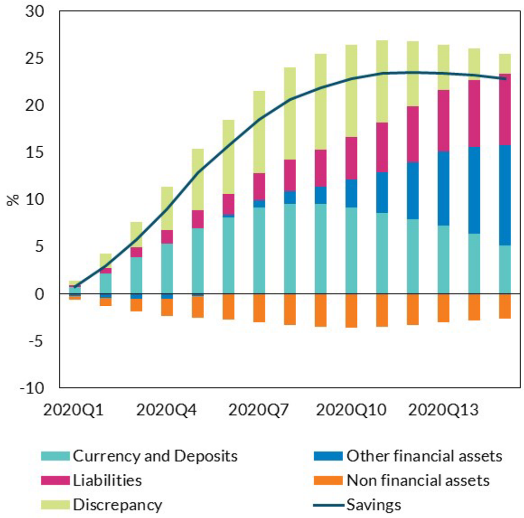
Large excess savings remain in the household sector but moderate consumption growth is expected over the forecast horizon, reflecting contained wage growth

Figure 14: Projected real and nominal consumption growth (%)



Source: Central Bank of Ireland

Figure 15: Cumulative excess savings as a share of gross disposable income (%)



Source: Eurostat and authors' own calculations

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[2] See the Governor's blog – the resilience of household borrowers (8 Feb 2024) for a further discussion on interest rate pass through to date.

Investment

While the level of modified investment remains high by historical comparison, a number of headwinds temper expected growth over the forecast horizon. The culmination of a normalisation of activity following significant MNE investments in preceding years, weaker global growth and tighter financing conditions, have resulted in a slight downward revision to the forecasts for modified investment compared with the previous *Bulletin*, with a moderate pickup over the forecast horizon. Overall, modified investment is forecast to grow by just 0.7 per cent this year and by 1 and 1.6 per cent in 2025 and 2026. Headline investment is forecast to grow by 4.8 per cent this year, before contracting by 2.6 per cent in 2025 and returning to growth of 0.9 per cent in 2026 (Figure 17).

For building and construction, a contraction in commercial building may be facilitating expansion in residential housing investment. There is tentative evidence that previous labour supply constraints in the residential sector are no longer as binding as commercial construction has slowed, with some transfer of labour.[3] A pickup in housing indicators points to a further increase in completions this year (Figure 18). The best guide to completions are commencements and these were running at an annual rate of over 34,000 units in January 2024. Significant potential residential investment is also illustrated by the gap between planning permissions and commencements. Over 58,000 cumulative planning permissions granted since 2019 have not yet progressed to commencement stage (Figure 19). Completions this year are forecast to increase to 35,000 units and to 36,500 and 37,000 in 2025 and 2026. These forecasts are conditional on limited delays in the planning system and improved connection times to utilities.

Modest declines in modified machinery and equipment (M&E) investment are forecast this year and next as the sector unwinds from the unusually high MNE-related expenditure of recent years. Imports of M&E, which have declined by 13.2 since their peak in Q2 2022, point to a moderation in M&E investment. Modified M&E investment, however, should recover in 2026 as expenditure on decarbonisation and large capital projects in the public and private sector mean that the level of spending will still be high by historical standards. Imports of aircraft are expected to add significantly to overall M&E investment this year, which will be partially reversed in 2025. These significant

[3] The EU survey on construction in March 2023 indicated that labour supply was a pressing constraint on building activity for Ireland.

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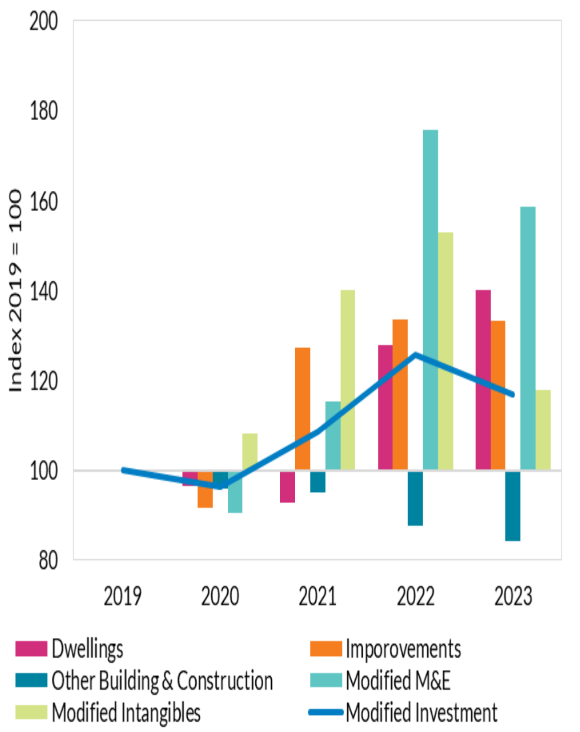
investment expenditures related to aircraft add to the headline investment forecast for this year but do not affect the modified figure.

Modified investment growth in recent years driven by MNE activity

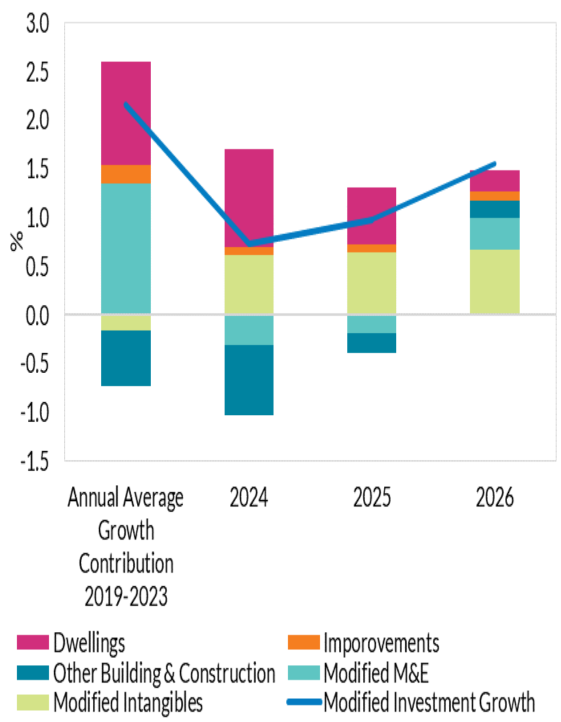
Figure 16: Modified investment and components



Source: CSO, Central Bank of Ireland

Modest recovery in modified investment is forecast

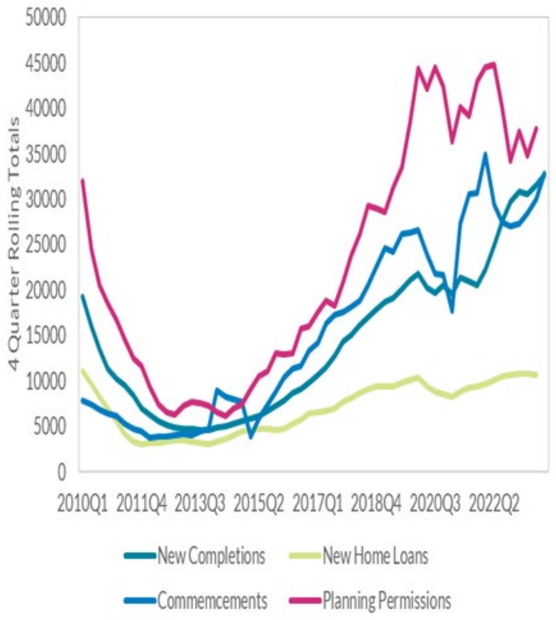
Figure 17:Contributions to modified investment growth



Source: Central Bank of Ireland

House completions stronger than expected in 2023

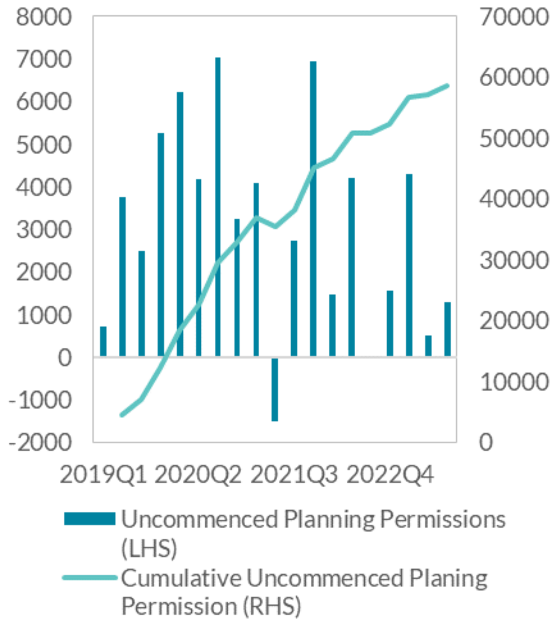
Figure 18: Housing indicators



Source: CSO, DoHLGH, BPFI, Central Bank of Ireland

Large number of accumulated potential housing commencements

Figure 19: Planning permission less commencements



Source: CSO, DoHLGH, Central Bank of Ireland

Exports and Imports

Compared with the last *Bulletin*, the forecast for headline exports in 2024 is unchanged, but the outlook is uncertain given the developments in offshore export activity. The environment for domestically produced exports is challenging, based on weaker assumptions for import demand in Ireland's main trading partners in 2024. The expectation of weaker demand for exports produced in Ireland primarily reflects the continuing slowdown in activity in the euro-area, in particular in Germany. In the United Kingdom, economic activity remains muted, and new restrictions on imports from the EU will gradually come into place throughout 2024. While these restrictions were incorporated in the last *Bulletin* projections, new data suggest that the UK is now in recession, which will lower the overall demand from the UK (see Box D).[4] Trade activity in 2024 will also be damped by the direct and indirect effects of renewed geopolitical tensions on global trade activity. In particular, the price of shipping has increased due to rising commodity prices and conflict in the Red Sea disrupting shipping routes between Asia and Europe. Although manufacturing delivery times have lengthened in Ireland, global supply chain

[4] The ONS estimate of monthly GDP in the UK for December suggested that GDP fell in both the 3rd and 4th quarters of 2023.

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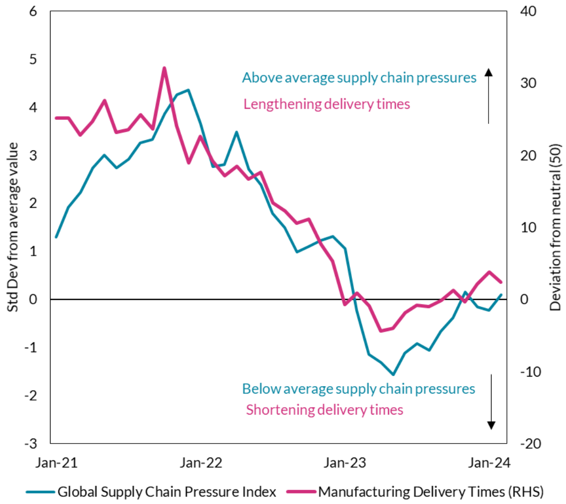
pressures remain contained so far, and especially in comparison to that experienced during the Covid-19 pandemic (see Figure 20).

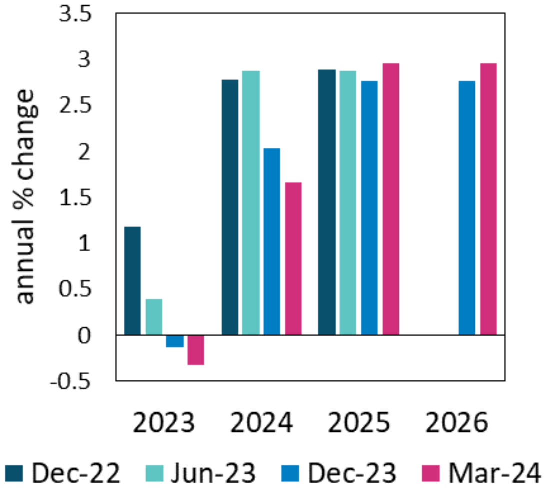
Weak economic growth in Ireland's main trading partners and the effects of geopolitical factors on global trade will affect Irish exports in 2024, before recovering in 2025

Figure 20 : Supply chain pressures



Source: Refinitiv, Federal Reserve Bank of New York, CBI calculations. Last observation February 2024.

Figure 21: Change in world demand for Irish exports



Source: ESCB

Despite these near term headwinds, the outlook for Irish net exports remains positive. As in the December *Bulletin*, the decline in pharmaceutical exports seen in 2023 is expected to reverse in 2024, and monthly external trade data released since December show tentative signs of this (see Figure 2). Services (particularly computer services) are also expected to continue to contribute strongly to exports this year after some weakness in 2023. Contract manufacturing exports are assumed to remain around their Q4 2023 level during 2024, and contribute negatively to headline export growth in contrast to their positive contribution to exports in the December projection.

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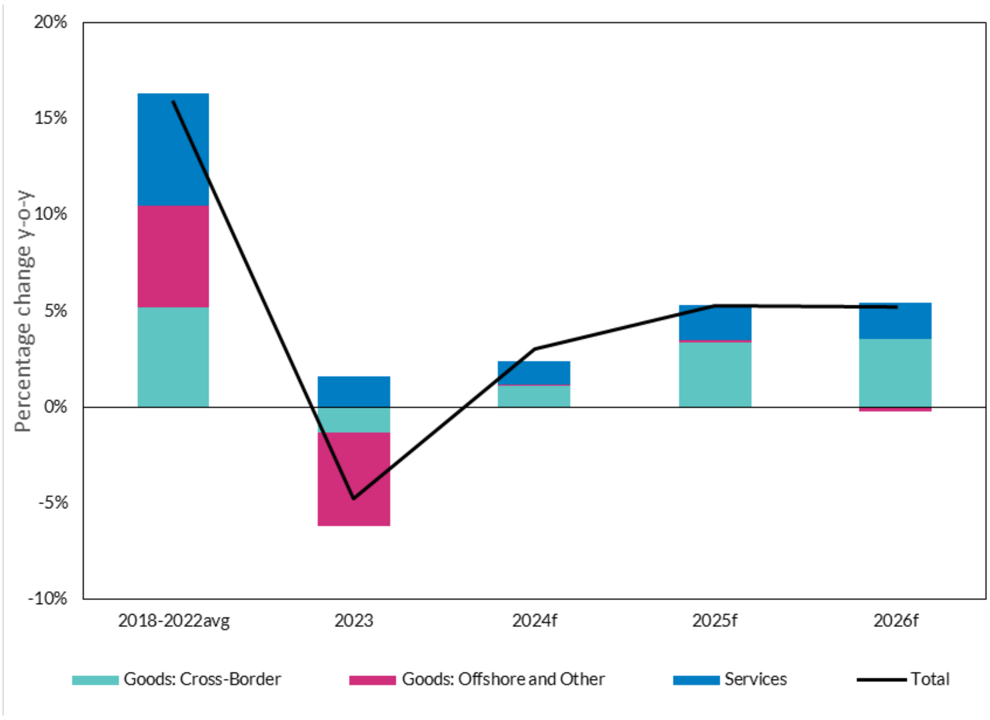
A recovery in the pharmaceutical sector, as well as continued growth in Computer services, projected to bolster export growth

Figure 22: Decomposition of contributions to growth in Exports of Goods and Services



Source: CSO and Central Bank of Ireland calculations

The headline projection for exports is highly uncertain, owing to the impact of exports produced abroad, but risks to the underlying projection are broadly balanced. A stronger than anticipated rebound in exports by the pharmaceutical sector poses upside risks to the export projection, particularly in 2024. The risks to goods exports from re-shoring in advanced economies are broadly balanced over the forecast horizon.[5] Exports of computer services are forecast to continue to grow at a robust pace, but any unanticipated changes to the taxation of digital services pose a downside risk to these exports, which currently account for around one third of overall exports. The effect of new non-tariff barriers on Irish exports to the UK have been factored into the baseline forecast, but any change to these regulations or a further deterioration in the UK economy poses a downside risk to Irish exporters, particularly exporters of agri-food products.

[5] See for example: Clancy, Daragh and Smith, Donal and Valenta, Vilém, The Macroeconomic Effects of Global Supply Chain Reorientation (February 2024). ECB Working Paper No. 2024/2903 ; Navigating the risks of geo-economic fragmentation - Speech by Vasileios Madouros, Deputy Governor, Monetary and Financial Stability. Kennedy Summer School, September 2023.

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Balance of Payments

Headline measures of the balance of payments current account is projected to continue to record strong surpluses, as a result of distortions from the multinational sector. Exports are forecast to outstrip import growth over the forecast horizon, increasing the trade balance. While income outflows are expected to remain significant owing to the size of the multinational sector, the overall current account balance is expected to remain in surplus over the forecast horizon.

Looking ahead, based on our forecasts for goods and services trade, we expect the current account to remain in surplus, both in terms of headline and modified measures. As the economy, and particularly net exports recover, we forecast the modified current account surplus to average 7 per cent of GNI* over the forecast horizon.

Prices and costs

Recent consumer price data point to subsiding but still strong inflationary pressures, with core HICP inflation remaining higher and stickier than the headline rate.[6] According to the flash estimate, the instantaneous headline inflation rate[7] of 0.1 per cent remained well below annual headline inflation in February (Figure 23), indicating lower inflationary pressures in more recent months that should become more visible in the headline HICP rate in the near future. Similarly, full HICP data for January also showed instantaneous core inflation at 0.7 per cent, staying below core HICP inflation in year-on-year terms for the sixth consecutive month. This reflects negative price pressures from non-energy industrial goods and positive pressures from services. Underlying inflation measures, which aim to provide a signal about medium-term price pressures abstracting from temporary shocks, continue to decline but remain above the 2 per cent inflation target and the pace of disinflation has slowed (Figure 24).

In terms of pipeline price pressures, producer prices for domestic sales declined since the last *Bulletin*, although still remain well above their pre-

[6] The CSO updated the expenditure weights of the consumer basket items and the composition of the basket changed slightly. The weight for services increased to 52.2 per cent from 49.5 per cent. The weights for energy, food and non-energy industrial goods components declined slightly. See the CSO press release for more detail.

[7] In the conventional year-on-year inflation rate, month-on-month inflation rate twelve months ago is given the same weight as month-on-month inflation rate in the current month. In the instantaneous inflation measure, the weight declines rapidly with less weight assigned to months further back (Eeckhout, 2023).

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pandemic levels. Domestic producer prices of non-energy manufactured goods (including food) and energy declined over the past few months, with a larger decline for energy products. [8] In contrast to the general trend, producer prices of food products were little changed, after increasing on a monthly basis in January (Figure 25). Agricultural output prices have been increasing while input prices declining at a slower pace (Figure 26), signalling potential future upward consumer price pressures for food.[9] Despite a large decline from the peak, domestic producer prices remain much higher compared to January 2020. The effect of the Middle East conflict on supply chains and goods transportation may imply an upward pressure on input producer prices and, eventually, consumer prices, however, this effect has been limited so far (Figure 20).

Since the last *Bulletin*, energy price assumptions have moved sharply downwards over the forecast horizon, while assumptions for non-energy commodity prices have increased in the near term but decreased for 2025-26. Lower energy price assumptions (Table 2) are in line with larger than expected recent declines in wholesale natural gas and electricity prices. This reflects lower demand for energy in light of a warmer winter, higher US natural gas production and larger inventories. Major energy providers in Ireland announced substantial price reductions for consumers taking effect in February and March. Oil prices over December and January were broadly in line with expectations. Lower demand for oil due to global economic slowdown is counteracted by deeper OPEC oil supply cuts, lower production in North America in January, and increased uncertainty due to attacks on vessels in the Red Sea. Food price assumptions are higher in the current *Bulletin* (Table 2) in comparison with the December forecast, reflecting supply effects of poor weather conditions. The assumptions for hard (non-food) commodity price inflation have also been revised up in the near term, but revised down in the later part of the forecast horizon. A stronger euro against the pound sterling implies some downward pressure on the prices of consumer goods imported from the UK.

[8] Electricity, gas, steam and air conditioning supply.
[9] These reflect prices paid to farmers for their produce and prices paid by farmers for purchases of goods and services.

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Table 2: Changes in key technical assumptions

	QB1 2024			QB4 2023		
	2024	2025	2026	2024	2025	2026
Oil (USD/barrel)	79.7	74.9	72.2	80.1	76.5	73.6
Natural gas (EUR/MWh)	30.0	32.1	29.5	47.4	44.2	36.9
Wholesale electricity (EUR/MWh)	74.4	78.3	71.3	116.5	110.8	97.7
Non-energy commodities (USD, per cent change)	0.6	2.0	0.1	-2.3	2.4	1.7
USD/EUR	1.08	1.08	1.08	1.08	1.08	1.08
GBP/EUR	0.87	0.87	0.87	0.85	0.85	0.85

Source: ECB, Refinitiv

Headline HICP inflation is forecast to decline over the next years, and at a faster pace than previously expected. HICP inflation has been revised down to 2.0 per cent for 2024, reflecting substantial downward revisions to energy inflation and small downward revisions to food and NEIG inflation compared to the previous *Bulletin* (Table 3).[10] Services inflation forecast remains unchanged for 2024. Headline inflation forecast is also revised down for 2025 to 1.8%, as lower energy and food inflation are only partially offset by higher NEIG inflation. In 2026, headline HICP is expected to be at 1.4%, unchanged since the last *Bulletin*. No revision at the aggregate HICP level masks downward revisions for food and services inflation and upward revisions to energy inflation. Overall, services remains the key driver of inflation over the forecast horizon (Figure 27). In the near term, less favourable data and near-term outlook for modified domestic demand is counteracted by more favourable wage growth outcomes and outlook. Slightly weaker outlook for services inflation in 2026 is consistent with weaker wage growth outlook and marginally weaker consumption growth forecast.

Core HICP inflation is now expected at 3.0 per cent in 2024 and is forecast to moderate to 2.1 and 1.7 per cent in 2025 and 2026. Despite relatively robust services inflation (albeit slightly below its long-term average of 3.1 per cent), negative NEIG inflation for 2026 brings core inflation below 2 per cent. Forecasting NEIG inflation in Ireland is challenging since its price index exhibited a strong negative trend over the decades prior to the pandemic, in sharp contrast to the dynamics for the euro area (Figure 28). This partly

[10] In the cases of food and NEIG inflation, revisions also reflect the annual updates to the forecast models.

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reflects measurement issues related to quality adjustment. Consequently, the NEIG inflation forecasts contain positive judgement to account for recent improvements in measurement for some items of the NEIG price index by the CSO[11], which should have alleviated the persistent downward trend that is hard for models to incorporate. However, it is uncertain to what extent the issue has been addressed given the distortions to the index brought about by the pandemic.

Table 3: Inflation Projections

	2023	2024	2025	2026
HICP	5.2	2.0	1.8	1.4
Goods	5.4	0.2	0.4	-0.2
Energy	5.1	-7.3	0.0	0.3
Food	8.1	3.4	1.7	0.8
Non-Energy Industrial Goods	3.3	1.3	-0.3	-1.2
Services	5.0	3.7	3.1	2.9
HICP ex Energy	5.2	3.1	2.0	1.6
HICP ex Food & Energy (Core)	4.4	3.0	2.1	1.7

Source: CSO, Central Bank of Ireland

Consumer inflation expectations in Ireland have declined considerably from recent peaks, but remain high. According to the new ECB Consumer Expectations Survey (CES) for Ireland, the average perceived inflation rate over the past twelve months was 10.3 per cent in January, much below its peak last year (Figure 29). Average expected inflation over the next year also declined and was 5.4 per cent in January, while average expected inflation reported in the Central Bank of Ireland Expectations Survey (CBIES) was 4.7 per cent. Elevated inflation perceptions and expectations (both above actual inflation) may result in more persistent inflation. For instance, higher wage demands in light of high perceived or expected inflation, if granted, could increase consumer demand putting upward pressures on prices. High expected inflation could also reduce incentives to save, especially if interest rate on savings are lower.

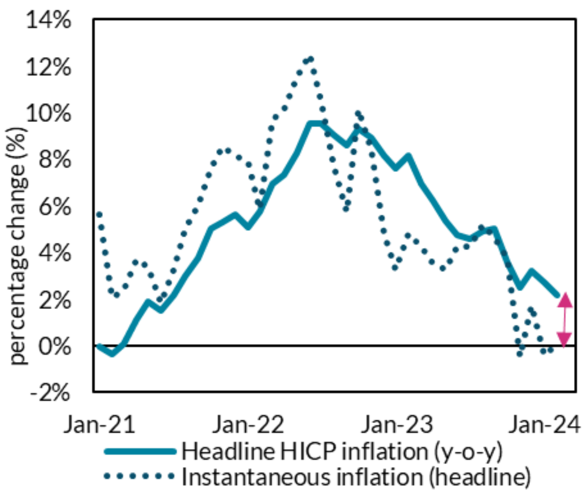
The inflation forecast is subject to both upside and downside risks that currently are assessed to be broadly balanced. Upside risks to inflation outlook stem from potential further shocks to European energy markets and global supply chains due to continued geopolitical tensions. Food prices may be

[11] See for more details on the improvement for computers and printers here and for clothing, footwear and travel goods here.

subject to negative weather-related risks, implying upward price pressures. Stronger than expected consumption and labour costs growth could result in higher services inflation. On the other hand, the domestic economy could slow down by more than expected in light of larger effects of higher interest rates and a more protracted global slowdown. Consequently, labour market slack could increase by more than assumed in current forecasts with an implication for real wage catch-up. Remaining measurement issues in NEIG prices, which have manifested themselves in a persistent downward trend in this price index, potentially pose some downside risks if these issues persist.

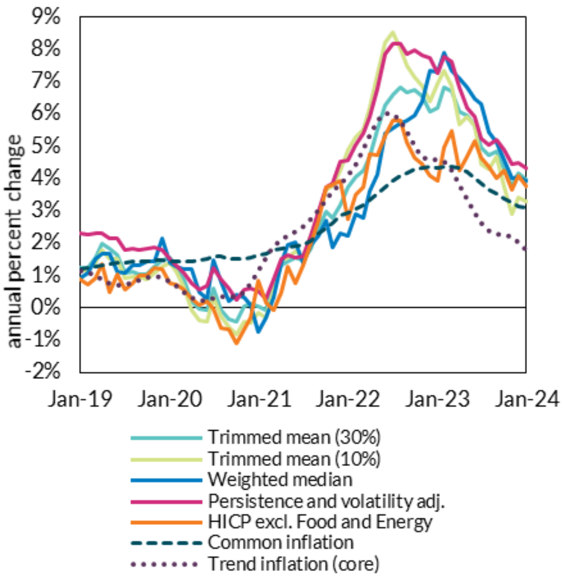
Price developments in recent months indicate lower inflationary pressures than annual rates would suggest. Underlying inflation measures continue to decline, but most remain above 2 per cent

Figure 23: Annual and instantaneous inflation



Source: Eurostat, CBI calculations.
Note: instantaneous inflation is based on seasonally adjusted HICP. Last data appoint is February 2024.

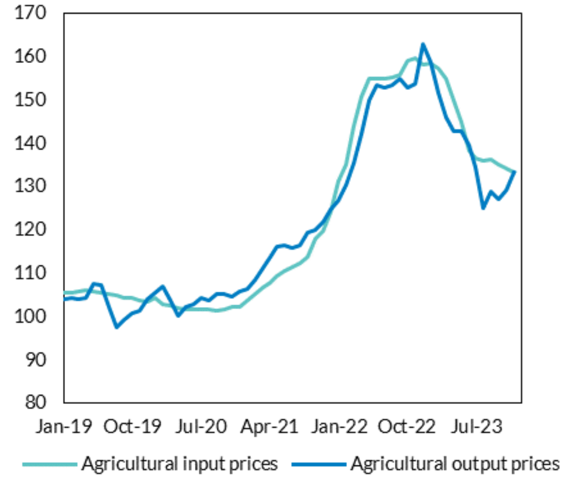
Figure 24: Underlying inflation measures



Source: Eurostat, CBI calculations.
Note: last data point is January 2024.

Agricultural output prices increasing while input prices decline at a slower pace

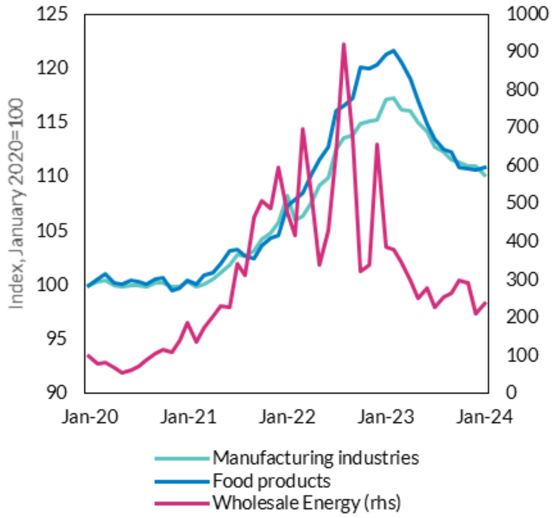
Figure 25: Agricultural input and output prices



Source: CSO. Last observation: January 2024.

Decline in domestic producer prices slowed, the price level remains elevated

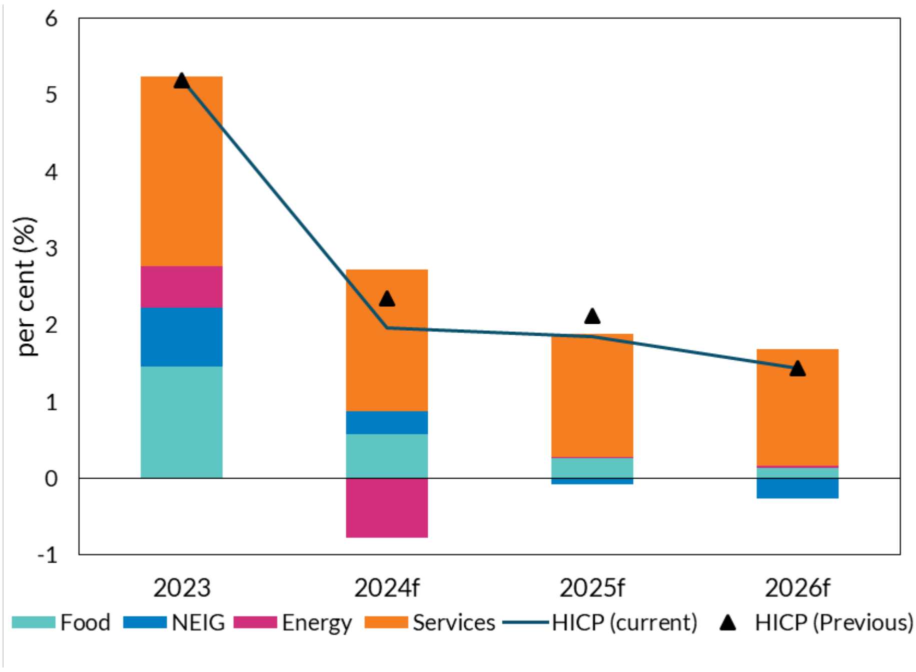
Figure 26: Domestic producer prices



Source: Eurostat. Last observation: January 2024.

Headline inflation is expected to decelerate at a slightly faster pace, with services remaining a key driving force out to 2026

Figure 27: HICP Forecast



Source: CSO and Central Bank of Ireland

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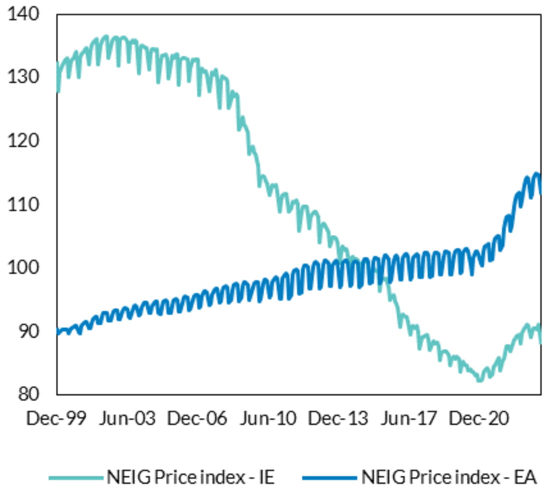
Prices of non-energy industrial goods exhibited a strong downward trend prior to the pandemic in a sharp contrast to the euro area

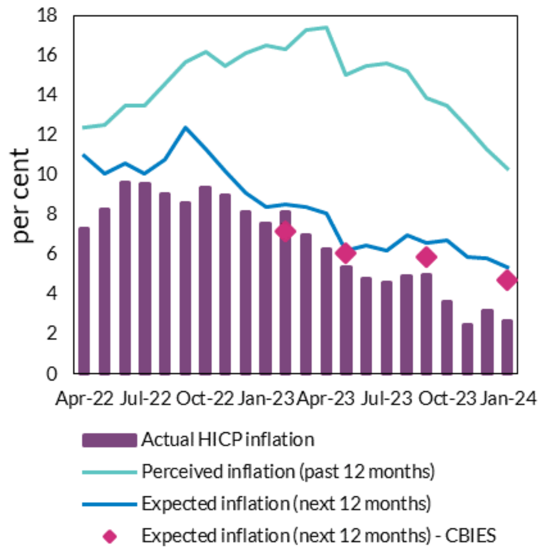
Figure 28: Non-energy industrial goods price index



Source: Eurostat. Notes: last observation is January 2024.

Consumer inflation expectations declined sharply but remain elevated

Figure 29: Consumer inflation perceptions and expectations



Source: ECB CES, CBIES

Labour Market

Revisions to the Labour Force Survey (LFS) have seen an upward shift in employment levels to above 2.7 million persons, although forecast projections point to moderating growth rates. LFS data have recently been revised back to Q3 2016 to align with population figures in the 2022 Census (Figure 30). Increased employment levels have resulted in lower annual growth rates from 2016, though proportional measures such as the unemployment rate have been relatively unchanged.[12] While annual average employment growth for 2023 measured 3.5 per cent, growth is projected to moderate with forecasts of 1.6 per cent and 1.5 per cent in 2024 and 2025, respectively.

The gap between employment and total actual hours worked in the economy has continued to diverge. Average hours worked in Q4 2023 were 3 per cent lower relative to end-2022 and 7.3 per cent lower than pre-pandemic levels (Figure 31). Similar trends are observed in many euro area economies, with analysis suggesting these declines in average hours worked may be structural

[12] The peak difference for headline employment rate, unemployment rate or labour market participation rate estimates was 0.1 percentage point.

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in nature and unlikely to be reversed.[13] In contrast, they may reflect a higher tendency for labour hoarding driven by cyclical developments which would be expected to unwind as firms have more certainty over their demand for labour.

The labour force increased by 3.5 per cent annually in Q4 2023 with recent growth continuing to be driven by inward migration. Non-Irish nationals accounted for 59 per cent of the 94,600 increase in the labour force. The importance of inward migration to labour force growth is reflected in employment permits data with a 35 per cent increase in the number of permits in January 2024 compared with the previous year, driven by demand in the health sector (Figure 32). CSO population estimates show higher levels of younger persons entering the working age population over the forecast horizon compared to recent years. The boost to the working age population from this influx of younger workers could have implications for the labour market projections in this *Bulletin*, depending on the relative proportions of those younger individuals who enter the labour force or remain in education or training (Figure 33).

The unemployment rate decreased to 4.2 per cent in Q4 2023 and is expected to remain relatively low out to 2026. The labour under-utilisation rate, a wider measure of labour market slack, has risen annually from 9.9 per cent to 12.4 per cent of the extended labour force in Q4 2023, driven by increases in the Potential Additional Labour Force (PALF) and those in part-time underemployment.[14] Changes in the inactive population may feed through to higher unemployment levels as the cohort most detached from the labour force, those classified as "does not want a job", has fallen by 78,200 in the year to Q4 2023. Increased labour costs related to wage catch-up, worker demands and minimum wage increases may see a reduction in potential labour hoarding across sectors exhibiting higher shares of part-time underemployment. At present, developments in the monthly unemployment rate do not signal an economic downturn as suggested by analysis on a newly-developed recession indicator (See Box C). Looking ahead, unemployment is projected to average 4.5 per cent in 2024 before moderating to 4.5 per cent in 2025.

[13] Astinova et al (2024) "Dissecting the Decline in Average Hours Worked in Europe" IMF Working Paper No. 2024/002

[14] The Labour Underutilisation Rate refers to the number of persons classified as unemployed, plus those part-time under employed who wish to work additional hours and are available to do so, plus those outside the labour force who are available for work but not seeking work as a percentage share of the extended labour force. See U6 definition.

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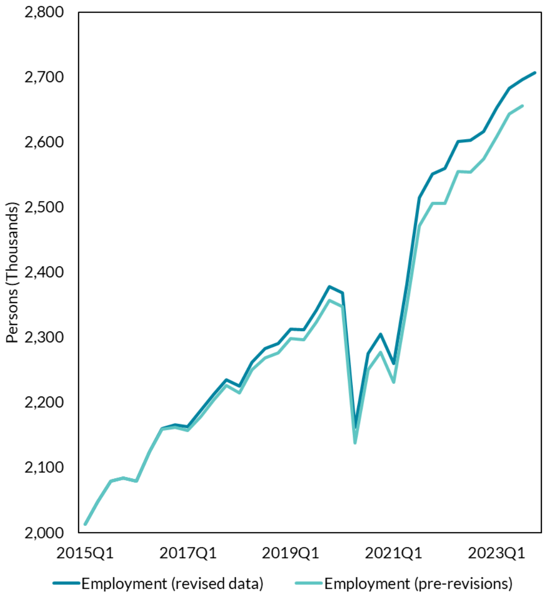
Employment revised upwards following alignment of Labour Force Survey (LFS) to 2022 Census population levels

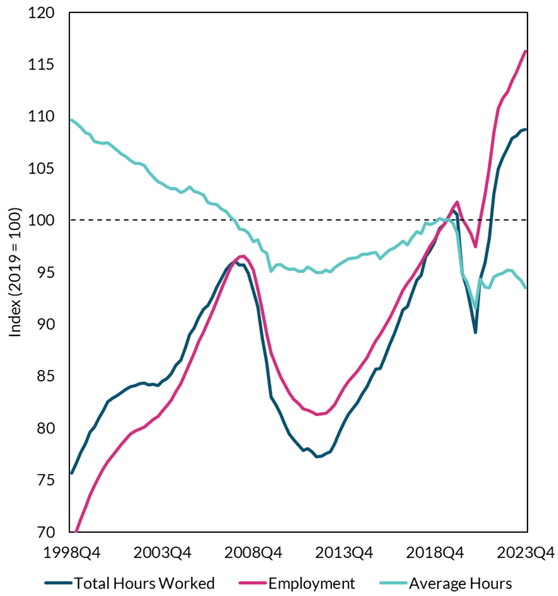
Figure 30: Employment levels pre and post Census 2022 revisions



Source: CSO

Average hours worked continues to decline post-pandemic, though this appears to be a long-run trend

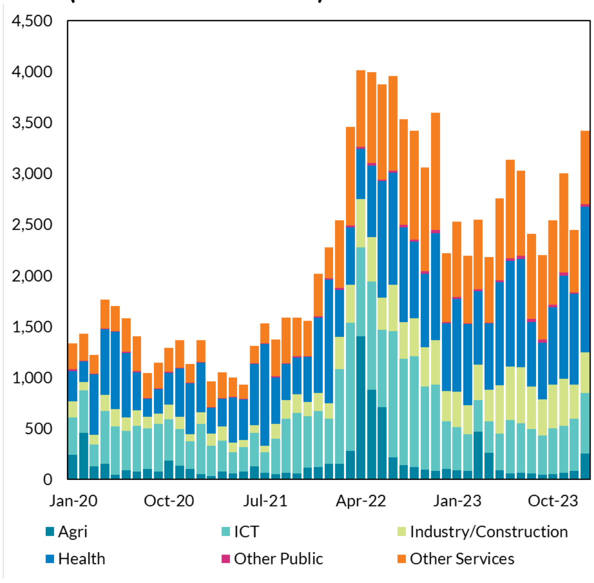
Figure 31: Indexation of employment and total actual hours worked



Source: CSO
Note: Data are calculated on a four-quarter rolling average basis

Tight labour market sees increase in demand for work permits across sectors

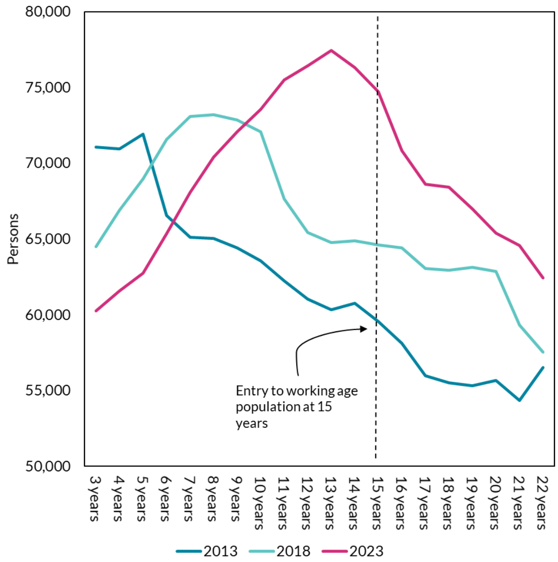
Figure 32: Employment work permits issued by sector (Jan 2020 – Jan 2024)



Source: CSO

Working age population expected to further increase buoyed by higher birth rates in early 2010s

Figure 33: CSO population estimates by single year of age



Source: CSO Population Estimates

Earnings and Income

Average hourly earnings increased by 2.1 per cent year-on-year in nominal terms in Q4 2023 driven by developments in the private sector. Private sector earnings rose by 3.6 per cent to offset an annual decline in public sector earnings (-1.5 per cent). This decline arose due to base effects from backdated payments which boosted earnings in the final quarter of 2022.[15] Higher earnings growth was observed in the Admin (8.7 per cent) and Accom (7.9 per cent) sectors.

Labour demand has continued to moderate in the final quarter of the year reflecting the slowdown in labour market growth. The EHECS job vacancy rate declined to 1 per cent in Q4 2023, still marginally above its long-run average but down from a peak of 1.6 per cent in Q2 2022. The slowdown appears to be greater in the private sector as the public sector vacancy levels increased marginally in the quarter with the vacancy rate remaining at 1.6 per cent. Moderating labour demand is evident in separate data from Indeed job postings with the index 20 per cent lower in January 2024 relative to the corresponding month in 2023.

Looking ahead, the wage outlook will be determined by an anticipated easing of labour supply and demand imbalances alongside the effects of known specific events. Posted wage growth for prospective new hires in January slowed to 3.8 per cent on a year-on-year basis which aligns with trends in the US and euro area as well as movements in domestic core HICP (Figure 34). Real compensation per employee continued to decline in 2023 with average levels down by 0.7 per cent due to inflation and relatively strong employment growth. The decline in average hours worked has resulted in a divergence between earnings growth measures on a per employee and per hour basis (Box F). Positive real earnings growth is expected in 2024 though growth may be uneven during the year due to changes to the minimum wage in Q1 and the incremental increases arising from the new public sector pay deal.[16,17]

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[15] Public sector earnings are up 1.1 per cent in the quarter to Q4 2023. Backdated payments as part of the previous public sector pay deal "Building Momentum" were paid to staff with 3 per cent backdated to February 2022.

[16] The national minimum wage increased €12.70 (12.5 per cent) on January 1st 2024 as recommended by the Low Pay Commission. Comparable increases are proposed for 2025 and 2026 in order to converge the minimum wage to a new living wage that equates to 60 per cent of the national median hourly pay rate. Latest LFS data estimates 7 per cent of the workforce to be on the national minimum wage.

[17] The new public sector pay deal outlines a 4.25 per cent increase in 2024 (of which 2.25 per cent will be backdated to January 2024), 4 per cent in 2025 and 2 per cent in 2026, respectively. As the deal is yet to be formally accepted by members, the first instalment of backdated pay will likely see a large annual increase in Q2 or Q3 2024 data.

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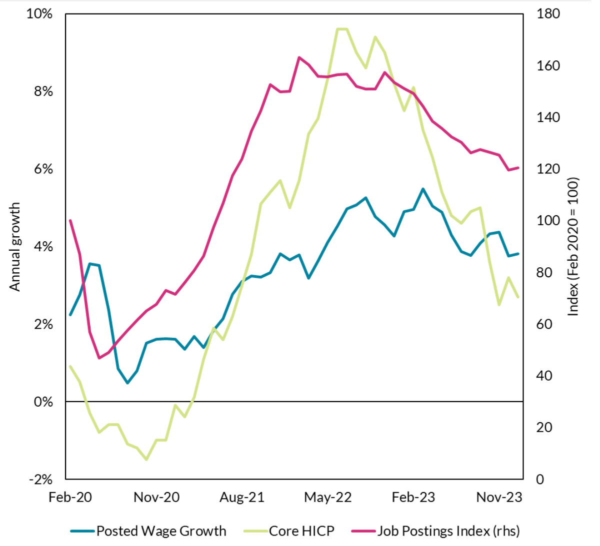
Increases to the minimum wage could give rise to wage increases along the income distribution due to spillover effects, though analysis points to these effects being limited to the bottom 30 per cent of the distribution.[18] The recently announced public sector pay agreement is broadly in-line with previous expectations, and consequently does not contribute in any significant way to changes in the latest forecast. Compensation per employee is forecast to increase annually by an average of 2.9 per cent in real terms between 2024 and 2026. Real gross disposable income, inclusive of taxes and transfers, is expected to increase by an average of 4.3 per cent over the same period (Figure 35).

Posted wage growth has slowed in line with moderating core HICP and labour demand

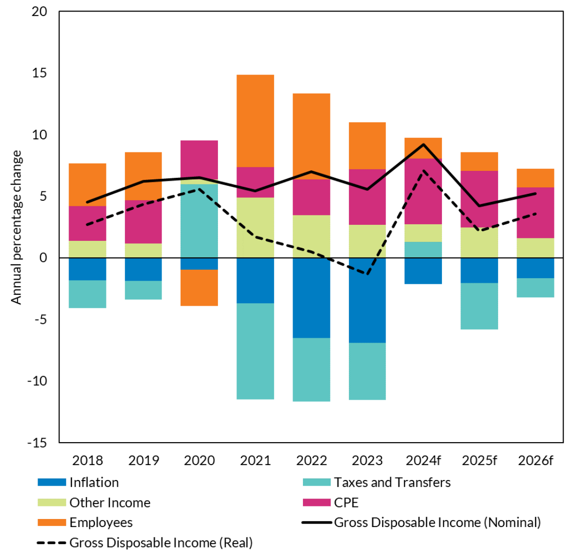
Figure 34: Indeed posted wages, core HICP inflation and job postings



Source: CSO and Indeed

Gross disposable income to increase faster than employee compensation in 2024 driven by taxes and transfers

Figure 35: Decomposition of Gross Disposable Income



Source: CSO and Central Bank of Ireland calculations

[18] See Redmond et al (2021) "The impact of a minimum wage change on the distribution of wages and household income" Oxford Economic Papers, Volume 73, Issue 3.

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Table 4: Labour Market Projections

	2022	2023	2024f	2025f	2026f
Employment (000s)	2,595	2,685	2,729	2,770	2,812
% change	6.9%	3.5%	1.6%	1.5%	1.5%
Labour Force (000s)	2,716	2,805	2,861	2,901	2,944
% change	5.0%	3.3%	2.0%	1.4%	1.5%
Participation Rate (% of Working Age Population)	64.9%	65.5%	65.6%	65.6%	65.7%
Unemployment (000s)	121	120	132	131	132
Unemployment Rate (% of Labour Force)	4.4%	4.3%	4.6%	4.5%	4.5%

The Public Finances

The headline general government balance (GGB) is expected to remain in surplus over the medium term. The projections assume that non-core spending measures are withdrawn as outlined in Budget 2024 (Table 5). Reflecting a weaker than expected Exchequer outturn in the final months of last year, due in the main to higher than anticipated expenditure, it is now estimated that the GGB recorded a surplus of 2.7 per cent of GNI* in 2023. Although limited data are available for 2024 to date – the Exchequer ran a very small deficit of €0.1bn in the first two months of the year - a further moderation in the surplus to 2.5 per cent of GNI* is currently projected for 2024. A slowdown in employment and nominal private consumption growth from elevated levels is expected to result in more subdued revenue growth in 2024 than in recent years, with this in turn partly reflecting weaker inflationary pressures. On the expenditure side, the large increase in core or permanent spending measures introduced in Budget 2024 (€5.3bn or 6.2 per cent) is projected to be partially offset by a modest decline in non-core spending (Table 6). Within this, it is assumed that the full €2.2bn in unallocated expenditure outlined in the Budget is utilised. Looking further ahead, most of the remaining non-core expenditure – which includes humanitarian support for Ukrainian refugees, cost of living supports and legacy spending related to the Covid-19 pandemic – is due to be withdrawn in 2025 based on Budget 2024 (Figure 36). This phasing out of non-core spending directly results in a 1.8 per cent of GNI* projected improvement in the GGB surplus next year. As a result, the surplus is projected to strengthen to 3.8 per cent of GNI* in 2025 before stabilising at that ratio in 2026. These GGB projections represent a downward revision from the previous *Quarterly Bulletin* reflecting the smaller surplus estimate for 2023 – which carries through the remainder of the projection horizon - and the inclusion of the recently agreed public sector pay deal.[19] These factors are partly offset in 2026 by some upward revisions to corporation tax revenue compared to the December 2023 projections.

Table 5: Key Fiscal Indicators, 2023-2026

	2023e	2024f	2025f	2026f
GG Balance (€bn)	7.8	7.5	12.3	12.6
GG Balance (% GNI*)	2.7	2.5	3.8	3.8
GG Balance (% GDP)	1.5	1.4	2.2	2.2
GG Debt (€bn)	223.7	223.4	222.6	222.1
GG Debt (% GNI*)	78.4	73.6	69.7	66.2
GG Debt (% GDP)	44.3	42.5	40.4	37.8
Excessive CT (€bn)	11.2	11.2	11.5	12.0
Underlying GGB (€bn)	-3.4	-3.7	0.8	0.6
Underlying GGB (% GNI*)	-1.2	-1.2	0.2	0.2

Source: Central Bank of Ireland Projections

Table 6: Evolution of non-core expenditure (percentage of GNI*)

	2020	2021	2022	2023f	2024f	2025f
Covid-19	7.2	5.3	1.4	0.5	0.4	0.1
Cost of Living	-	-	0.9	1.0	0.4	-
Humanitarian	-	-	0.4	0.7	0.8	-
Other	-	-	0.1	0.2	0.2	0.1
Total	**7.2**	**5.3**	**2.7**	**2.5**	**1.9**	**0.2**

Source: CSO, Department of Finance and Central Bank of Ireland Estimates

The favourable budgetary outlook is projected to result in further declines in the general government debt (GGD)-to-GNI* ratio in the coming years. The GGD ratio has fallen sharply in recent years against the backdrop of extremely favourable debt dynamics. The decline in the coming years is expected to occur at a more gradual pace but the projected ratio of 66 per cent of GNI* in 2026 would still represent a drop of around one-third from its pre pandemic value. The public debt ratio for the euro area, by comparison, is expected to be broadly unchanged in 2025 when compared to 2019. Large primary budget surpluses – projected to average 4.5 per cent of GNI* - are the biggest factor driving the reduction in the debt ratio in Ireland (Figure 37). The interest-growth rate differential also continues to be supportive, with the projected

[19] The Government estimates that the Public Service Agreement will cost €3.6bn over the period 2024 to 2027. It is unclear whether any of this will be funded by the €2.2bn of resources that were not allocated in Budget 2024, around half of which appears to be earmarked for current expenditure.

nominal GNI* growth remaining well ahead of the expected effective interest rate. The latter represents the average interest rate on the entire public debt stock, and while marginal rates have been on an upward trend since end 2021, a favourable maturity profile and large cash balances at the disposal of the National Treasury Management Agency (NTMA) are expected to limit pass through risks (Figure 38). The €19.5bn of government bonds maturing this year and next have higher interest rates than the current 10-year rate[20], while the Government is planning to use existing cash balances to fund around half of its Exchequer funding needs this year.[21] The deficit-debt adjustment – which explains the difference between the GGB and the change in the stock of government debt in a given year – is forecast to partially offset these favourable developments, primarily reflecting the transfer of resources to the new savings funds introduced by the Government in Budget 2024. The NTMA raised €3bn through the syndicated sale of a 10-year bond in January at a yield of 2.7 per cent. This represents almost 40 per cent of the mid-point of its funding range for the year (€6bn to €10bn).

There is a high level of uncertainty surrounding the medium-term fiscal outlook, most notably with regard to corporation tax (CT) receipts. CT remains an extremely narrow tax base and a significant proportion of its revenue growth in recent years cannot be explained by developments in the underlying Irish economy. Excluding such 'excess CT' – which could be subject to a sudden reversal - reveals a much less favourable outlook for the underlying GGB, which would remain in deficit this year and broadly in balance in 2025 and 2026 (Figure 39). There is also uncertainty over the timing and impact of international tax reforms. While Pillar 2 of the BEPS reforms - which introduces a minimum effective tax rate of 15 per cent for large multinationals - came in to operation at the start of the year, this is not expected to affect the Exchequer until 2026. Nevertheless, uncertainty over how companies respond to the new rate and the timing of payments mean that the potential magnitude of the impact on the fiscal position remains unclear.[22] On the expenditure side, spending overruns in the Health vote group have required large supplementary resources in each of the past two years and it remains to be seen whether such

[20] Government bonds maturing in 2024 (€8bn) and 2025 (€11.5bn) have interest rates of 3.4 and 5.4 per cent respectively. The 10-year bond yield at the end of February 2024, by comparison, was 2.7 per cent.
[21] As outlined on the NTMA website, Exchequer funding needs of €17.9bn in 2024 will be financed by new borrowing (€8bn), an Exchequer surplus (€1.8bn) and a reduction in cash balances (€8.1bn).
[22] The potential introduction of BEPS Pillar 1 presents a downside risk to corporation tax receipts, but there is as yet no international agreement on its implementation.

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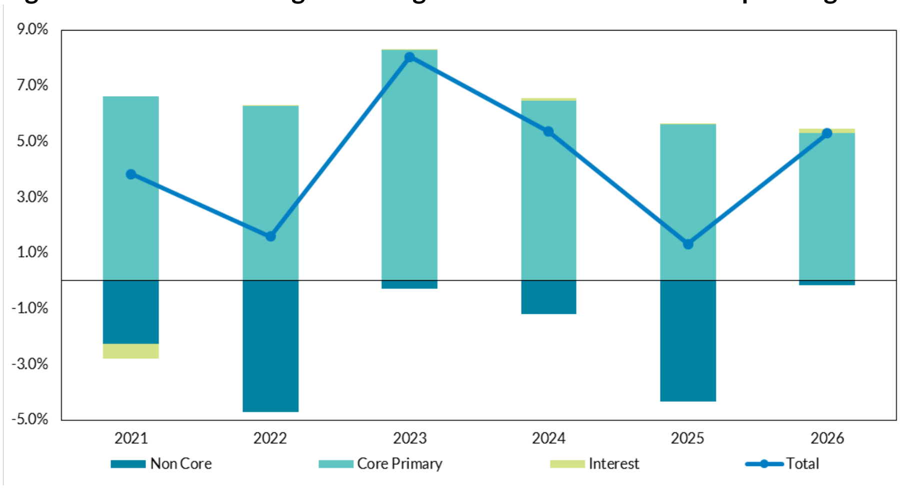
a development will be reversed over the projection horizon. The Irish Fiscal Advisory Council, for example, has noted the risks related to the Health spending allocation for this year. [23] Additional challenges on the spending side relate to appropriately supporting necessary public capital expenditure and ensuring sufficient resources are available to meet future ageing and climate transition costs. Against this backdrop the creation of two new long-term public saving funds in Budget 2024, which aim to prepare for future challenges, reduce pro-cyclicality and increase the resilience of the public finances more generally, is a welcome development.

GG surplus expected to increase in 2025, contingent on withdrawal of non-core spending as envisaged in Budget 2024

Figure 36: Factors driving the change in General Government spending

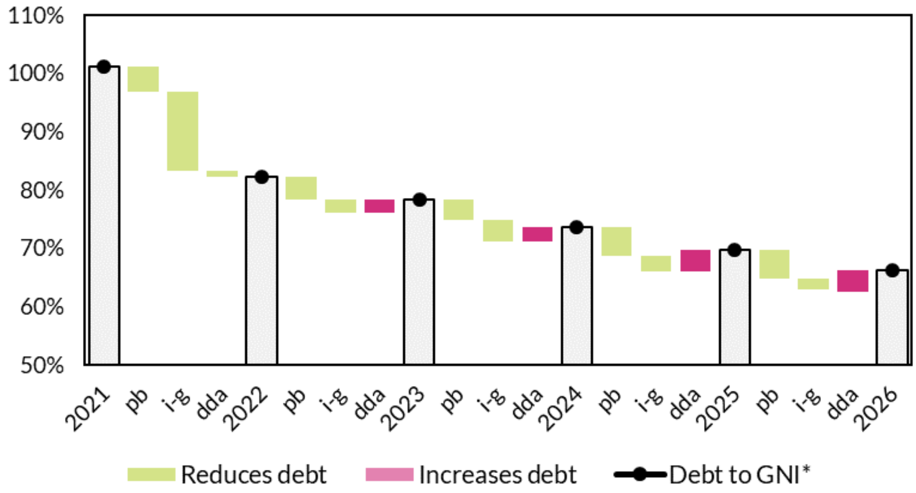


Source: CSO, Central Bank of Ireland Projections

[23] See Irish Fiscal Advisory Council, Fiscal Assessment Report, December 2023.

GG debt projected to fall to 66 per cent of GNI* by 2026, lowest since 2008

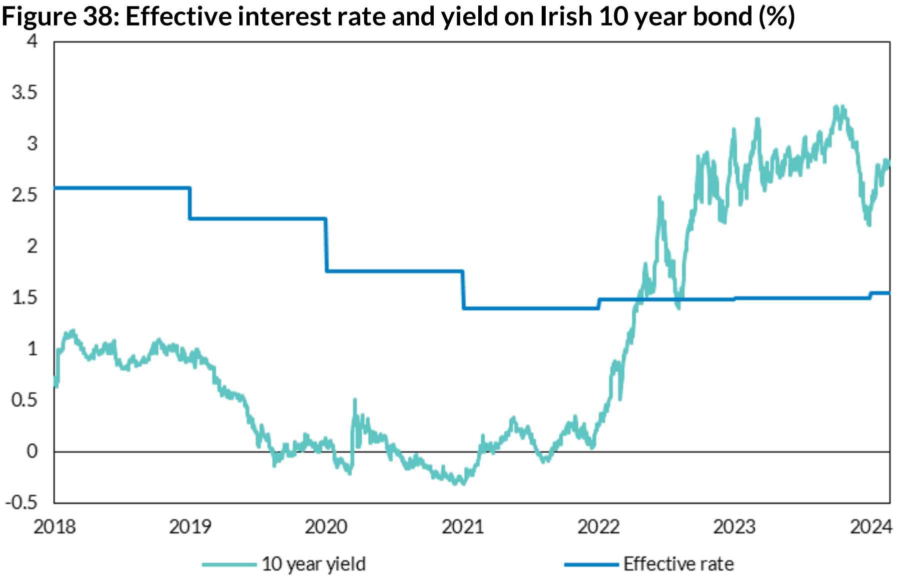
Figure 37: Factors driving the change in GG Debt Ratio (% of GNI*)



Source: CSO, Department of Finance, Central Bank of Ireland Projections
Note: pb = primary balance, i-g = interest growth differential, dda = deficit debt adjustment

Marginal sovereign borrowing rates remain elevated in early 2024 compared to position up to the end of 2021

Figure 38: Effective interest rate and yield on Irish 10 year bond (%)



Source: Refinitiv

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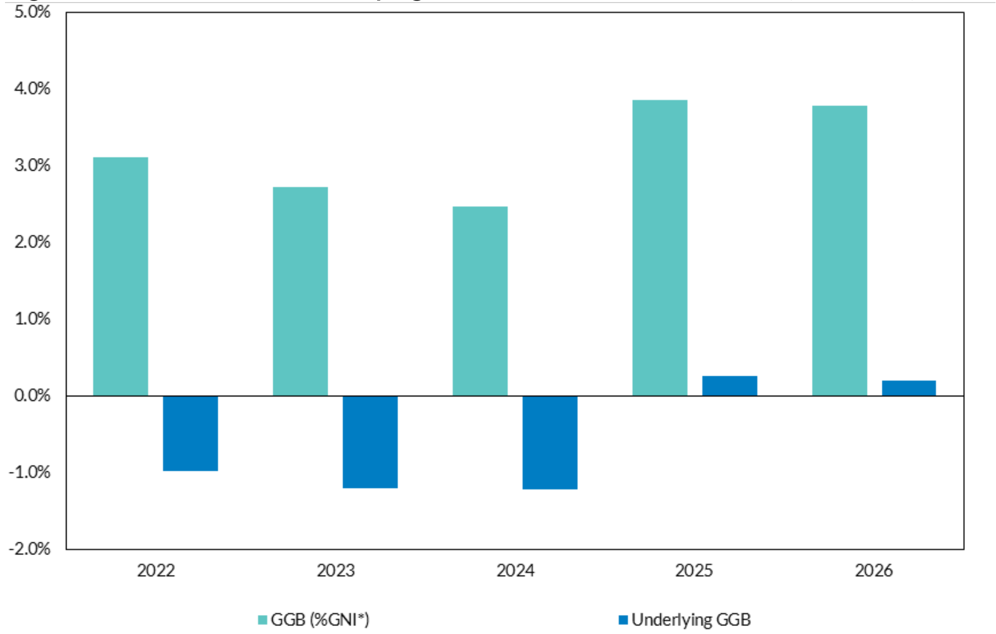
Headline budget balance expected to continue to run large surpluses, but underlying picture (excluding excess CT) is less favourable

Figure 39: Headline and Underlying General Government Balance (% of GNI*)



Source: CSO, Central Bank of Ireland Projections
Note: Underlying GGB excludes Central Bank estimates of excessive corporation tax receipts

Box A: The International Economic Outlook

By the Monetary Policy Division

With the notable exception of the United States, the global economy in 2023 witnessed a weakening in demand and growth momentum. In many cases, this arose in through the effects of high inflation and the associated monetary policy response, and a significant slowdown in international trade partly due to geopolitical tensions. Global inflation rates are now on a steady downward path. Monetary policy tightening has reached its peak in a number of large economies, limiting demand and slowing economic growth. With headline inflation falling towards target in many jurisdictions, market expectations are for policy rates to ease from the current restrictive levels in a number of major economies over the course of 2024. Against this background, global geopolitical tensions continue to remain elevated, with repercussions on global uncertainty, trade and financial markets.

Within this global environment, the March ECB staff macroeconomic projection exercise forecasts 0.6, 1.5 and 1.6 per cent for GDP growth in 2024-2026 and 2.3, 2.0 and 1.9 per cent respectively for inflation. Despite representing a slowdown from +3.5 per cent in 2023, economic growth for the world excluding the euro area has been revised upwards to 3.4, 3.2 and 3.2 per cent in 2024 to 2026 (compared with 3.1, 3.2 and 3.2 respectively); this is for the

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most part attributable to stronger than expected performance of the US economy, against subdued consumer spending in China. Global (excl. euro area) trade growth is expected to pick up after a weak 2023, to 2.8, 3.1 and 3.2 per cent respectively in 2024-2026. Global CPI inflation is projected to continue reducing gradually, from 4.9 per cent in 2023 to 4.1, 3.2 and 2.8 per cent respectively in the following years.

The euro area economy stagnated in the last quarter of 2023, with GDP unchanged on a quarterly basis compared to Q3 2023, and only 0.1 above the same quarter of 2022. The slowdown in economic activity is the result of a combination of factors, including weak household consumption, fiscal consolidation, weak dynamics for global trade, as well as the delayed effects of unprecedented monetary tightening on aggregate demand in the economy. The euro area economy is expected to have grown by 0.5 per cent in the whole year of 2023 compared to 2022.

Despite stalled growth and restrictive monetary policy, the labour market remained relatively strong in the euro area, with employment levels growing by a further 0.3 per cent in Q4 2023 compared to the previous quarter (+1.3 per cent compared to Q4 2022). However, as average hours worked per person employed has declined, the total number of hours worked in the economy did not increase as much. The euro area seasonally-adjusted unemployment rate reached a record low of 6.4 per cent in January 2024, down from a level 6.5 it had remained at since March 2023.

After falling steadily throughout the year to a low of 2.4 per cent in November 2023, annual HICP inflation rose to 2.9 per cent in December and later declined to 2.8 per cent in January and 2.6 per cent in February 2024 (0.6 per cent on a monthly basis). The increase since November was in large part due to base effects, especially related to energy prices, dropping out of the calculation (energy inflation rose to -3.7 per cent in February from a low of -11.5 in November). At the same time, annual price growth for most of the main sub-components of HICP continued to fall. In particular, core inflation in February declined from 3.3 per cent to 3.1 per cent, non-energy industrial goods inflation fell from 2.0 per cent to 1.6 per cent, while services inflation (the largest component of the HICP basket and mostly reflecting domestic developments) declined to 3.9 after remaining flat at 4.0 per cent for the previous three months.

The Governing Council of the ECB decided in February to maintain unchanged the deposit facility, main refinancing operations, and marginal lending facility rates at 4.0, 4.5 and 4.75 per cent, respectively. The ECB had previously increased the three key ECB interest rates by a cumulative 450 basis points over 10 consecutive meetings from July 2022 up to September 2023 in an effort to return inflation towards its 2 per cent target. The Governing Council considers the key ECB interest rates to be at levels that, if maintained for a sufficiently long duration, will make a substantial contribution to returning inflation

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towards the 2 per cent target; however, it will maintain a data-dependent approach to determine the level and duration of monetary restriction. The holdings within the Asset Purchase Programme continue to be gradually reduced by not reinvesting maturing securities. Holdings within the Pandemic Emerging Purchase Programme continue to be reinvested flexibly, but a reduction in the portfolio by €7.5bn per month (done by only partial reinvestments) will start in the second half of the year, while all reinvestments will be discontinued at the end of 2024.

In the United States, the resilience of the economy continued to surprise despite restrictive monetary policy, with household and government consumption remaining particularly strong. GDP increased by 0.8 per cent on a quarterly basis in Q4 2023 (3.1 per cent higher than the same quarter of the previous year). The labour market also remains strong, with the unemployment rate standing at 3.7 per cent in January, unchanged from the previous two months. US CPI inflation has fallen to 3.1 per cent in January 2024, down from 3.4 in December; it had reached a low of 3.0 per cent in June 2023 and has fluctuated around that level since then. The core inflation rate, although on a slowly declining trend, remained unchanged at 3.9 per cent in January. In January, the Federal Open Market Committee (FOMC) of the US Federal Reserve decided to maintain the target range for the Federal Funds Rate at a level of 5.25 per cent to 5.5 per cent; further decisions will be based on the Committee's assessment of the appropriate monetary policy stance. The FOMC is continuing to reduce the size of the Federal Reserve balance sheet.

In the United Kingdom, GDP fell by 0.3 per cent in Q4 2023, following a contraction of 0.1 per cent in the previous quarter. Trade, household spending and government consumption all declined. Overall, the economy is expected to have grown by 0.1 per cent in 2023 compared to the previous year. The unemployment rate was 3.8 per cent in December, after falling by 0.1 per cent each month since July 2023. UK CPI inflation remained unchanged at 4.0 per cent in January 2024, after declining steadily until November (3.9 per cent). At its February meeting, the Bank of England's Monetary Policy Committee maintained the Bank Rate at 5.25 per cent, a level that was set in August 2023. The MPC judged that monetary policy would need to remain restrictive for sufficiently long so as to return inflation to the 2 per cent target sustainably in the medium term.

The inflation rate in China turned negative in October 2023 amid weak domestic consumption and continuing weakness in the property sector, and by January 2024 it has reached a value of -0.8 per cent. Core inflation remains positive (0.4 per cent) but producer prices are falling. GDP for the full year of 2023 was 5.3 per cent higher than in 2022. While this growth rate compares to a rate of 3.0 in 2022, it represents a significant slowdown in growth compared with the pre-pandemic years. In this context of deflation and weak demand, the People's Bank of China in February reduced the 5-year loan prime rate to 3.95 per cent, from 4.2 per cent previously. GDP in Japan unexpectedly contracted by 0.1 per

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cent in Q4 2023, after a decline of -0.8 per cent in Q3 due to weak consumer demand. The full year 2023 growth in GDP was 1.9 per cent owing to relatively strong growth in the first half of the year. Inflation declined to 2.6 per cent in December, from 2.8 per cent in November. The Policy board of the Bank of Japan decided to maintain unchanged its current policy of yield curve control, and main policy rate at -0.1 per cent. While headline and core inflation in Japan have recently been above the 2 per cent target, the BOJ believes further accommodation is necessary to sustainably maintain inflation at this target. However, the BOJ notes that the probability of these conditions being reached has recently increased, with tentative signs of a cycle of pass-through of price increases to wages, and vice-versa, having started to take hold.

Box B: How have rising interest rates affected businesses' credit dynamics?

By Tom Keogan and Cormac O'Sullivan[24]

Summary

Rising interest rates have significantly increased the cost of credit, leading to a general decline in new lending to business. However, lending to SMEs has proven to be resilient to monetary policy changes, partially due to the substantial deleveraging that has occurred since the Global Financial Crisis which has reduced reliance on bank debt by SMEs. Nevertheless, certain sectors such as Construction and Real Estate have seen significant declines in the drawdown of new credit, possibly reflecting sector-specific factors. Increasingly, SMEs are utilising alternative forms of financing such as revolving credit and overdraft facilities. On the demand side, credit demand remains muted, with many SMEs preferring to rely on internal funding.

Cost of Credit

The cost of credit facing Irish firms has risen markedly in response to ECB monetary policy changes, with interest rates on new business loans having increased by 302 basis points to 5.69 per cent since the ECB began raising rates in July 2022. The pass-through of ECB rate increases to lending interest rates charged by banks has been more pronounced for businesses than for household mortgage or consumer lending

[24] Statistics Division

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Table 1: Changes in interest rates, June 2022 – December 2023

	Rate June 2022	Cumulative change (bps)	Rate December 2023 (%)	Cumulative change since Q4 Quarterly Bulletin (bps)	Change in Volume of New Business (%)[25]
Deposit Facility	-0.5	450	4	-	-
Deposits					
Household overnight	0.02	10	0.12	8	2.62
Household term	0.02	271	2.73	14	506
NFC overnight	-0.11	21	0.1	-1	0.5
NFC new term	-0.22	391	3.69	-1	330
Lending					
New Mortgage	2.68	151	4.19	8	18.5
New Consumer	7.72	26	7.98	34	-15.38
New NFC	3.22	247	5.69	-15	-33.33

Source: Central Bank of Ireland Credit and Banking Statistics

A higher cost of accessing bank credit dampens business activities such as investment and employment relative to what they otherwise might have been. However, there are factors that mitigate against the immediate impact of rate rises and increase the resilience of Irish businesses to monetary policy changes relative to the past. Notably, businesses have deleveraged substantially since the Global Financial Crisis, with lending by Irish banks to SMEs having decreased by over two-thirds since 2012. Even when lending to property-related sectors such as Construction and Real Estate is stripped out, outstanding business credit is less than half of what it was in 2012. Furthermore, the most recent Credit Demand Survey indicates that 40 per cent of Irish SMEs have no bank debt.

The cost of credit on new lending to businesses plateaued over the course of 2023, as the pace of ECB interest rate increases first slowed and then halted. In December, the weighted average interest rate on outstanding lending was 5.72 per cent, which compares with an average of 5.22 per cent for the euro area as a whole (Figure 1). While the cost of bank credit is higher for Irish businesses than the euro area average, that differential has decreased since ECB policy rates began to rise. This indicates that, on average, the rest of the euro area have seen a more pronounced pass-through of ECB monetary policy changes.

[25] Volume of new business in December 2023 compared to June 2022

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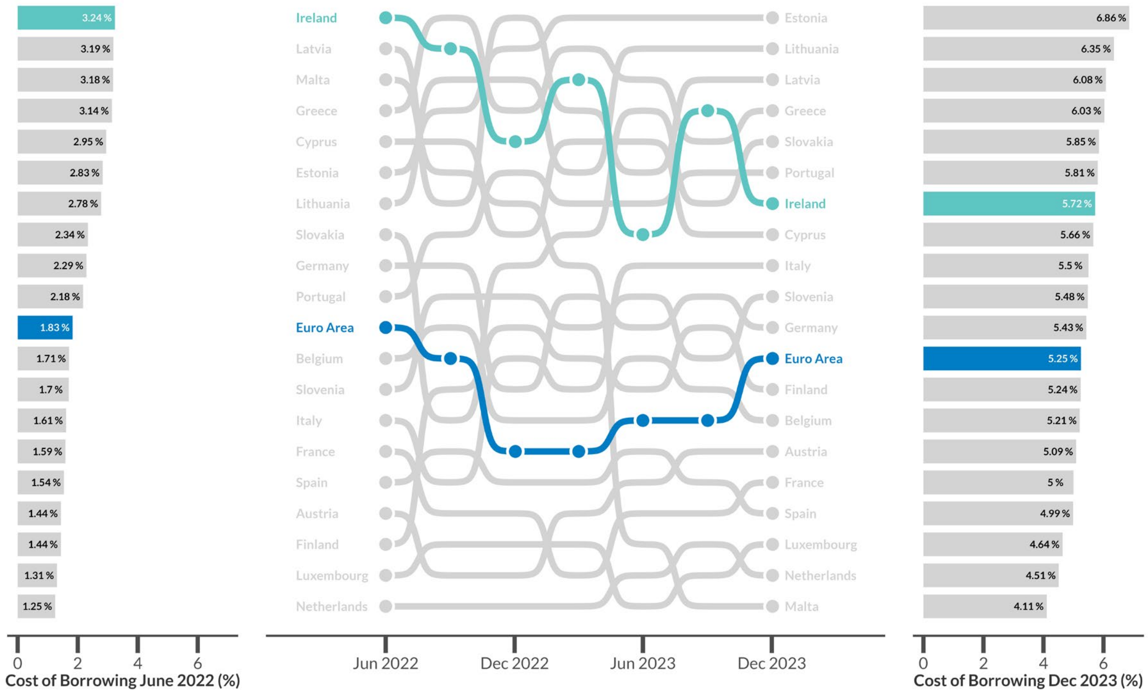
Interest rates on lending to businesses are higher in Ireland, but have increased less than the euro area average

Figure 1: Ranking of the cost of borrowing for corporations across the euro area



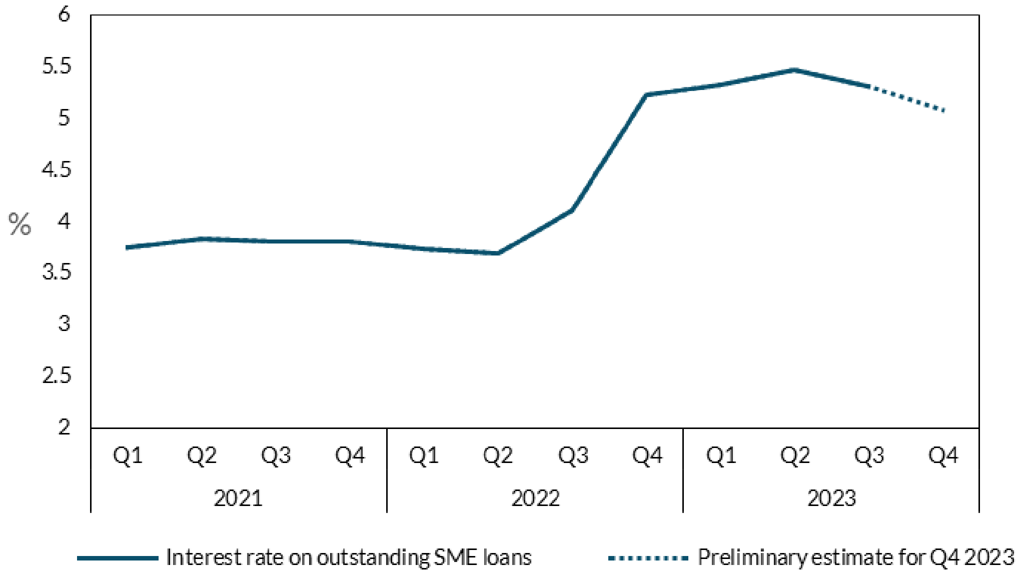
Source: European Central Bank MFI Interest Rate Statistics.

For SMEs, interest rates on outstanding lending rose by 161 basis between June 2022 and December 2023, and currently stand at an estimated 5.08 per cent (Figure 2). However, since June 2023, SME rates have also begun to level off.

The Bank Lending Survey suggests that there has been a tightening of credit standards generally, though credit standards on loans to SMEs specifically have not changed. Banks participating in the survey cited the general economic situation and outlook, as well as industry and firm specific factors, as being behind this tightening.

Interest rates on SME lending increased rapidly in the second half of last year, but have since plateaued

Figure 2: Interest rate on outstanding lending to SMEs



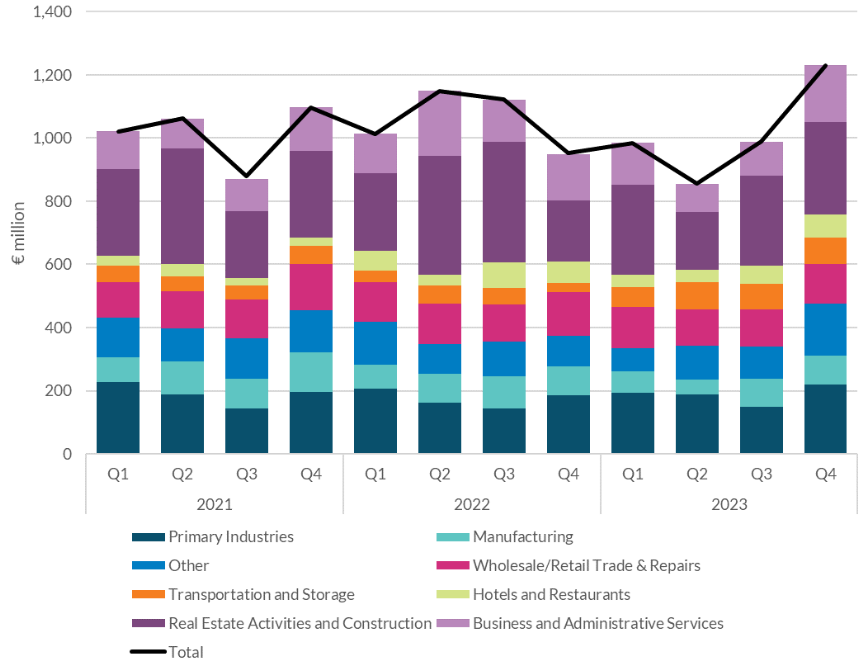
Source: Central Bank of Ireland Credit and Banking Statistics.
Notes: Preliminary estimate for Q4 2023 based on internal calculations using AnaCredit data.

Flow of Credit

New lending to businesses, which had been trending upwards following the lifting of pandemic-related restrictions, moderated over the course of 2023 in the wake of rising interest rates (Figure 3). Cumulative new lending totalled €13.7 billion over the year, compared to €17.6 billion in 2022. Fewer loans over €1 million drove this decline, while new lending of loans of a value less than €1 million increased by 10 per cent relative to the previous year.

Gross new lending to SMEs has proven to be resilient as interest rates have risen

Figure 3: Gross new lending by economic activity



Source: Central Bank of Ireland Credit and Banking Statistics.
Notes: Preliminary estimate for Q4 2023 based on most recent figures available at time of writing.

Looking at SMEs in particular, gross new lending has been less sensitive to interest rate increases. Cumulative new lending to SMEs in 2023 was €4.1 billion, compared to €4.2 billion in 2022. However, SME loan repayments exceeded drawdowns of new lending throughout 2023, such that total net lending for 2023 was -€804 million. Total outstanding lending to SMEs stood at €17.8 billion at the end of 2023 (Figure 4).

Real estate activities was the SME sector that saw the biggest decline in gross new lending in 2023. This reduction in lending is possibly related to the decrease in demand for commercial real estate space and construction following the pandemic and associated increase in home working for employees across various sectors. Combining real estate and construction activities, there was a decline of €152 million in gross new lending in 2023, relative to 2022. Net lending for real estate and construction was -€279 million for 2023.

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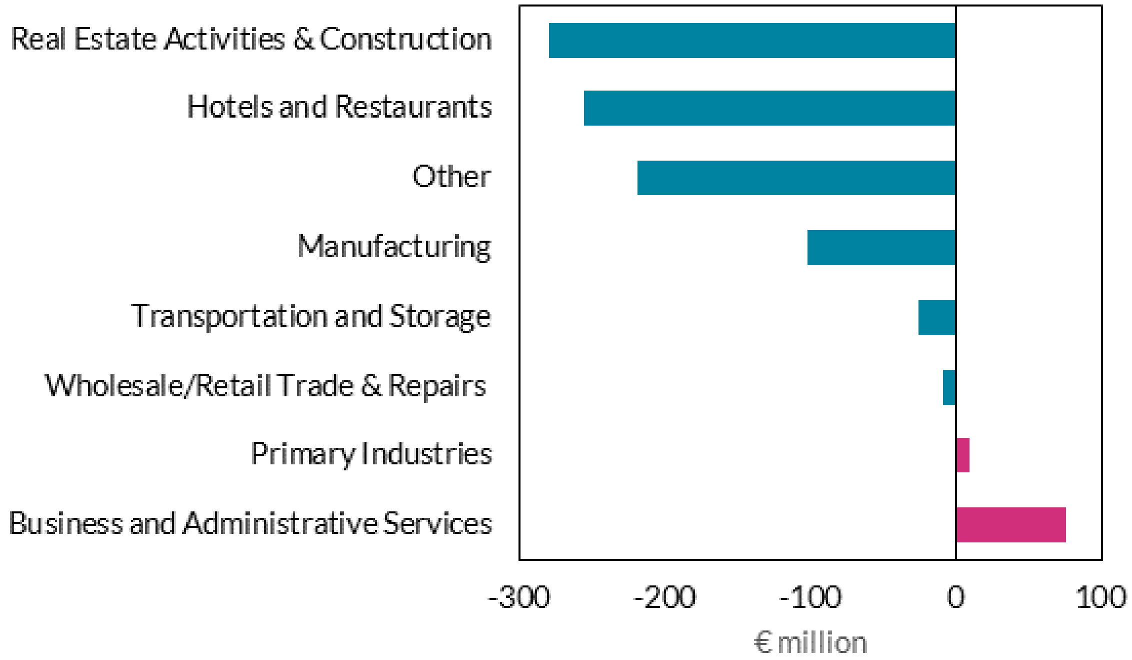
Net lending has decreased for most SME sectors

Figure 4: Net lending by economic activity



Source: Central Bank of Ireland Credit and Banking Statistics.
Notes: Preliminary estimate for Q4 2023 based on most recent figures available at time of writing.

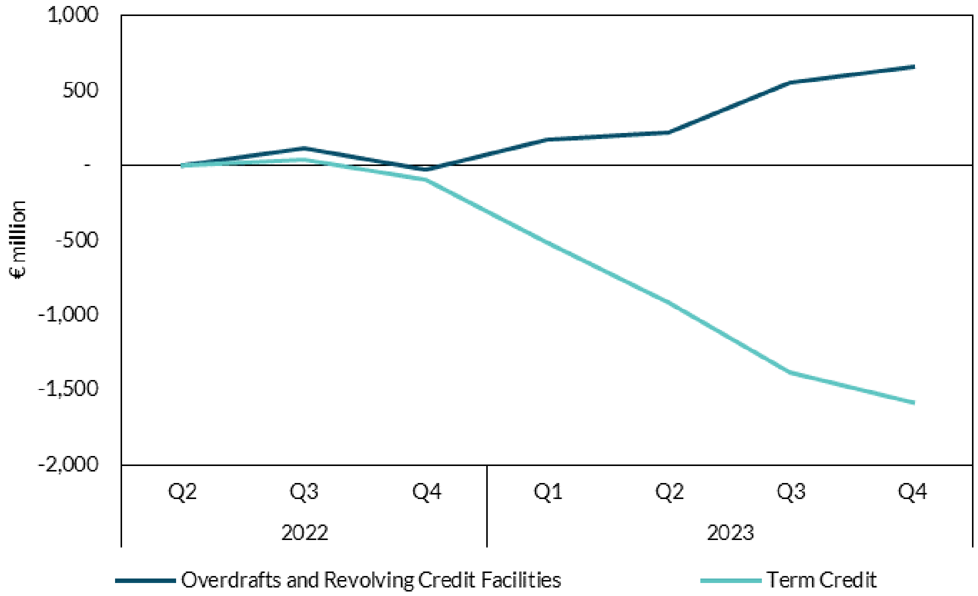
Revolving Credit Facilities and Deposits

Revolving credit and overdrafts are alternative forms of financing to traditional business loans and can be used as SME working capital. These forms of finance allow the borrower to withdraw and repay credit within a pre-approved limit during an agreed period of time. These credit facilities can be more flexible than a loan as they do not require a repayment schedule, allowing businesses to use available funds as they are needed during the agreed period. Lenders will usually charge a fixed amount for use of the facility as well as interest for funds used.

Although still a small portion of total SME lending, overdrafts and revolving loans have recently been an increasingly important source of SME funding. This funding type had declined during the pandemic, but has steadily risen in recent quarters. Total revolving credit and overdraft lending to SMEs fell from €1.4 billion in 2019 to €0.8 billion in 2020. Since Q4 2022, total lending of revolving credit and overdrafts has slowly increased back towards pre-pandemic levels, and stood at €1.5 billion at the end of 2023 (Figure 5).

Use of revolving credit and overdraft facilities by SMEs has increased as use of term credit has declined

Figure 5: Cumulative change in revolving credit facilities & overdrafts lending and transactions in term lending to SMEs since 2022 Q2



Source: Central Bank of Ireland Credit and Banking Statistics, Internal CBI calculations.
Notes: Preliminary estimate for Q4 2023 based on most recent figures available at time of writing.
Cumulative change in stocks does not account for changes due to reclassifications, revaluations or loan sales.

Accumulated deposits are another potential resource for SMEs. Between the beginning of 2021 and the end of 2022, deposits held by businesses with Irish banks increased by €17.6 billion to €73.8 billion. Over the course of 2023, deposits rose by only by €458 million, which was the smallest annual accumulation since 2012. Additionally, firms appear to have responded to increased interest rates on term deposits. Deposits with agreed maturities rose by €3.8 billion in 2023, while overnight deposits fell by €3.4 billion. Interest rates on deposits with agreed maturity of up to 2 years has increased from 0.07 per cent in July 2022 to 3.44 per cent in December 2023.

Credit Demand

In addition to the cost of credit, credit demand is also important for determining new lending. According to the Bank Lending Survey, demand for business credit increased slightly in Q4 2023, though demand from SMEs specifically has remained stable. Banks expect a further slight increase in demand for credit in Q1 2024, particularly for short term lending. Survey data from the firms' perspective, though less timely than the Bank Lending Survey, also show muted credit demand. The Credit Review found just 17 per cent of SMEs expected to borrow within the following six months, while the Department of Finance Credit Demand Survey cited a preference by the majority of SMEs for relying on internal funding rather than borrowing for investment.

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Box C: Is the Sahm rule useful for Ireland?

By Enda Keenan [26]

The Sahm rule is an economic indicator proposed to identify turning points in the (US) business cycle (Sahm, 2019). It uses changes in the monthly unemployment rate as it is considered to be a timely measure of economic activity and is less prone to revision than National Accounts indicators. Although the labour market is often considered to be a lagging indicator of economic conditions, alternatives such as quarterly GDP or output data are also published with a considerable lag and are subject to revision, particularly in the case of Ireland. Data available from the US Federal Reserve show the Sahm rule as a successful indicator in correctly signalling recessions from the 1970s onwards. The rule has been the subject of increased attention as global economies currently face a period slower growth. This *Box* calculates the Sahm Rule indicator for Ireland and discusses whether it is a useful recession indicator in an Irish context.

The methodology simply compares the three-month moving average unemployment rate to the lowest three-month average from the previous 12 months. A signal is triggered if the difference between these two data points is greater than the threshold amount of 0.5 percentage points. In an economic downturn, a snowball (or reinforcing) effect can occur where rising unemployment leads to depressed domestic demand and further unemployment. This provides the motivation for a threshold indicator, which in this case corresponds to the 0.5 percentage points proposed by Sahm (2019).

Calculating the Sahm rule indicator for Ireland requires using the monthly seasonally-adjusted unemployment rate from the CSO up to the most recently published benchmark LFS data. Estimates of the unemployment rate published by the CSO for months beyond those covered in the most recent quarterly LFS are uncertain and typically subject to revision.[27] This analysis limits the use of unemployment data to months in which the monthly rate incorporates quarterly LFS benchmarks in order to reduce potential false signals. [28]

As the Sahm rule is a relatively mechanical indicator, it is important to consider a number of potential drawbacks to this approach, such as the possibility of producing false signals. For

[26] Irish Economic Analysis Division

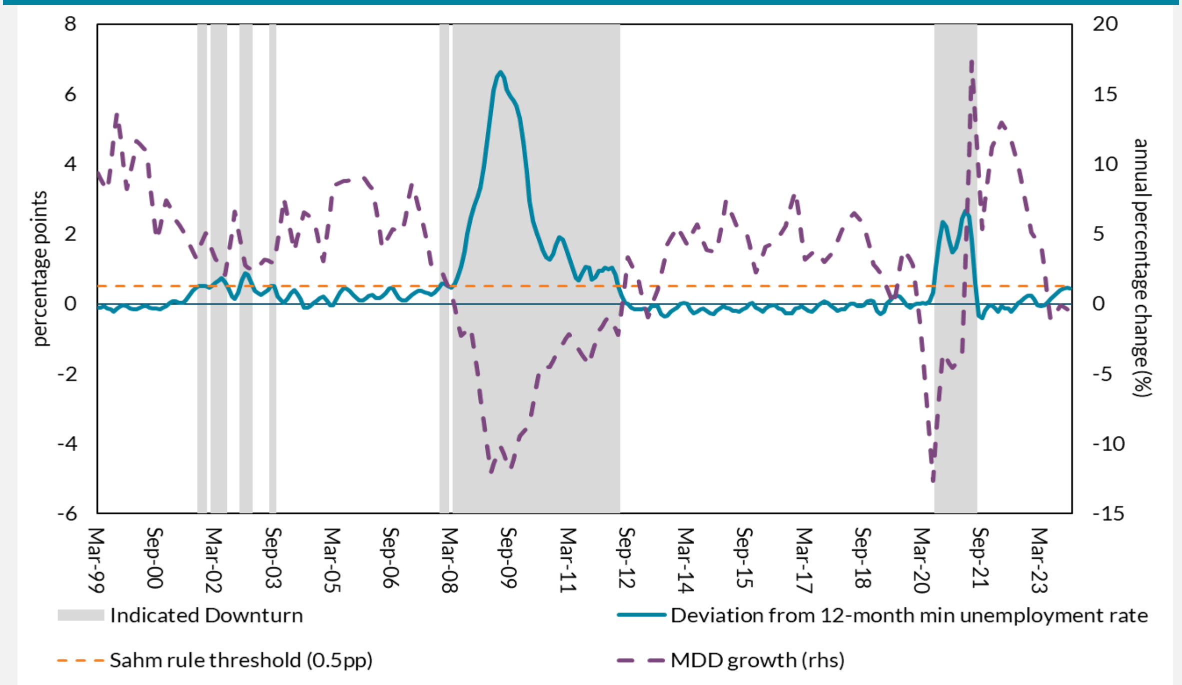
[27] The CSO monthly unemployment rate incorporates quarterly LFS data as benchmarks ensuring that the average of three months in a particular calendar quarter is equal to the corresponding LFS estimate. For months where LFS data are not yet available, the ratio of the LFS monthly estimate to the Live Register monthly estimate is forecast forward in order to extrapolate a monthly LFS estimate. See CSO background notes for further details.

[28] For example, the December 2023 monthly unemployment rate was revised from 4.9 per cent to 4.5 per cent when incorporating LFS Q4 2023 benchmark values.

example, as the Irish unemployment rate has been close to historic lows since mid-2022, an increase in it could be a reflective of a return to long-run equilibrium following a period of overheating. That such an increase may trigger the signal without an associated recession occurring may suggest the need for a higher threshold value at this time.[29] Furthermore, unemployment is often considered a lagging indicator, peaking after a recession has ended. Finally, while the indicator may signal a change in unemployment, it does not provide any indication of the likely scale of recession or ultimate increase in unemployment.

With these caveats in mind, Figure 1 shows the Sahm rule applied to Irish data from March 1984 to December 2023. The grey bars indicate months in which the threshold value of 0.5pp was exceeded. The indicator captures well-known downturns in the Irish economy over this period with breaches of the 0.5pp threshold corresponding to the currency devaluation (early 1990s), dotcom crisis (2001), global financial crisis (2008) and the pandemic period (2020). The global financial crisis saw unemployment rise from 6 per cent in June 2007 to 12.6 per cent in June 2008. The rule signalled a downturn in December 2007, prior to the declaration of a recession in September 2008 or national accounts data exhibiting two consecutive quarter declines in modified domestic demand (MDD) in Q3 2008.

Figure 1: Sahm rule for Ireland and annual modified domestic demand growth



Source: CSO, Eurostat and author's calculations
Note: Grey bars indicate months in which the threshold value of 0.5pp was triggered

[29] The 0.5pp threshold is chosen as changes of this extent in the US unemployment rate occurred only during or closely following recessions. While Ireland is a smaller economy in which migration and other demographic trends can have relatively greater effects on the unemployment rate, a different threshold value may be more relevant.

The pandemic was different to typical business cycle downturns given its abrupt nature in forcing the overnight closures of businesses across many sectors. While a recession indicator is not necessary to signal the potential economic dangers of such an event it is useful to assess its performance during this period as both worker flow out of the labour force and income support schemes distorted the unemployment rate.[30] The rule first signalled a downturn in July 2020, though many people had been out of work from March onwards. While the labour force contracted notably and ILO unemployment rose to 7.3 per cent, the signal still functions, albeit on a lagged basis.[31]

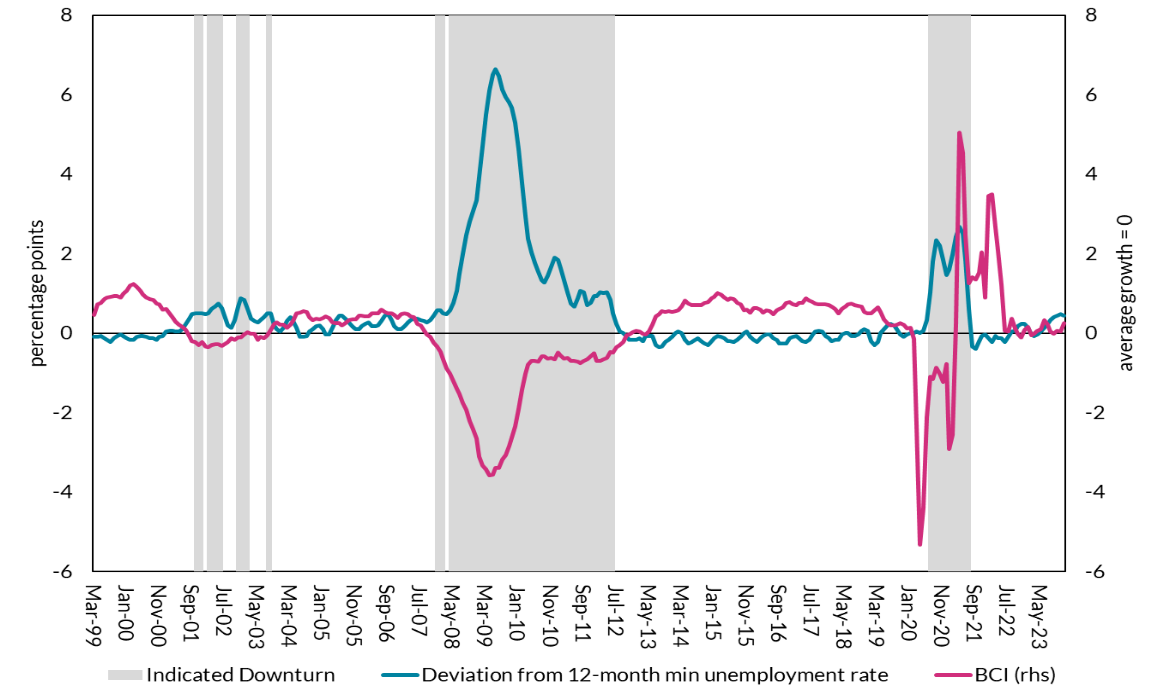
The use of a 0.5pp threshold for the Sahm rule was designed for a US labour market context. A number of studies have investigated using different threshold values or measures of labour market slack with varying degrees of success across OECD countries (Feng and Sun, 2021; Blanchflower and Bryson, 2022). Using a threshold value of 1 for Ireland would remove signal events such as the dotcom crisis in which unemployment rose to a peak of 5.4 per cent and various measures of economic output remained positive, despite the international slowdown (Figure 1).

The Sahm rule may prove a useful indicator to monitor alongside other existing tools. For instance, comparison with the Business Cycle Indicator (BCI) shows that both have a close and inverse relationship (Figure 2). Periods in which the BCI exhibits below average growth broadly coincides with periods in which Sahm rule has signalled an economic downturn. The latest BCI shows that the pace of growth in the domestic economy slowed as values remain positive but close to zero in December. Similarly, the Sahm rule value for December was 0.43pp suggesting that the figure is close to but below the threshold that would signal an economic downturn. Typically, monthly unemployment data incorporates LFS benchmarks on a t+30 day basis. This is prior to availability of all BCI components (t+38 days) and provisional MDD data (t+60 days).

While a number of methodological issues must be considered including its limitation to labour side of the economy, the rule may be a useful first-stage signal alongside wider economic indicators. Three quarters of consecutive declines in MDD up to Q4 2023 suggests the Irish economy has recently entered a technical recession. Quarterly Bulletin analysis attributes this decline to lower physical investment by MNEs in the State following extraordinarily high growth in 2022. Other indicators such as employment and tax receipts point to positive output growth in 2023, albeit at a slower pace than in 2022. In this respect the Sahm rule indicator not breaching the 0.5 threshold in 2023 corresponds with the general perspective on positive economic activity in 2023.

[30] See Byrne and Keenan (2020) "Measuring and Forecasting the Unemployment Rate during COVID-19" Central Bank of Ireland Quarterly Bulletin, Q4 2020 Box D
[31] Using the COVID-adjusted monthly unemployment rate instead of the ILO rate would have seen a signal triggered in March 2020.

Figure 2: Sahm Rule and Business Cycle Indicator



Source: CSO, Central Bank of Ireland and author's calculations
Note: Grey bars indicate months in which the threshold value of 0.5pp was triggered

Box D: New changes to trading arrangements for Irish exporters to the UK

By Thomas Conefrey

On 31 January 2024, the UK introduced customs and Sanitary and Phytosanitary (SPS) requirements on all imports into Britain from the EU including Ireland, as contained in its new Border Target Operating Model (BTOM).[32] The new arrangements arise as a result of the UK's exit from the European Union on 31 December 2020 and the subsequent implementation of the Trade and Cooperation Agreement (TCA) between the EU and UK. The controls introduced in January follows five previous deferments by the UK government and are the first phase of measures to be implemented this year, with further changes due in April and October 2024. The importance of the UK as a trading partner for Ireland has been in long-run decline since the 1970s and this reduction in trade exposure has continued since the 2016 referendum. At the same time, the UK remains Ireland's third largest trade partner for goods and second largest for services. The purpose of this *Box* is to outline the nature of new trade restrictions coming into force this year, explain the sectors of the Irish economy most likely to be negatively affected and discuss the

[32] Sanitary and Phytosanitary (SPS) requirements refer to rules on food safety and animal and plant health standards designed to protect human, animal or plant life.

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broader potential macroeconomic implications of the EU-UK economic relationship following the implementation of Brexit.

New Restrictions on Exports from Ireland to the UK from January 2024

Starting on 31 January 2024, Irish traders exporting goods to Great Britain or via the UK landbridge to the rest of Europe must comply with new UK import rules.[33] The rules are in addition to the existing customs obligations that have applied to Irish businesses moving goods to, from or through Great Britain since 1 January 2021.[34] In summary, the rules applied in January introduce three new important requirements for Irish traders:

- Pre-notification requirements for live animals, animal products and high and medium risk category plant products;
- Full customs controls;
- Health certification on medium risk animal products, plants, plant products and high risk food and feed of non-animal origin.

Among the practical implications of the new arrangements, Irish exporters are required to ensure that their GB importer or GB-based agent has registered with the UK Customs Declarations System (CDS) and has made a customs declaration. The rules also require that certain products have an Export Health Certificate, including when using the GB landbridge.[35] The new rules are most onerous on food, animals and products of animal origin.

Further changes are envisaged in the UK's BTOM for later in 2024. In particular, from October, it provides for the introduction of documentary and risk-based identity and physical checks on medium risk animal products, plants, plant products and high risk food and feed of non-animal origin from the EU, including from the island of Ireland. Taken together, the changes imply an additional administrative burden, delays and associated cost for Irish firms exporting goods to Great Britain or transporting goods to Europe via the landbridge.[36]

[33] The UK landbridge describes the route that connects Irish importers and exporters to the EU single market and wider international markets using the UK's road and port networks.
[34] Details on the new arrangements in place since January 2024, as well as further changes planned during 2024 are set out here.
[35] There has been a significant reduction in the use of the UK landbridge by Irish traders. Traffic on ROI-GB routes has declined by roughly 20 per cent since 2020, while traffic on ROI–EU routes has doubled. According to the Irish Maritime Development Office, the decline in the use of the UK landbridge has been the main reason for these changes. Although traffic on the landbridge has reduced, it continues to be used particularly for time-sensitive products. As of Q4 2023, ROI – GB traffic represents two thirds of all ROI Roll on/Roll off (RoRo) traffic.
[36] The new UK requirements do not apply to goods moving between Ireland and Northern Ireland.

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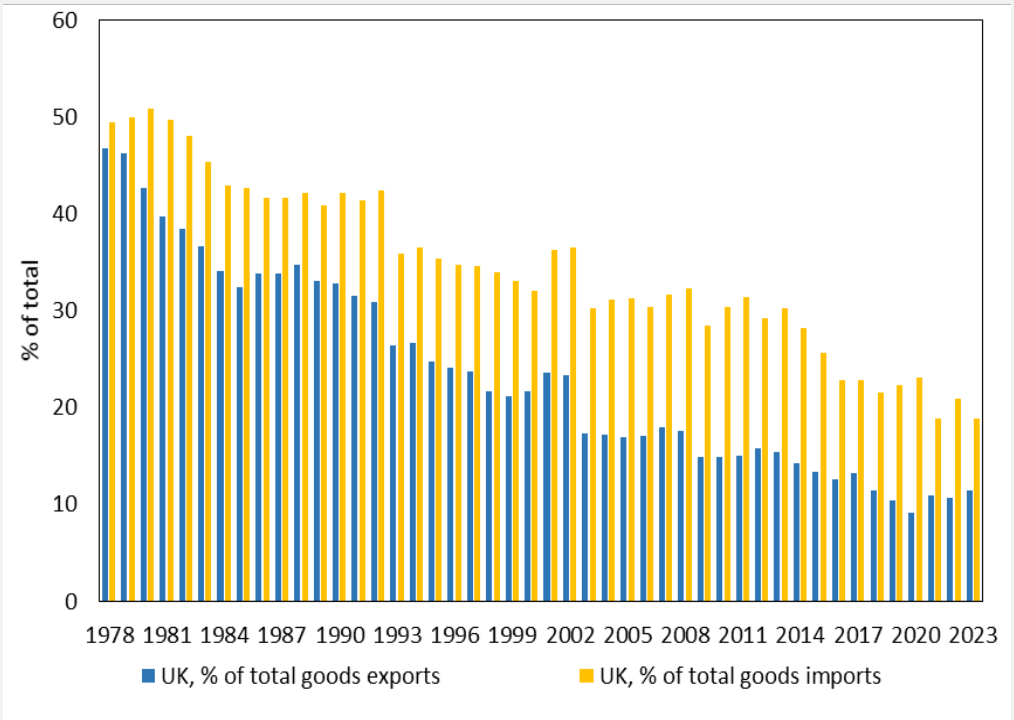
Trade exposure of Ireland to the UK has declined steadily over time but it remains an important market

Figure 1: UK as a percentage of overall goods exports and imports in Ireland



Source: CSO

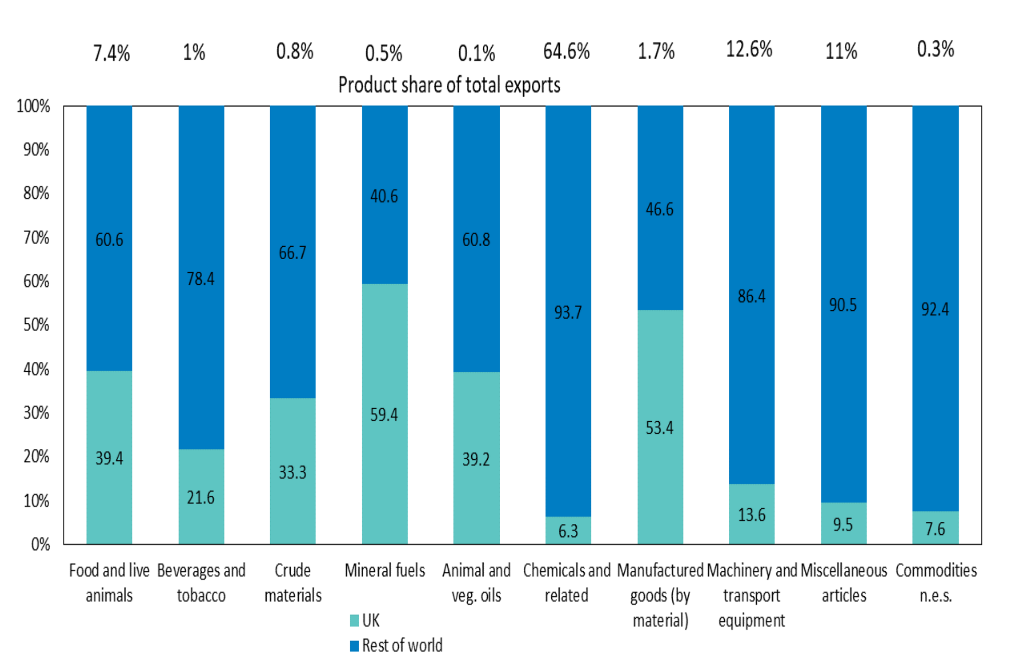
What sectors and firms are most exposed to the new UK rules?

Taking aggregate goods exports and imports, the exposure of the Irish economy to the UK has declined steadily over time (Figure 1). In the late 1980s, the UK was the destination for almost half of Ireland's goods exports and a similar proportion of Ireland's imports were sourced in the UK. By 2023, the proportion of goods exports sold to the UK had declined to around 11 per cent. The proportion of imports sourced in the UK has also fallen but by less than the drop in exports – in 2023 the UK was still the source for around one-fifth of Irish imports, compared to over 50 per cent in the late 1970s.

The relative importance of the UK can be assessed by examining the proportion of exports sent to that market compared to the rest of the world. Looking at market share by commodity group (Figure 2), the exposure of the agri/food sector emerges clearly. The sector accounts for just over 7 per cent of total goods exports and of these, 40 per cent go to the UK. *Chemicals and related products* make up by far the largest component of overall goods exports in Ireland, accounting for just under two-thirds of the total. This product group has the lowest UK market share with less than 7 per cent of its exports going to that market (Figure 2). Other products such as *Mineral fuels* and *Manufactured goods (classified by material)* have a high UK market share of over 50 per cent, but these commodities account for a relatively small proportion of overall exports (0.5 per cent and 1.7 per cent respectively).

Almost 40 per cent of food and live animal exports are sold to UK market

Figure 2: Export market share by commodity group (2023)



Source: CSO

Since larger firms tend to have a more diversified export base and are likely to be better equipped to adjust to the new customs and SPS rules being introduced on Ireland-UK trade, it is useful to examine how exports to the UK vary by firm size, where size is measured by number of employees in the firm. This is possible using data published by the CSO up to 2018. The vast majority of firms in Ireland exporting to the UK are SMEs, representing 97 per cent of the total. Micro enterprises (firms with fewer than 10 employees) alone make up over half the number of firms exporting to the UK (Figure 3). Despite accounting for the overwhelming majority of firms exporting to the UK, SMEs represent a smaller proportion of the overall value of Ireland's exports to the UK (54 per cent). Large firms which make up just 3 per cent of all firms exporting to the UK were the source of 44 per cent of the value of exports.

Focussing on the agri/food sector because of its significant exposure to the UK, SMEs account for 36 per cent of the exports of this sector with large firms making up the remainder (Figure 4). The *Wholesale and Retail sector* also has considerable exposure to the UK with 38 per cent of its exports going to that market. This sector is dominated by SMEs with these firms accounting for 78 per cent of the exports from the sector to the UK. Exports from the chemical and pharma sector to the UK (around one-third of total UK exports) are dominated by large firms accounting for over 90 percent of exports.

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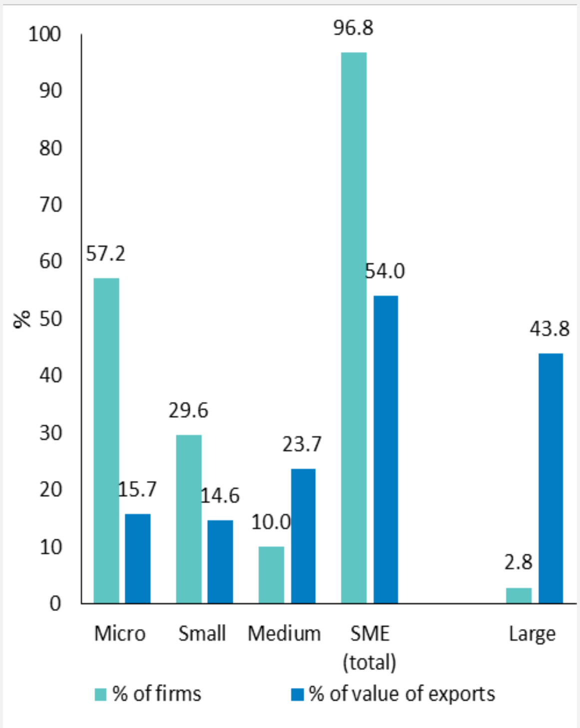
SMEs account for 97 per cent of firms exporting to the UK

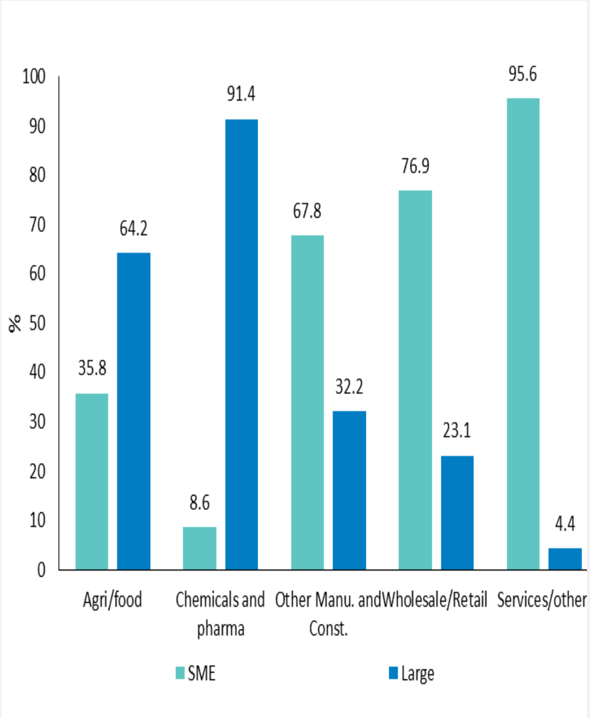
Figure 3: Exports to UK by size of enterprise



Source: CSO

Large presence of SME exporters in wholesale/retail and agri/food sectors

Figure 4: Exports to UK by size of enterprise and sector



Source: CSO

Implications of the new trading regime

The changes to EU-UK trading arrangements in 2024 introduce new complexity and cost for Irish firms exporting to the UK. This is especially the case for the agri-food and wholesale and retail trade sectors where SMEs have a significant presence The ultimate impact of the changes across sectors will depend on the scale of the additional costs faced by particular firms and the extent to which these can be absorbed into profit margins or passed on the final consumer abroad.

A significant proportion of Ireland's trade with the UK is accounted for by the pharma sector (around one-third) which has grown rapidly over the last decade and produces high-value products. As a result, it is possible that overall exports to the UK could continue to grow even with a decline in agri-food exports. Nevertheless, a reduction in these exports is likely to negatively affect economic activity and employment in Ireland, in particular in regions outside the main urban areas where employment-intensive agri/food activity is concentrated.

More broadly, as the implications of the UK's exit from the EU and the effects of the implementation of the TCA unfold over time, the negative macroeconomic effects of the new arrangements will continue to materialise for the UK and the Irish economies.

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Although the TCA allowed for a continuation of tariff and quota-free trade between the EU and UK, it introduces new non-tariff barriers including more stringent customs checks, documentary compliance, rules of origin requirements and other barriers. This *Box* has focussed on the implications for Irish goods exports to the UK in the light of the changes being implemented this year, however, these non-tariff barriers present an impairment to EU-UK trade more widely, including their effects on imports and on services trade.

The ultimate long-term economic implications of these changes will take time to fully materialise. Some sectors are adjusting more quickly and the economic loss will be relatively contained but other parts of the economy will face greater challenges, as illustrated in this *Box*. As recent analysis has demonstrated, by reducing trade, investment and productivity, Brexit is estimated to have already lowered UK economic activity relative to what would have been expected if EU membership was maintained. This drag on growth is likely to persist over the long term. The spillover from this expected weaker UK economic performance to Ireland and the EU, as well as the direct effect of the new trade restrictions on Ireland-UK trade, will negatively affect economic activity in Ireland over the coming years. Through these channels, previous analysis for Ireland (Conefrey and Walsh, 2020) estimated that a Free Trade Agreement (FTA) – similar to the EU-UK TCA – would reduce Irish output by around 3.5 per cent after 10 years.

Box E: What does survey evidence tell us about Irish consumer's earnings expectations?

By Enda Keenan and Zivile Zekaite[37]

Over the course of 2023, the Central Bank of Ireland Expectations Survey (CBIES) gauged consumers' economic expectations based on a representative sample of the population in Ireland. This *Box* focuses on respondent's earnings expectations over the short (one-year ahead) and medium-term (three-years ahead) horizon and, in conjunction with their expectations for inflation, what their expectations for real earnings growth are. Using regression analysis based on the data collected, we identify the factors explaining nominal earnings expectations, including socio-demographic characteristics and other economic expectations. This work updates and extends previous survey analysis for H1 2023 with new data collected in September and December 2023.[38]

Qualitative earnings expectations over the next 12 months have risen steadily since May. The share of respondents expecting their earnings to increase rose from 49 per cent in May

[37] Irish Economic Analysis Division
[38] The survey is undertaken on behalf of the Central Bank of Ireland by Ireland Thinks. The total number of survey responses was 1,060 in September and 1,517 in December.

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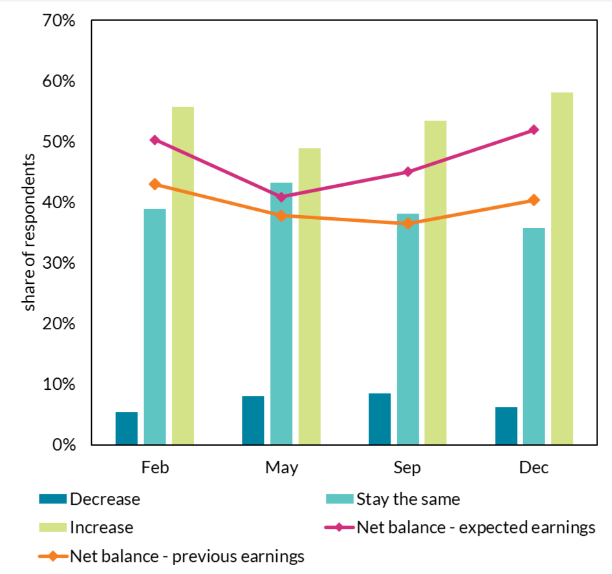
to 58 per cent in December (Figure 1). The difference between the proportion of respondents expecting their earnings to rise and the proportion of respondents expecting earnings to decline (the net balance) stood at 51.9 per cent in December up from 41 per cent in May. Earnings expectations appear to be positively associated with past (perceived) earnings growth (orange line in Figure 1). Additionally, respondents working in the low-consumer facing services sector were most optimistic about their future earnings, while those working in the manufacturing were most pessimistic

More respondents expect nominal earnings to increase over the coming year

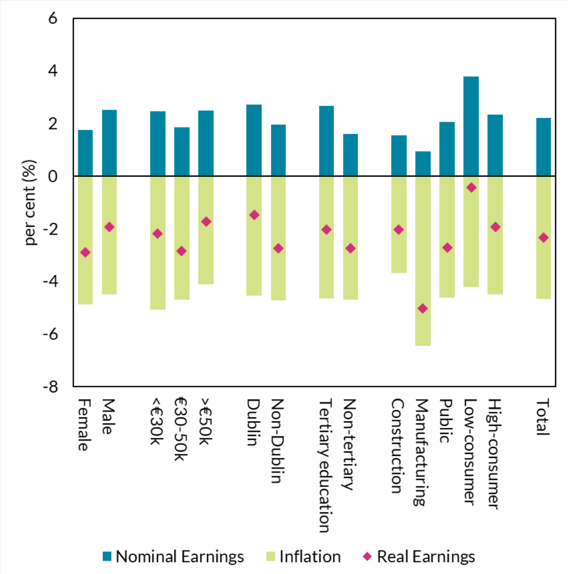
Figure 1: Qualitative earnings expectations (1-year ahead)



Source: CBIES
Note: The difference in the balance statistic for expected nominal earnings are statistically significant across survey waves
Note: To limit the effects of outliers, data are winsorized at the 2nd and 98th percentile. Weights are used to ensure the representativeness of the sample.
The net balance is the difference between the positive and negative responses.

Relatively stronger earnings expectations amongst males and workers in low-consumer facing-sectors

Figure 2: Real earnings expectations by socio-demographic characteristics (One-year ahead) – December 2023 survey



Source: CBIES
Note: Weights are used to ensure the representativeness of the sample. High-consumer facing sectors includes Retail, Accommodation. Low-consumer facing services includes ICT, Financial and Prof sectors. Public includes Education, Health and Public Admin. Expected inflation is expressed in negative terms.

On a quantitative basis, average nominal earnings expectations for the next 12 months have also increased from 1.6 per cent in May to 2.2 per cent in December, albeit are unchanged when compared to February 2023. As inflation expectations declined steadily throughout 2023 (see Figure 29), real earnings expectations, the difference between nominal earnings expectations and inflation expectations, gradually increased but remained negative in December survey results. In December, average real earnings expectations over the next year stood at -2.3 per cent, up from -4.2 per cent in September. Relatively higher

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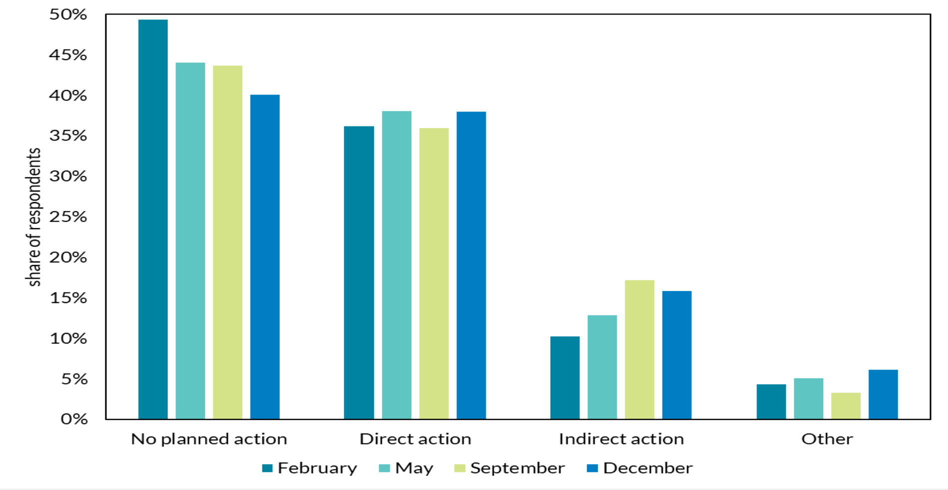
expectations for real earnings were observed amongst males and Dublin-based respondents as well as those with gross annual income above €50,000, tertiary-level qualifications, and workers in low-consumer facing services sectors (Figure 2). Even though short-term earnings expectations remain negative in real terms, sentiment appears to be improving. A gradual increase in expected purchasing power is broadly consistent with current *Bulletin* projections, as moderating headline inflation and strong nominal earnings developments allow for a degree of real wage catch-up to occur from 2024.

Respondents were asked about their expectations for wage catch-up with inflation over the next three years. More specifically, we ask whether respondent's earnings would be sufficient to afford current standard of living in three years' time. In December, 41 per cent stated that their earnings would be just about sufficient to afford the same quantity of goods and services with a further 20 per cent expecting future earnings to be more than sufficient. Combined, over 60 per cent of respondents expect their real earnings to either remain at the same level or be higher three years from now. Wage-catch up expectations became more pessimistic as the year progressed, with the share of respondents expecting future earnings to be insufficient increasing from 34.1 per cent in February to 39.7 per cent in December. Greater optimism regarding real earnings expectations over the next year relative to three years' time suggests more subdued expectations over the medium-term horizon. This could reflect currently much lower inflation than at the start of 2023, providing workers with less leverage when negotiating higher pay in more distant future.

Share of respondents planning direct action for wage increase has remained relatively unchanged

Figure 3: Share of respondents planning future action to seek higher earnings



Source: CBIEES
Note: To limit the effects of outliers, data are winsorized at the 2nd and 98th percentile. Weights are used to ensure the representativeness of the sample.
Direct action refers to respondents selecting "request wage increase", "change job" or "work more hours". Indirect action refers to respondents who expect a trade union to act on their behalf. In both cases the timeframe for expected action is the next three months.

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With inflation declining but still remaining high in 2023, there has been a decline in the share of respondents not planning to take an action in near future to seek higher earnings. Just over 40 per cent responded that they have no planned action to seek higher earnings, down from 44 per cent in September and 49 per cent in February (Figure 3). This change mostly reflects the share of respondents expecting unions to demand higher wages on their behalf (indirect action); however, the share remains relatively small (14.4 per cent). The share of respondents planning to take direct action (request increase, change job or work more hours) has remained broadly unchanged during 2023. Overall, survey evidence up to December 2023 does not signal increasing risks of a wage-price spiral whereby higher inflation would lead to unsustainably higher wage demands from workers, which in turn, would feed into inflation. However, this risk should continue to be monitored.

As earnings expectations can influence inflation and consumption, it is important to understand their determinants (Brandao-Marques et al, 2023). In that vein, we combine data from all four survey waves for a regression analysis to assess which demographic factors and economic expectations help explain quantitative nominal earnings expectations one year ahead. Figure 4 presents marginal averages of expected earnings for selected characteristics together with the error bands, keeping other earnings determinants constant at their sample averages. We find that males have significantly higher expected earnings than females. Higher level of education and higher income are also associated with significantly higher expected earnings. Workers planning to take a direct action to seek higher earnings expect significantly higher earnings compared to those who do not plan action or plan to take an indirect action. Perceived earnings growth in the previous 12 months is an important determinant of expected earnings: those who experienced earnings growth have 3 (1.6) percentage points higher expected earnings growth compared to those who reported a decrease (no change) in their earnings. In line with Phillips curve research and international survey expectations analysis, respondents who expect unemployment to increase over the coming year have significantly lower earnings expectations than those who expect unemployment to stay the same or decrease. We do not find a statistically significant role for inflation expectations in explaining nominal earnings expectations based on our analysis of the 2023 data.[39]

[39] We estimate the same regression for qualitative earnings expectations and find similar results.

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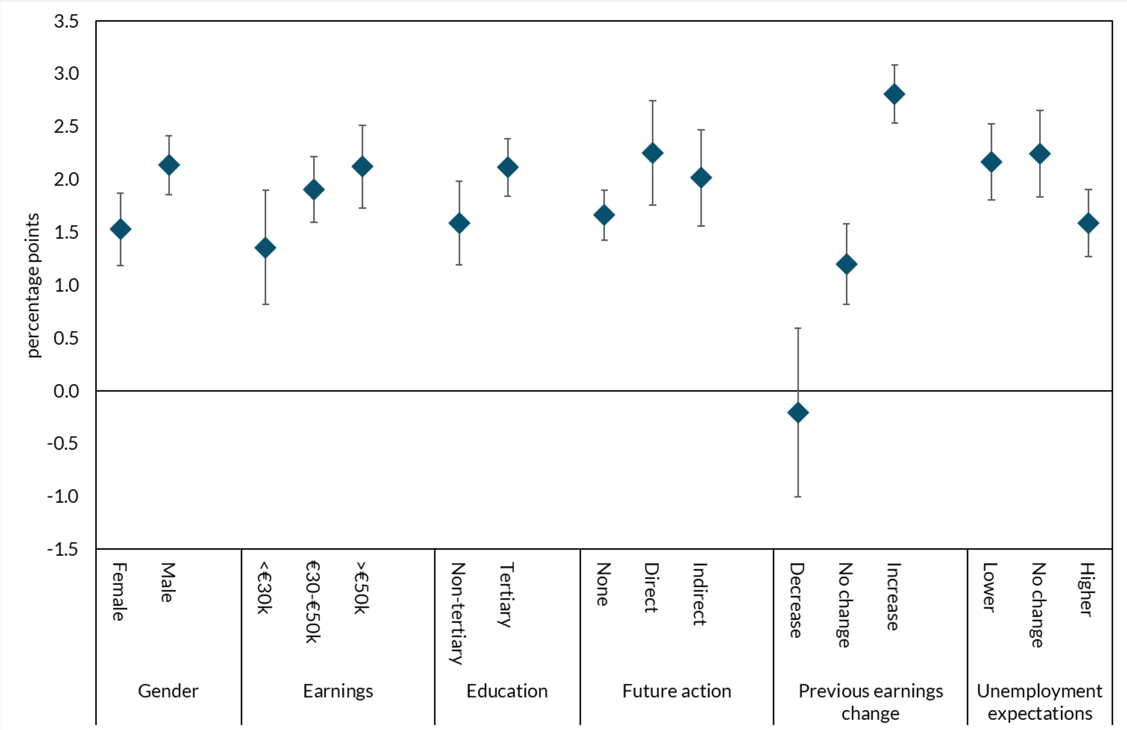
Persons who received a previous earnings increase have a higher expected earnings expectations - holding all other factors constant

Figure 4: Adjusted means of quantitative nominal earnings expectations across demographics and economic expectations



Source: CBIEES
Note: Regression analysis uses robust errors. We also control for age, region, sector of employment, home ownership and include dummy variable for each survey wave.

Box F: Diverging measures of labour costs: What to monitor for inflation purposes?

By Enda Keenan and Martin O'Brien[40]

Recent analysis has outlined how the interaction of profits, productivity growth and labour costs influences domestically-driven inflation (O'Brien, 2023). For the disinflation currently underway in the Irish economy to proceed as expected, anticipated higher wage rates and other labour costs need to be accompanied by commensurate productivity growth and changes in profit margins. This *Box* outlines overall labour cost trends in recent quarters, noting the relative importance of wages and non-wage labour costs. We also discuss the divergence between labour costs on a per-employee and a per-hour-worked basis and the

[40] Irish Economic Analysis Division

related implications for the outlook of wages, other labour costs and inflationary pressures over the forecast horizon.

Wage costs account for 84 per cent of total labour costs on average with the remainder made up of costs to the employer such as PRSI and private pension contributions (non-wage costs). Methodological issues regarding the Employment Wage Subsidy Scheme (EWSS) and the scale of take-up during the pandemic saw notable shifts in the growth rate of non-wage costs, particularly at the sectoral level.[41] Even as these distortions have washed out of more recent data, sectoral breakdowns show that the share of non-wage costs can vary considerably across sector with larger shares evident in the highest-earning sectors, such as ICT (23 per cent) and Finance (20 per cent) (Figure 1). These relatively higher non-wage costs may reflect efforts by firms to attract or retain highly-skilled or specialised workers through non-statutory contributions or benefit in kind while a continuing tight labour market may see further increases in both wage and non-wage costs to avoid losing staff to competitors.[42] The Eurostat Labour Costs Index (LCI) measures changes in employer-reported wage and non-wages costs on a per-hour basis with total labour costs in Ireland increasing annually by 6.9 per cent in Q3 2023 (Figure 2). Wage costs rose by 6.3 per cent relative to 10.6 per cent growth in non-wage costs, though non-wage costs may still be affected by distortionary issues in annual comparisons.[43] The pace of increase in non-wage and overall Irish labour costs has typically been above euro area average recently (Figure 2). However, in level terms, non-wage labour costs still make up a smaller proportion of total labour costs in Ireland than in the euro area as a whole (Figure 1). Announced taxation changes such as higher employer PRSI rates from October 2024 and the proposed pension auto-enrolment scheme would add to non-wage cost levels in Ireland, though growth in the share of total labour costs may be constrained by rises in wage costs such as minimum wage adjustments to a living wage and related second-round effects along the income distribution.[44]

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[41] See Box A in "Earnings growth under high inflation" (Boyd et al, 2023) Central Bank of Ireland Quarterly Bulletin Signed Article QB3 2023.
[42] Non-statutory social contributions: payments made by enterprises on behalf of their employees which include pension fund contributions, life assurance premiums, income continuance insurance as well as other employee related payments. Benefit in kind includes items such as shares or share options, subsidised crèche or canteen, subsistence claims paid to employees to cover meals if they are away for work, company car, staff discounts on company products.
[43] The LCI is based on data generated by the CSO EHECS quarterly survey and as such labour cost levels and growth rates may differ to those derived from GVA and other National Accounts data. Additionally, LCI data is seasonally and calendar-adjusted.
[44] Employer PRSI class A rate will increase by 0.1 per cent to 4.1 per cent in addition to changes across all classes (Advance notice for 2024)

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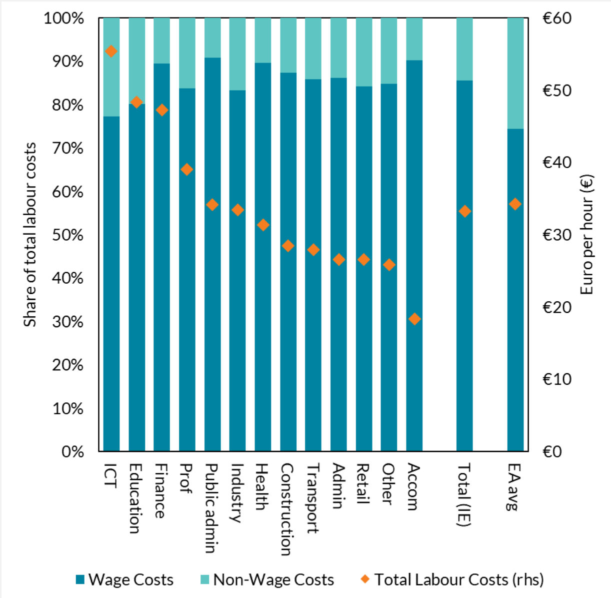
Higher earning sectors exhibit higher shares of non-wage costs

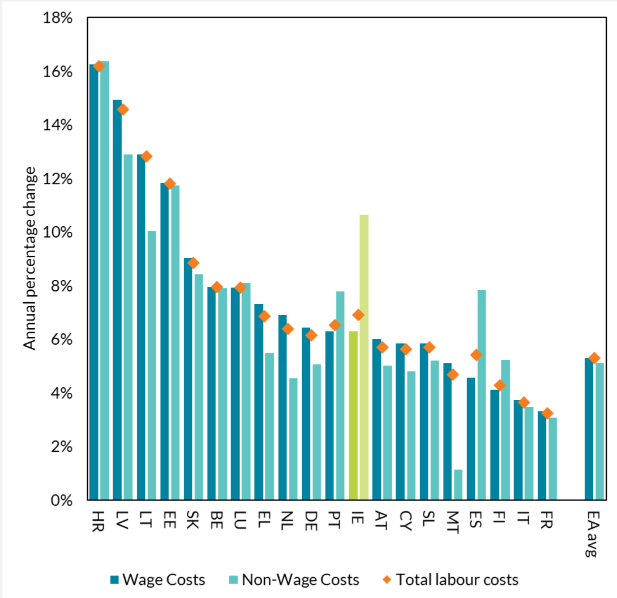
Figure 1: Share of wage and non-wage costs by Irish economic sector (Q4 2023)



Source: CSO; EHECS
Note: Data for euro area average are for 2022

Non-wage costs in Ireland are growing faster than wage costs

Figure 2: Annual growth in wage and non-wage costs (Q3 2023)



Source: Eurostat
Note: These data are sourced from employer surveys.

Labour costs can be calculated on either a per-hour or per-employee basis. Growth in these measures typically exhibit a close alignment to one another. However, since the onset of the pandemic the strong growth in employment has coincided with an initial sharp reduction and subsequent anaemic recovery in hours worked. The persistence of this deviation between hours worked and employment growth has meant average hours per employee remain below 2019 levels. As a result, hourly labour costs have increased for businesses, but declines in average hours worked continue to damp aggregate earnings growth on a per employee basis. On the basis of National Accounts data (in contrast to employer-survey data), the domestic-dominated sectors annual growth in labour costs per employee in 2023 has averaged 2.9 per cent relative to 4.8 per cent in labour costs per hour (Figure 3).[45] If this divergence persists as employment growth eases then inflationary pressures could be maintained, as businesses seek to adjust to higher per hour labour costs. At the same time, the extent of real wage catch-up and subsequent increase in household disposable income supporting domestic demand could be more limited.

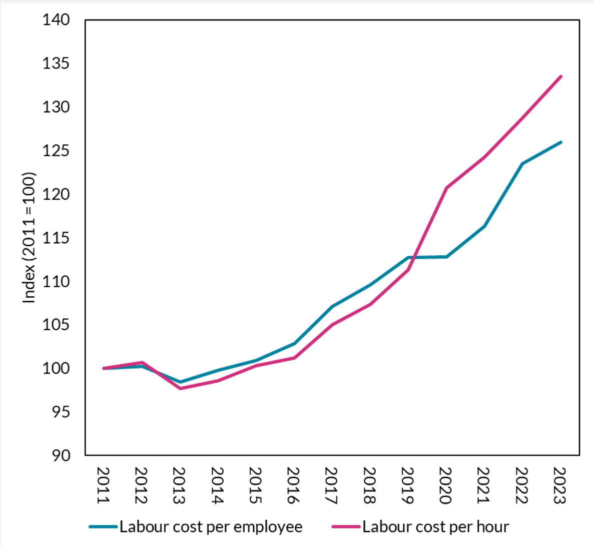
A decline in average hours worked is a feature of many euro area labour markets, with corresponding issues for labour costs on a per employee and per hour basis. National

[45] We estimate the number of employees in domestic sectors from Labour Force Survey data using the same NACE codes for Gross Value Added (01-18, 22-25, 27-30, 33-56, 59-60, 64-75, 78-98). This sectoral approach may be an underestimation as CSO Business in Ireland 2021 uses firm level data to state foreign-owned enterprises employ 28 per cent of employees relative to 14 per cent in the above method.

Accounts data for Q3 2023 show that labour costs per hour for Ireland, inclusive of the multinational-dominated sectors, increased by 3.5 per cent annually with larger growth rates evident in the five largest euro area economies (Figure 4). Labour cost per employee or compensation per employee (CPE) increased comparatively by 1.9 per cent. A convergence in average hours worked towards pre-pandemic levels would alleviate discrepancies between labour cost measures. However, analysis to date suggests that hours worked developments across Europe since 2020 may be structural and pre-date trends observed in the aftermath of the pandemic (Astinova et al, 2024).

Labour cost measures have diverged as employment growth has outstripped that of hours worked

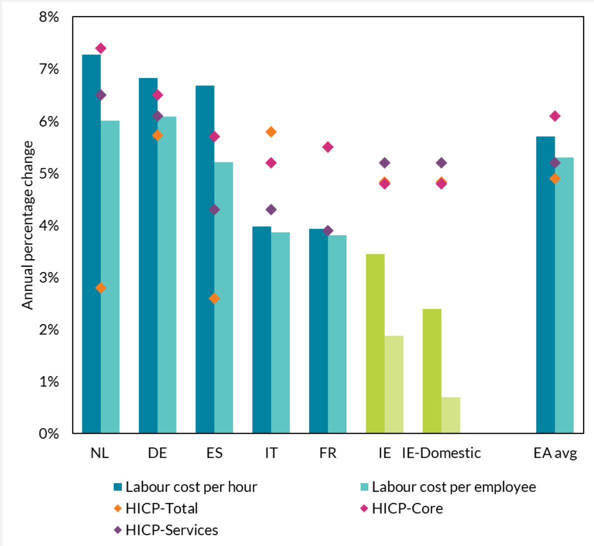
Figure 3: Indexation of annual average labour cost per employee and labour cost per hour in domestic sectors



Source: CSO

Irish labour cost growth is lower relative to average euro area developments

Figure 4: Annual change in labour costs and HICP measures (Q3 2023)

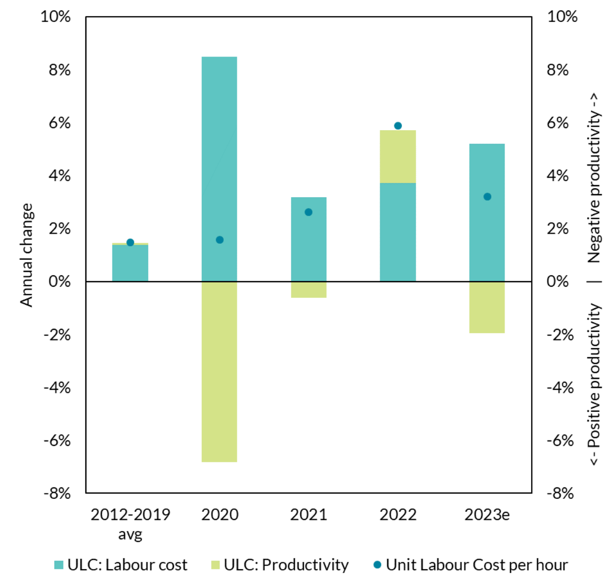


Source: CSO and Eurostat
Note: These data are sourced from National Accounts

Minimising the extent to which rising hourly labour costs passes through to consumer prices charged by businesses requires those rising costs to be absorbed through either higher productivity or lower profit margins. Unit labour costs (ULC) are a summary measure combining the average cost of labour per unit of output and the productivity of labour. Growth in ULC arises where labour costs are rising faster than labour productivity. The pace of increase in ULC per hour in 2023 is estimated to have eased to 3.2 per cent, still above but converging toward its average growth rate over the 2012 to 2019 period (Figure 5). In contrast to the experience of that period, ULC growth in 2023 saw the higher growth in labour costs per hour (up 5.2 per cent) partially offset by productivity growth (down 2.0 per cent).[46] Domestic inflationary pressures in the presence of higher labour cost are also a function of the capacity of businesses to absorb those higher costs through lower profit margins. Inflationary pressures during 2022 reflected a rise in both ULC and in unit profits, a proxy for profit margins (Figure 6). The disinflation that began in 2023, however, corresponded with profit margins being relatively flat, alongside the rise in labour productivity and higher wage and non-wage labour costs noted above.

Productivity growth has partially offset the most recent rise in labour costs

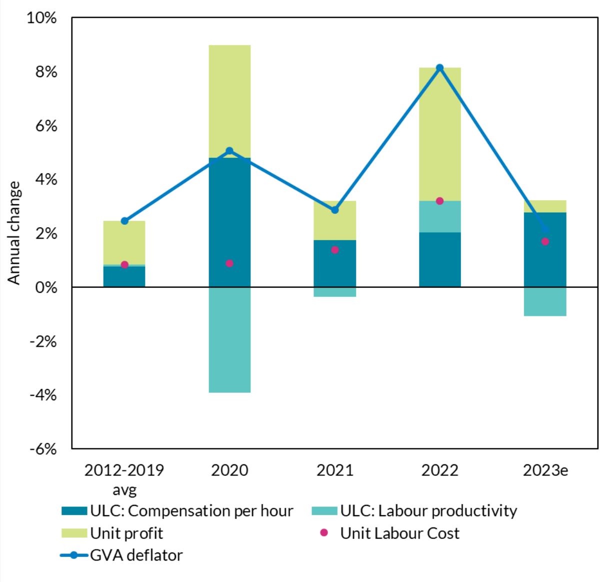
Figure 5: Contribution of annual change in labour cost and productivity to unit labour cost growth (Ireland – Domestic sector)



Source: CSO Productivity in Ireland Quarterly Frontier Release and Central Bank staff estimates.
Note: Data refer to domestically-dominated sectors, excluding rental and leasing. See Background Notes in the Productivity in Ireland Frontier Release.

Easing of inflationary pressures as productivity growth and lower profit margins offset higher labour costs

Figure 6: Annual change in GVA deflator and contributions from unit labour costs and unit profits (Ireland – Domestic sector)



Source: CSO Productivity in Ireland Quarterly Frontier Release and Central Bank staff estimates.
Note: Data refer to domestically-dominated sectors, excluding rental and leasing. See Background Notes in the Productivity in Ireland Frontier Release. Unit profits are roughly equivalent to an EBITDA margin in a company's financial accounts.

The baseline projection in this *Bulletin* is for wage growth per employee in Ireland averaging 4.7 per cent per year in nominal terms out to 2026, with overall labour costs rising at a similar pace. The slowdown in average hours worked across the economy will likely see a higher growth rate of labour costs in per hour terms, with the commensurate implications for business costs. In order for ULC and inflationary pressures to remain contained alongside rising hourly labour costs, productivity growth in the domestically-dominated

[46] Labour costs or labour compensation includes wages and salaries (wage costs) as well as employer social insurance or pension contributions (non-wage costs). If labour costs rise faster than productivity, then ULC increases, and its contribution to domestic inflation may also increase.

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sectors of the economy will have to be higher than the average witnessed over the 2012 to 2019 period and/or growth in profit margins would have to be below that witnessed in those years. Our estimates for the domestic sector in Ireland show nominal ULC per hour averaging 3.2 per cent annual growth in 2023, which is below the realised data up to Q3 2023 euro area average (6.3 per cent) and the total Irish economy including multinational-dominated sectors (6.9 per cent). While a level of wage catch-up is expected to compensate for elevated inflation levels, ULC growth must be monitored to assess implications for the economy and wider competitiveness issues.

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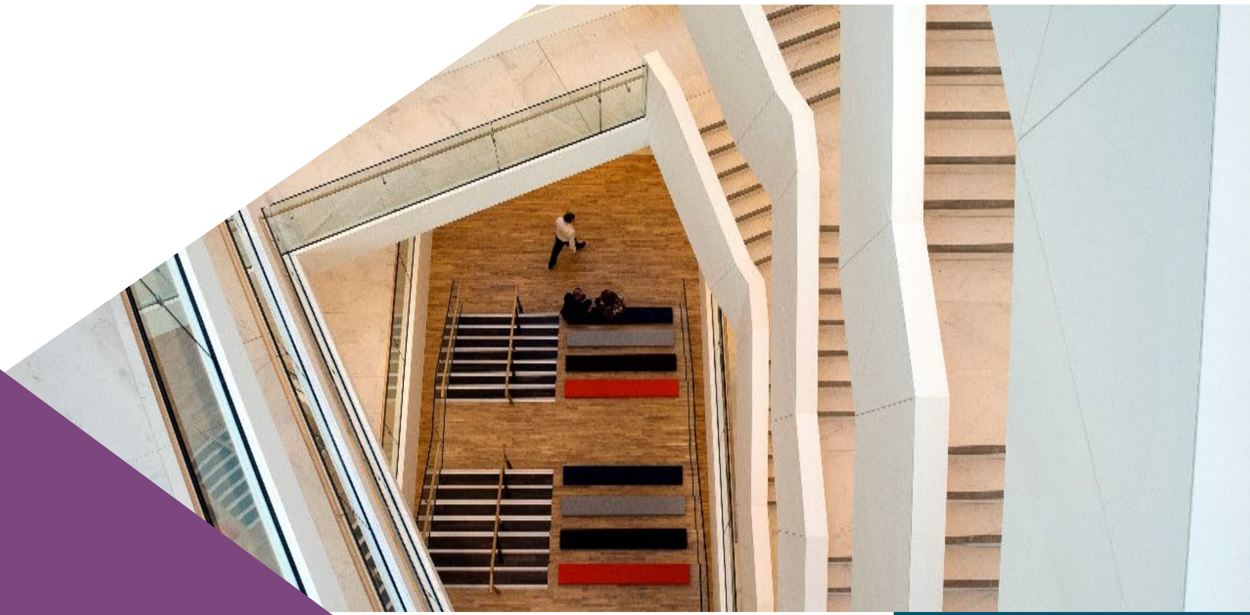
Signed Articles

The articles in this section are in the series of signed articles on monetary and general economic topics introduced in the autumn 1969 issue of the Bank's Bulletin. Any views expressed in these articles are not necessarily those held by the Bank and are the personal responsibility of the author.



Inequality and wealth distribution among Irish households: introducing new Distributional Wealth Accounts

Marco Moreno[47]

Abstract

This *Article* introduces the experimental Distributional Wealth Accounts (DWA) for Ireland - a novel high-frequency dataset on household wealth consistent with National Accounts statistics, addressing increasing interest and growing demand for timely, consistent and internationally comparable information on the distribution of assets and liabilities across households. By linking Quarterly Sector Accounts with household survey data, DWA provide new insights on the growth of household wealth in Ireland on a quarterly basis. The data indicate that the overall increase in the net wealth of Irish households over the past decade has been accompanied by a significant reduction in inequality. This was mainly driven by strong growth in the net wealth of households in the bottom half of the distribution. Yet, the wealthiest 10 per cent of Irish households are more than five times as rich as those in the poorer half of the distribution altogether. One reason for this is the considerable heterogeneity in the composition of households' balance sheets and the increasing concentration of housing assets amongst richer households. Over the past decade, while those in the bottom half of the net wealth distribution mainly benefited from a reduction of their liabilities, the richest 10 per cent of households witnessed an increase of their assets' value.

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The views expressed are those of the author and do not necessarily reflect those of the Central Bank of Ireland or the Eurosystem. Very useful comments from Jean Cassidy, Dave Cronin, Robert Kelly, Tara McIndoe-Calder, Martin O'Brien, Jenny Osborne-Kinch, Simone Saupe and other colleagues are gratefully acknowledged.
The Distributional Wealth Accounts have been jointly developed by the European Central Bank and the National Central Banks (including the Central Bank of Ireland) of the Member States participating in the ESCB Expert Group on Distributional Financial Accounts between 2019 and 2024. The data used throughout this *Article* is based on the version originally released by the ECB on January 8th, 2024 and may be subject to subsequent updates and revisions.

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1. Introduction

Policy-makers, researchers and the public have become increasingly interested in gaining a clearer understanding of how income and wealth are distributed across households. Several studies have highlighted that inequality may harm economic growth, worsen the effect of recessions and dampen the effectiveness of fiscal and monetary policies.[48]

Research in the field of inequality and distributional economics is substantial.[49] A significant literature stream for central banks particularly focuses on the intersection between monetary policy and inequality developments; a topic that has been growing in relevance for researchers[50] and policy-makers[51] alike.

Despite the ongoing development of internationally comparable datasets on the distribution of wealth in the past decade (e.g., the OECD Wealth Distribution Database also described in Balestra and Tonkin, 2018), consistent and high-frequency data allowing for more focused analyses has so far been scarce. Macroeconomic data (particularly Quarterly Sector Accounts statistics) provide a comprehensive view on the aggregate household sector's balance sheet at a granular time frequency, but lack distributional information. In contrast, household surveys and other micro data statistics provide detailed household-level information (on certain assets and liabilities, income, and consumption levels) but can suffer from infrequent timing and potential inconsistencies over time and across countries.

Experimental[52] DWA data published by the ECB in January 2024 bridges these two views, providing data on the distribution of wealth across households in the Euro Area, Ireland and 19 other European countries,[53] that are aligned with national accounts totals. The dataset includes information on the net wealth (and its components) of European households, broken down by their net wealth level (bottom half and top five deciles of the distribution), by employment and home-ownership status. The development of timely and granular distributional statistics on household wealth in Europe is in line with

[48] See, for instance OECD (2015), Dabla-Norris et al. (2015), Pereira da Silva et al. (2022).
[49] Nolan et al. (2019) and Zucman (2019) provide an overview of the literature on income and wealth inequality,
respectively.
[50] See, for instance, Coibion et al. (2017), Colciago et al. (2019), Hansen et al. (2020).
[51] See, for instance, Schnabel (2021), Carstens (2021), Makhlouf (2022) and the ECB's 2021 Policy Strategy Review.
[52] The ECB's definition of "experimental statistics" qualifies this dataset as being reliant on significant assumptions and undergoing further improvements, but nevertheless "sufficiently reliable to be useful for monetary policy purposes and various ESCB tasks".
[53] Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Portugal, Slovenia, Slovakia, Spain and Hungary.

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the targets of the G20 Data Gaps Initiative, alongside similar datasets already introduced in the USA and Canada (see Batty et al., 2019 and Statistics Canada, 2024) in previous years.

This *Article* provides details on the DWA for Ireland. It discusses the evolution of household wealth and inequality between Q2 2013 and Q2 2023. The new quarterly frequency introduced by this dataset allows one to investigate how the features of the Irish wealth distribution (so far only observed through infrequent surveys) have developed over the course of the past decade. This enables deeper analyses, which may focus on specific time intervals or specific household breakdowns.

DWA data highlights that the wealthiest 10 per cent of the population holds almost half of total net wealth in the country at the end of the reference period (more than five times the overall amount owned by the poorest 50 per cent altogether). It also describes how the balance sheet composition of poorer and richer households differs and how it evolved over time, providing insights on the importance of certain assets (especially housing) and on their distribution across different households. This aspect is of great importance for policy makers, as it allows users to conduct timely analyses on the impact of economic policy measures on specific sections of the population. Furthermore, the DWA contains key data to assess the financial vulnerabilities and the sensitivity of households to changes in the macroeconomic environment.

The remainder of this *Article* is structured as follows: Section 2 discusses the key features of the dataset. Section 3 leverages on the newly available DWA data to investigate the development of wealth and inequality in Ireland over the past decade, as well as the differences in balance sheet composition between poorer and richer households, especially in terms of asset ownership. Finally, Section 4 concludes.

2. Methodological overview and difference to existing sources

In January 2024, the European Central Bank published for the first time DWA statistics on its data portal.[54] The development of this experimental dataset is the result of work by the ECB-led Expert Group on Distributional Financial Accounts ("EG DFA"), which includes Ireland and 19 other European countries.

Until now, information on household wealth has primarily come from country-level statistics compiled as part of the quarterly sector accounts. Available since 1999 for Ireland, these time series provide a comprehensive view on the

[54] Additional information is provided in the official release note and in the DWA's FAQ document.

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evolution of financial and non-financial assets and liabilities owned by the household sector. However, these statistics do not give any insight into the distribution of wealth instruments across households, as they show aggregates only.

Conversely, microeconomic survey statistics do provide distributional information, but given the comprehensive nature of such surveys, and the range of household characteristics that they capture, they are by design collected on a relatively infrequent basis. Moreover, in many instances, the results of these surveys are not directly comparable with national accounts figures. The main source of microeconomic distributional data for Ireland is the Household Finance and Consumption Survey (HFCS), a harmonized European multi-country survey collecting household-level data on assets, liabilities, income and demographic characteristics. In Ireland, the HFCS has been carried out three times so far: in 2013, 2018 and 2020.

The development of both quarterly sector accounts and the Irish HFCS is a result of cooperation between the Central Bank of Ireland and the Central Statistics Office (CSO). While the Central Bank is responsible for the compilation of quarterly financial sector accounts, the latter is the ultimate source of information on items of a non-financial nature. The CSO is also directly responsible for managing the primary microdata collected as part of the HFCS, whose conceptual development is overseen by the ESCB "Household Finance and Consumption Network" in which the Central Bank is also involved.

The DWA links survey data and sector accounts' totals, and therefore closes the gap on missing distributional information for macroeconomic statistics. As a first important step in this process, the EG DFA developed a wealth concept to be adopted in the DWA dataset by combining the instruments surveyed in the HFCS and their corresponding national aggregates.[55]

Table 1 presents the *financial assets*, *non-financial assets* and *liabilities* of households, in the form of a balance sheet. The resulting difference between total assets and liabilities equals household *net wealth*.[56]

[55] This definition also builds on previous considerations by the Expert Group on linking macro and micro data for the household sector about the comparability between wealth instruments surveyed in the HFCS and national accounts aggregates.
[56] Contrary to the familiar representation of a corporate balance sheet, equity only appears on the asset side (in the form of listed shares and private business wealth), but not on the opposite side.

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Table 1: The household wealth concept adopted in the DWA

Assets	Liabilities
Financial	**Financial**
Deposits	Outstanding mortgages
Debt securities	Outstanding non-mortgages debt
Investment fund shares	
Life insurance and annuity entitlements	
Listed shares	
Financial business wealth	
Non-financial	
Housing wealth	
Non-financial business wealth	**Net Wealth**

Source: DWA methodological note.

This wealth concept largely covers the most important instruments recorded on a household's balance sheet (as these items represent the wide majority of households' wealth aggregates in sector accounts). However, it should be noted that some specific items such as cash holdings, trade receivables and - most importantly - pension entitlements, are not included due to limitations in the micro data collection. Given the different concentration of these "uncaptured" instruments across the wealth distribution, it should be acknowledged that their exclusion may therefore affect the DWA estimates of inequality.

Specific techniques and adjustments are applied in order to align microeconomic and macroeconomic data and to produce the dataset. These can be summarised in the following four steps:

- Categorization of households' assets and liabilities according to the conceptual national account equivalents;
- Corrections to specific wealth instruments (e.g., adjustments to reported deposit holdings deemed implausible);
- Population adjustments, mainly aimed at correcting the known issue of under-sampling of very wealthy households in survey data;[57]

[57] Vermeulen (2016) and Chakraborty and Waltl (2018) highlight this shortcoming. The latter also present a practical approach to estimate these "missing rich", which is close in principle to the method adopted in the development of the DWA. The approach followed relies on complementing the HFCS survey data with information published by the press about the wealth of the richest families in each country and filling the "gap" between those additional wealthy households and the richest HFCS respondents by assuming that wealthy households are distributed according to a Pareto distribution. This is not the only technique available to estimate the top tail of the wealth distribution uncaptured in survey data, and it is susceptible to parameter calibrations and data quality aspects. The study of alternative approaches to carry out this process, including by adjusting the household weights in the original HFCS data

- Reconciliation to national accounts totals and finalisation of the time series. Notably, interpolation and extrapolation techniques are applied to accommodate the lack of quarterly HFCS data. In principle, distributional structures are interpolated between survey quarters, and extrapolated until the release of the following wave.[58]

The above compilation steps inevitably rely on a number of significant assumptions, most notably in the approach taken to adjust the share of wealth belonging to the richest households in the country and to estimate the distribution of wealth in quarters after the latest HFCS wave.[59] Over time, both periodic updates to QSA aggregates and the release of new HFCS survey data will lead to revisions in the dataset (as they will lead to changes in national accounts totals and in the interpolation / extrapolation process, respectively).

The resulting dataset includes quarterly information from as early as Q1 2009 (Q2 2013 for Ireland) on the stock of assets and liabilities (and, consequently, net wealth) of resident households differing in their socio-economic characteristics for all European countries in the panel. Households are broken down into the following sections:

- Deciles of household net wealth;
- Working status of the main income earner of the household;
- Tenancy status.

Based on the above, the DWA also includes some derived statistics and indicators, such as the Gini coefficient for net wealth, data on median and mean net wealth levels, wealth amounts per household group and per capita, the share of total wealth belonging to different sections of the population (e.g., held by the poorest 50 per cent[60] of households), debt-to-asset ratios by each net wealth decile.

The following section of this *Article* will leverage on the quarterly series of asset and liabilities stocks in the DWA to investigate how household wealth

to follow an appropriate Pareto distribution (see, for instance, Kennickell et al., 2021), remains an ongoing area of research in the literature.

[58] This forms part of the assumptions adopted in the DWA compilation methodology, and reflects some constraints due to the infrequent timing of the HFCS. As a result, high-frequency changes in the distribution of wealth may not be fully captured in the data. Additional information on this process can be found in the DWA methodological note.

[59] However, the result of sensitivity analyses detailed in the DWA methodological note highlight only moderate discrepancies arising from changes in the compilation steps or in the parameters employed.

[60] DWA data groups together households in net wealth deciles 1 to 5 into a joint “bottom 50 per cent” cluster. Despite existing differences between households in those individual deciles, considering the lower half of the wealth distribution altogether allows for a more intuitive understanding of inequality in the country.

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(and its individual components, especially housing) evolved in Ireland between Q2 2013 and Q2 2023. It will also describe how wealth inequality in the country (as measured by the Gini coefficient) declined since the beginning of the series.

3. The evolution of wealth and inequality in Ireland between 2013 and 2023

The total net wealth of Irish households more than doubled throughout the last decade (increasing by €589 Bn), to stand shy of €1,079 Bn in Q2 2023. Over the same period, total net wealth of households in the Euro Area altogether increased by a more moderate 54 per cent (equal to €21,000 Bn overall).

A number of previous analyses (e.g, Quarterly Financial Accounts; Bader and O'Sullivan, 2019) described the main factors that led to the strong growth of wealth in Ireland, namely: continued appreciation of housing, accumulation of financial assets and the significant de-leveraging process that followed the Great Financial Crisis. Other research (e.g., Lawless et al., 2015; Horan et al., 2020; Arrigoni et al., 2022) discussed how this increasing amount of wealth was distributed across households at a few specific points in time, identified by the reference years of the HFCS.

While these analyses contributed to shine a light on the increasing level of aggregate wealth and its distribution across households, the DWA now provides more high-frequency information on the quarterly distribution of assets and liabilities, consistent with national account statistics. Due to the availability of richer, more granular data, the findings of the following analytical sections complement and significantly expand the preliminary results presented by Daly (2022) and discuss the evolution of wealth, its different composition across households as well as the level of inequality in Ireland between 2013 and 2023.

The development of Irish household wealth

As of Q2 2023, the wealthiest 10 per cent of Irish households owned €518 Bn, or 48 per cent of total household net wealth in the country (Figure 1).

This is more than five times the amount held by households in the bottom half of the net wealth distribution altogether (€98 Bn, or 9 per cent). However, total net wealth of the latter grew almost ten-fold since the beginning of the series (albeit starting from a low level: from €10 Bn in Q2 2013 to €98 Bn in Q2 2023), while it less than doubled for households in the top decile (increased by 81 per cent from €286 Bn in Q2 2013). This also affected the overall share of net wealth held by poorer and richer households over the past decade: since

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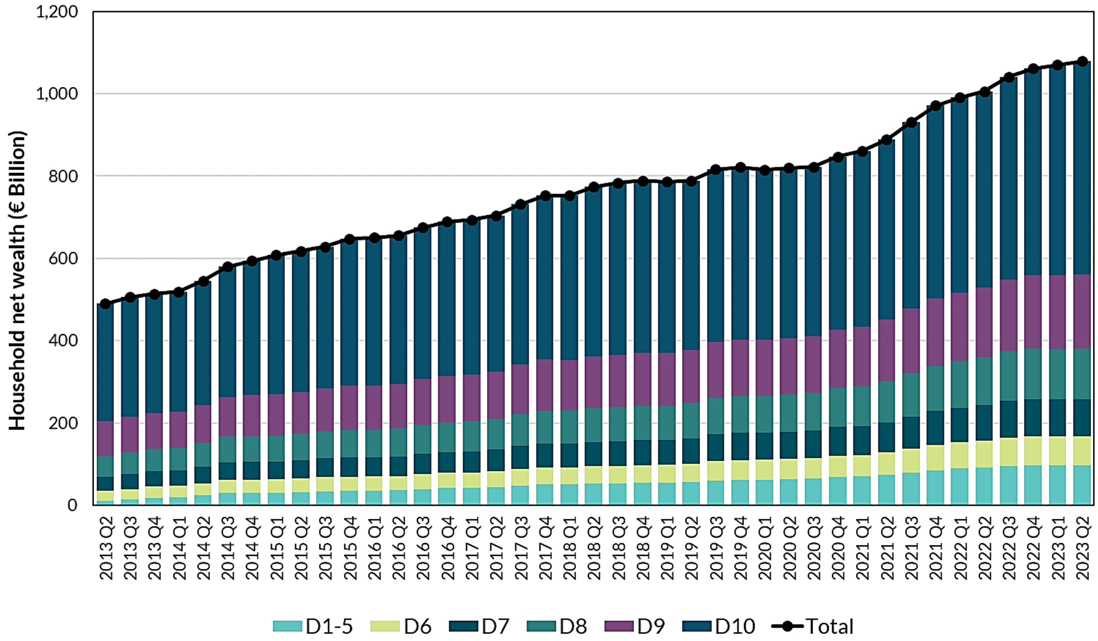
the beginning of the series the percentage of net wealth held by households in the bottom half of the wealth distribution increased from 2 per cent to 9 per cent. Conversely, the same share held by the top decile fell by 10 percentage points (i.e., from 58 per cent to 48 per cent) in the same period.

Figure 1: The wealthiest 10 per cent of Irish households own almost as much wealth as all other households in the country combined



Note: households are classified into sequential deciles (the bottom five deciles altogether, and the following five individually) according to their level of net wealth.
Source: author's calculations based on DWA data.

Households in deciles 6 to 9, owned €462 Bn as of Q2 2023. While in magnitude terms this equals to a €268 Bn increase since the beginning of the series, the share of total net wealth held by households in this section of the distribution remained relatively stable over time (from 40 per cent of the total in Q2 2013 to 43 per cent in Q2 2023).

As the share held by the poorest half of households increased and the share owned by the richest 10 per cent decreased, it follows that ultimately wealth inequality in Ireland reduced since the beginning of the series.

The DWA also allows one to investigate the development of net wealth by employment and home-ownership status (Figures A.1 and A.2 of the Appendix). As of Q2 2023, employees and retired households owned the largest part of net wealth in Ireland (€480 Bn and €290 Bn, respectively). Over the course of the decade, the share of total net wealth held by employed and retired households altogether increased significantly (growing from 57 per cent to 71 per cent). Conversely, the share owned by self-employed households decreased by 8 percentage points since the beginning of the series, to reach 20 per cent as of Q2 2023. Sectioning by housing tenure highlights an extreme concentration of total net wealth within home-owners (shy of 97 per cent).

The composition of wealth across Irish households

In addition to differing in the magnitude of their net wealth, Irish households also vary in terms of balance sheet composition, and how it has developed over time. Differences in the evolution of holdings of different wealth instruments also affected the overall evolution of net wealth across households.

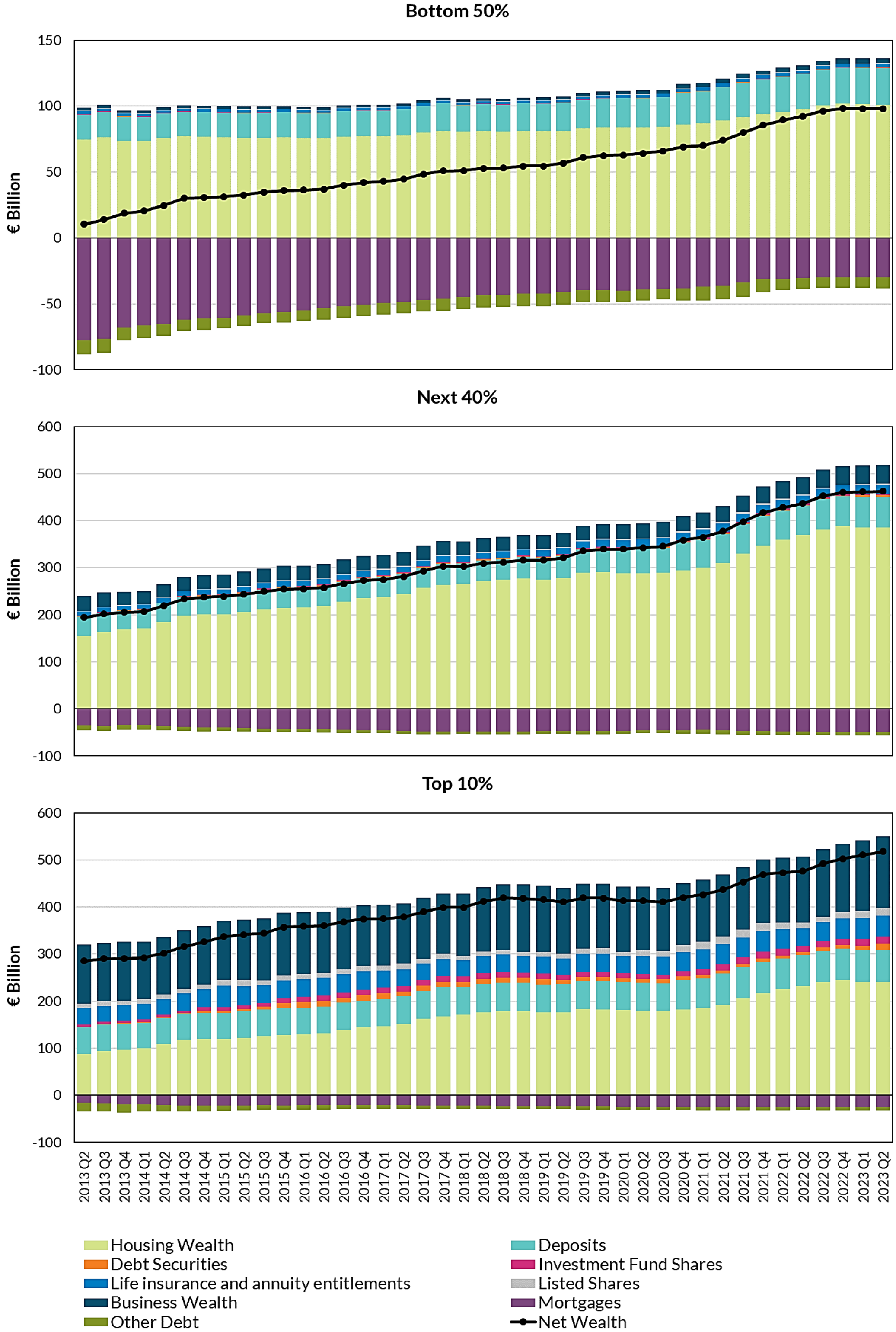
Household portfolio composition and its evolution over time

DWA data for Q2 2023 show a considerable heterogeneity in the composition of Irish households' wealth.

Housing [61] represents the most important asset for Irish households in all sections of the net wealth distribution (Figure 2), although accounting for varying shares of each groups' total assets: 74 per cent for both households in the bottom five and "middle" four deciles, and 44 per cent for households in the wealthiest decile. Overall, the assets of the latter are significantly more diversified than those of the other household groups and *business wealth* (which includes ownership stakes in unlisted companies) accounts for a considerable share of their portfolio (28 per cent). Moreover, this specific asset is particularly concentrated at the top of the net wealth distribution, as the richest 10 per cent of Irish households own 78 per cent (equal to €152 Bn) of all business wealth in Ireland. While business wealth still has moderate relevance on the balance sheet of households in the "middle" deciles, it only accounts for a negligible share of the wealth composition of the poorest 50 per cent of households. The same is also observed with respect to holdings of *listed shares* and *debt securities*.

[61] Comprising residential dwellings and their underlying land.

Figure 2: The composition of net wealth differs between richer and poorer households, but housing is prominent for all



Source: author's calculations based on DWA data.

Conversely, for households in the bottom 50 per cent of the net wealth distribution *bank deposits* play an important role, amounting to 20 per cent of their total assets as of Q2 2023. For both households in the middle 40 per cent and the top 10 per cent of the net wealth distribution, deposits represent a lower share of total assets (about 13 per cent each, as of Q2 2023), reflecting the more diversified composition of their assets.

The overall amount of *debt* (including mortgages and other personal credit) of households in the bottom half of the net wealth distribution equals €38 Bn as of Q2 2023, accounting for 30 per cent of total household debt in Ireland. While the absolute debt figures for households in deciles 6 to 9 (€56 Bn altogether and 45 per cent of the total) and in the wealthiest decile (€31 Bn and 25 per cent) may appear comparable, neither their debt-to-assets ratios (see Box A) nor their evolution during the past decade do.

DWA data also show significant differences in the portfolios of household groups broken down by employment status. For instance, business wealth acquires particular importance in the balance sheet of self-employed households, where it accounts for almost the same share of their total amount of assets as housing (38 per cent and 41 per cent, respectively). Irish retirees display a higher concentration of assets in bank deposits (17 per cent), while employed households' assets include sizeable investments in *life insurance* products (€35 Bn, equal to 6 per cent of their total assets). As of Q2 2023, retirees own a marginal amount of debt liabilities (€6 Bn, or 4 per cent of the overall total), as they have already largely repaid their mortgages. Conversely, employed households present larger balances of outstanding debt (€90 Bn, or 72 per cent of the total).

Capturing *quarterly changes* in the wealth of Irish households in the bottom 50 per cent, the following 40 per cent and the top 10 per cent of the net wealth distribution represents a significant element of novelty introduced by the DWA dataset (Figure 3). These variations may also be broken down into the more gradual components of wealth to assess how the importance of specific items for different household changed over time. Instruments observed include: housing, deposits, business wealth, total debt (including mortgages and other debt) and the remaining "other financial assets" (i.e., debt securities, investment fund shares, life insurance and annuity entitlements, and listed shares).

For the "middle" 40 per cent and the top decile of households in the Irish wealth distribution, debt remained relatively stable during the past ten years. Conversely, for households in the poorer half of the distribution, outstanding debt declined by €50 Bn (or 57 per cent) between 2013 and 2023. This may imply voluntary repayments of outstanding debt as well as a decline in new

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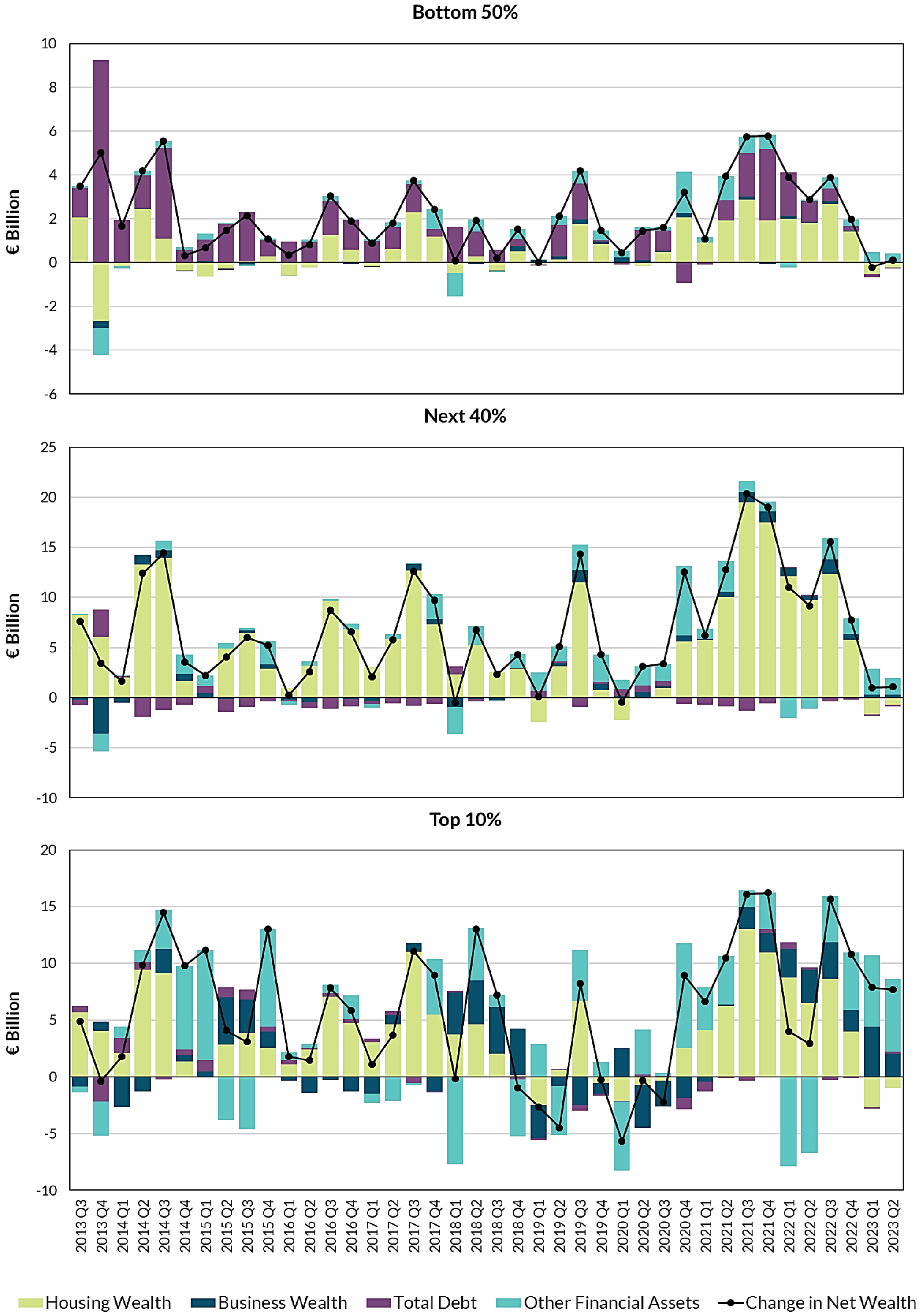
lending (or a combination of the two), and has significantly driven the increase in net wealth that those households experienced over the past decade. Moreover, sizeable changes in the value of housing assets held by these households further contributed to the increase in their wealth. Over the course of the decade their stock of housing assets increased by €27 Bn (or 36 per cent).

For the “middle” deciles (6 to 9), changes in net wealth have been mainly driven by variations in the stock of their housing assets (Figure 3). This includes new housing acquisitions and the revaluation of their existing housing stock, which more than doubled since Q2 2013, increasing by €230 Bn.

Figure 3: Debt reductions primarily drove changes in net wealth for households in the bottom half of the distribution, while positive changes in the value of assets (especially housing) drove them for richer households



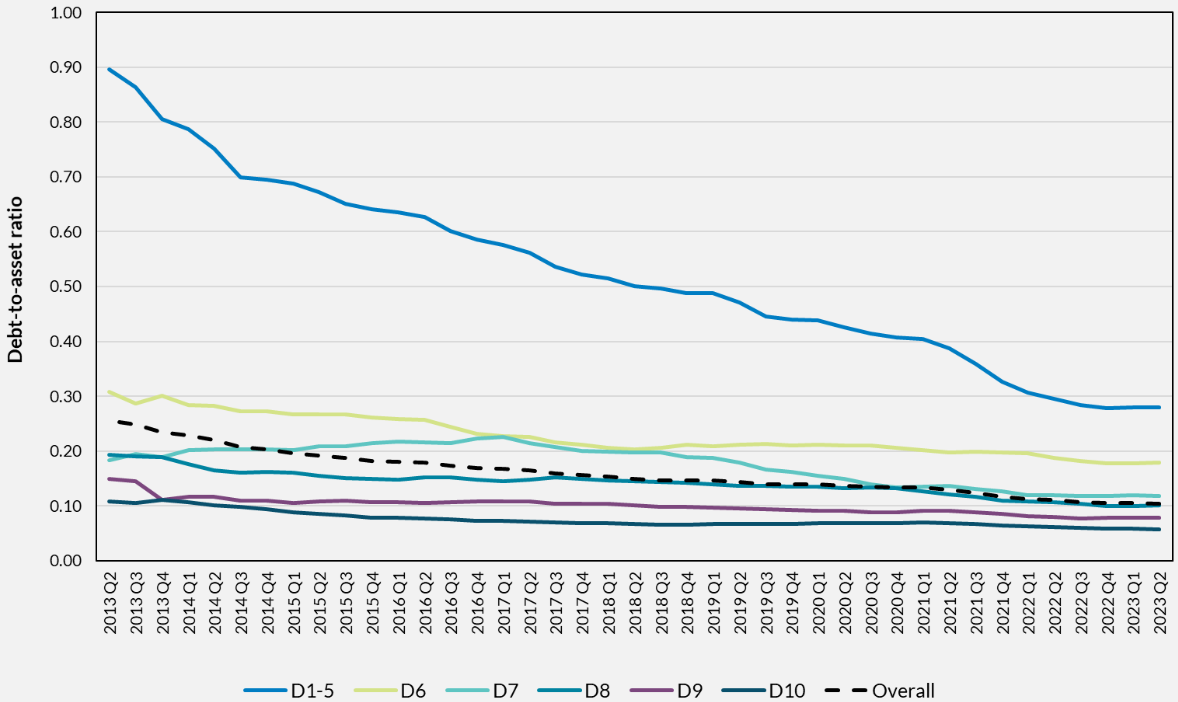
Source: author's calculations based on DWA data.

Changes in the wealth of the richest 10 per cent of Irish households, in line with the greater degree of portfolio diversification that they exhibit (as seen above), appear to be driven by a combination of movements in several instruments. For instance, business wealth grew cumulatively by €27 Bn (or 21 per cent) over the period, and financial assets by €49 Bn (equal to a 46 per cent growth). Most notably, since the beginning of the series the stock of housing assets owned by households in the wealthiest decile rose by €153 Bn (almost tripling since Q2 2013).

Box A: The deleveraging process and the debt-to-asset ratios of Irish households

DWA data (eventually combined with supplemental sources) allows a series of useful metrics for financial stability analyses to be constructed, thus introducing a new time-series perspective to previous research by Central Bank of Ireland staff that focused on aggregate (Quarterly Financial Accounts) and point-in-time distributional aspects (Arrigoni et al., 2022) of households' financial soundness. This Box investigates one example of such indicators: the *debt-to-asset ratio*, calculated as the relationship between total outstanding liabilities and total assets.

Figure 4: The debt-to-asset ratio of households in the bottom half of the net wealth distribution has decreased over time, but remains significantly above average



Source: author's calculations based on DWA data.

Analyses of the economic resilience of households (here broadly interpreted as their ability to withstand adverse financial shocks by relying on the existing stock of savings as a buffer) often follow an "expenses" approach, comparing repayment flows during the year with the available amount of income and liquid assets. This is, for

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instance, the approach behind the *financial margin* and *debt service* metrics discussed in Adhikari and Yao (2023).

While these indicators provide useful information on the sustainability of existing debt, they do not give a perspective on the overall stock of liabilities and their distribution across households in Ireland (e.g., are households with different levels of assets borrowing in the same proportion?). Investigating the evolution of debt-to-asset ratios by net wealth decile (Figure 4) contributes to answering this question.

As discussed in this *Article*, households in the lower half of the Irish net wealth distribution witnessed a sizeable reduction in their outstanding debt, paired with a (more moderate) increase in their total assets. Consequently, their debt-to-asset ratio fell from 0.90 in Q2 2013 to 0.28 in Q2 2023. While this marks a 69 per cent decrease in the ratio since the beginning of the series, it remains largely above the overall Irish average (equal to 0.10 as of Q2 2023).

The wealthiest 10 per cent of households, conversely, display a debt-to-asset ratio below average (0.06 as of Q2 2023). Since the beginning of the series, it only decreased by 5 percentage points and has largely remained below the 0.1 threshold throughout the period. In other words, these households have consistently been owning, on average, more than 10 times the amount of assets compared to their debt level, indicating the large availability of potential buffers against negative income shocks for this household group.

The debt-to-asset ratios of households in the "middle" section of the net wealth distribution (deciles 6 to 9) stand in an intermediate position between those of households in the bottom 5 or in the top decile, sequentially ranging from 0.18 to 0.08 as of Q2 2023 (with lower deciles exhibiting larger ratios). Considering those four deciles together, their combined debt-to-asset level (0.11) appears close to the overall Irish average at the end of the series. Although higher than for the top 10 per cent, households in this section of the net wealth distribution also appear to have built up a sizeable stock of financial buffers in relation to their debt (which moderately increased over the decade, by €10 Bn overall).

Considering the occupational breakdown, both Irish employed and unemployed households stand above the average (with ratios equal to 0.16 and 0.15, respectively), while retirees display ratios well below this amount: equal to 0.02, as of Q2 2023.

DWA data shows that the debt-to-asset ratios of Irish households have followed a similar evolution to the average ratios of households in the Euro Area altogether, as those in the bottom half of the European net wealth distribution also exhibit an above-average (but declining over time) indicator, and wealthier households display

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progressively lower ratios. In magnitude terms, while the overall debt-to-asset ratio in the Euro Area (0.11) stands close to the Irish one, the poorer half of households in the former appears to be more leveraged, with a ratio of 0.39 as of Q2 2023.

The analysis of debt-to-asset ratios could also be further refined by differentiating between available *liquid* or *illiquid* assets. For instance, a similar distinction is made by Arrigoni et al. (2022) to identify more "precarious" households across the joint income, consumption and wealth distribution (based on HFCS data).

Overall, the analysis of debt-to-asset ratios by net wealth deciles highlights how the level of financial leverage of Irish household decreased over time. Together with the findings of the latest Central Bank of Ireland's Financial Stability Review (2023), which pointed out that there are "few signs of a system-wide deterioration in borrowers' repayment capacity" despite the adverse effect of interest rates increases for some vulnerable households, these results suggest an increased level of financial resilience of households in Ireland since the beginning of the period.

The role of housing on the development of household wealth in Ireland

Housing assets are the primary component of the balance sheet of Irish households across all sections of the net wealth distribution, accounting for over 60 per cent of total households assets in the country as of Q2 2023. They have also been one of the key drivers of changes in net wealth over the course of the past decade (Figures 2 and 3). The importance of housing in the balance sheet of Irish households is consistent with previous findings and data from the 4th HFCS wave, which suggests similarly high rates of home-ownership compared with other European countries.

Since the beginning of the series, the overall value of the stock of housing assets more than doubled (rising by €410 Bn), to reach €727 Bn in Q2 2023. However, this large amount of housing wealth is unevenly distributed: the richest decile of Irish households owns one-third (€241 Bn) of the total, while households in the bottom 50 per cent of the net wealth distribution own 14 per cent (€101 Bn). The remaining, and therefore largest, share of housing wealth belongs to households in the "middle" section (deciles 6 to 9) of the distribution altogether: €385 Bn, or 53 per cent of the total.

Growth in the value of housing assets over the past decade led to an increase in the concentration of Irish housing wealth within the richest 10 per cent of households (Figure 5). The share of total housing assets belonging to these households increased about 5 percentage points when comparing Q2 2023 to

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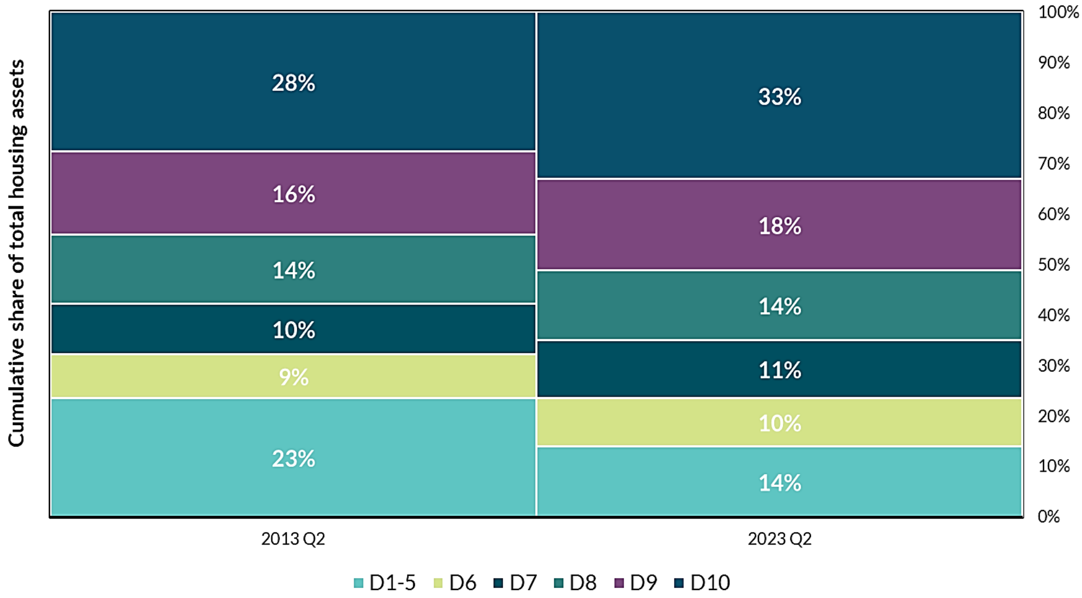
the same quarter ten years earlier (rising from 28 per cent to 33 per cent of the total). Households in the intermediate part of the net wealth distribution also witnessed an increase in their share of overall housing wealth between Q2 2013 and Q2 2023. Conversely, the quota of housing assets owned by households in the bottom half of the net wealth distribution fell by 9 percentage points over the same period (decreasing from 23 per cent to 14 per cent of the total).

Figure 5: The share of total housing assets held by households in the bottom half of the net wealth distribution decreased since 2013, while it increased for richer households



Source: author's calculations based on DWA data.

Similarly, housing wealth became increasingly concentrated within the group of retired households in Ireland, whose share in the holding of total housing assets increased from 21 per cent in Q2 2013 to 28 per cent in Q2 2023. This change was primarily mirrored by a reduction in the share of housing wealth of self-employed workers, while the overall share of housing belonging to employees has remained stable (at around 53 per cent of the total) over the past decade. Throughout this period, total net wealth of Irish households remained highly concentrated within homeowners (see Figure A.2 in the Appendix), highlighting a clear difference with tenant households.

Net wealth inequality in Ireland and Europe

Differences in the distribution of wealth instruments across households, as well as their quarterly changes, have consequently driven the evolution of the overall level of net wealth inequality in Ireland. The DWA employs the Gini

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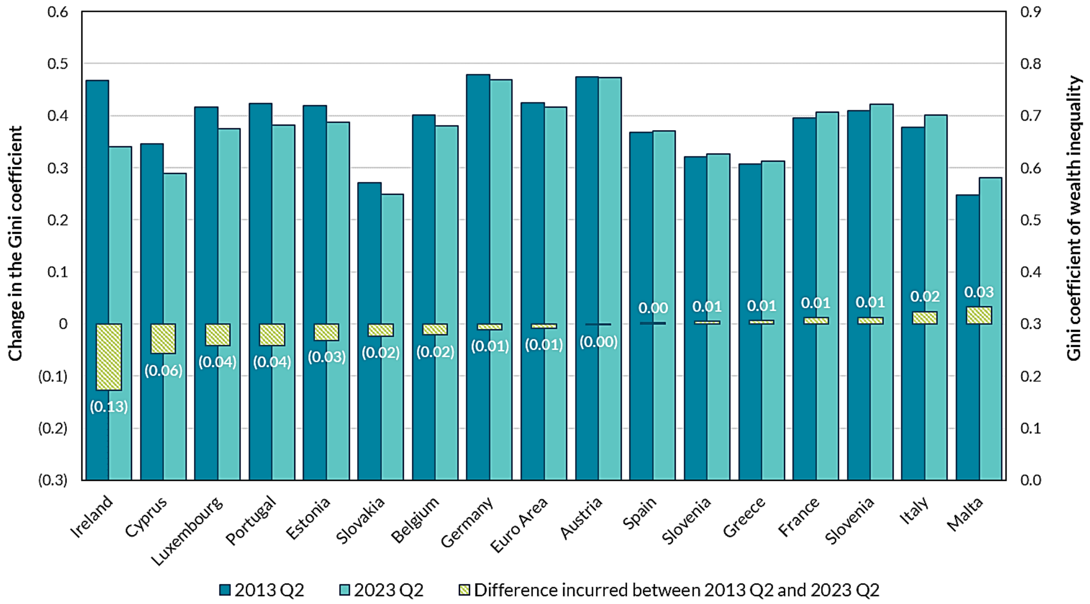
coefficient as a measure of distance from a measure of perfect equality.[62] Leveraging on the consistent methodological approach employed by the DWA, this section provides a brief overview of the development of wealth inequality in Ireland since Q2 2013, together with a high-level comparisons with other European countries in the panel.[63]

Figure 6: Ireland exhibits the sharpest decline in net wealth inequality across the panel of European countries in the DWA



Source: author's calculations based on DWA data.

Since the beginning of the series the Irish Gini coefficient of net wealth decreased sharply from 0.77 to 0.64, turning Ireland from the third most unequal country (in Q2 2013) to stand below most other European countries in the panel as of Q2 2023. In the same period, the Gini index remained stable - or only marginally changed – for most other countries in the DWA panel (Figure 6).

The evidence from this analysis is also in line with the findings of Horan et al. (2020), based on the comparison between Irish HFCS results in 2013 and 2018. However, new DWA data allows users to expand those authors' considerations by providing a quarterly series on the evolution of inequality.

[62] The Gini coefficient ranges from 0 (wealth is equally spread across the population) to 1 (all wealth is held by one individual).
[63] However, it should be noted that the Gini coefficient of wealth inequality may implicitly reflect relevant country-specific characteristics, such as the different rate of housing ownership or the presence of extremely rich households. As a result, effective comparisons of wealth inequality across countries should take a holistic approach and also consider additional aspects to complement the analysis of Gini coefficient trends, such as structural differences in the ownership of assets or other country-specific peculiarities affecting the distribution of wealth.

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Additional metrics of inequality (discussed, for instance, by Neves Costa and Pérez-Duarte, 2019) such as the "Atkinson" and "Theil" indices, could also be considered as complements or substitutes to the Gini index in future work, to provide a more comprehensive assessment.

Overall, the significant reduction in net wealth inequality in Ireland during the last decade as measured by Gini coefficient was mainly led by the continued reduction of liabilities of households in the bottom half of the distribution (which consequently increased their net wealth), paired with an overall growth in the value of housing assets.

4. Conclusions

Distributional Wealth Accounts provide a useful source of data on the distribution of household wealth in Ireland. This experimental dataset provides insights on the level and development of assets and liabilities, as well as their components, broken down into net wealth deciles, employment and housing status.

The new quarterly frequency introduced by the DWA allows users to assess how changes in the value of households' assets and liabilities over time impacted the distribution of wealth and the level of inequality in the country. Moreover, the dataset's consistency with existing national accounts aggregates allows one to obtain previously unknown distributional breakdowns for macroeconomic time series.

Evidence from the DWA indicates that the increase in Irish households' net wealth over the past decade (previously observed in macroeconomic statistics) was not evenly distributed across household groups. While for households in the bottom half of the net wealth distribution such an increase was primarily driven by large reductions in debt liabilities, growth in the value of assets (especially housing) benefited households in the upper half.

Furthermore, this *Article* underlined how new DWA data may play a role in future distributional analyses and provided a discussion on the evolution of household wealth in Ireland since Q2 2013, with the following key findings:

- As of Q2 2023, the richest decile of Irish households held almost half of total net wealth in the country, five times the amount owned by the poorest 50 per cent of households altogether;
- Despite differences in the balance sheet composition of poorer and richer households, housing assets remain the most important balance sheet component for Irish households in all net wealth deciles. However, the total share of housing assets owned by the richest 10 per

cent of the population has increased during the past decade, while the share held by households in the bottom half of the distribution declined over time;

- The net wealth distribution is less unequal considering its occupational breakdown, with employees and retirees holding over 40 per cent and shy of 30 per cent of the total, respectively. Net wealth is, however, highly concentrated within Irish home-owning households, who hold almost 97 per cent of the total;
- Net wealth inequality in Ireland, as measured by the Gini coefficient, fell sharply since the beginning of the series, to stand below most other European countries as of Q2 2023.

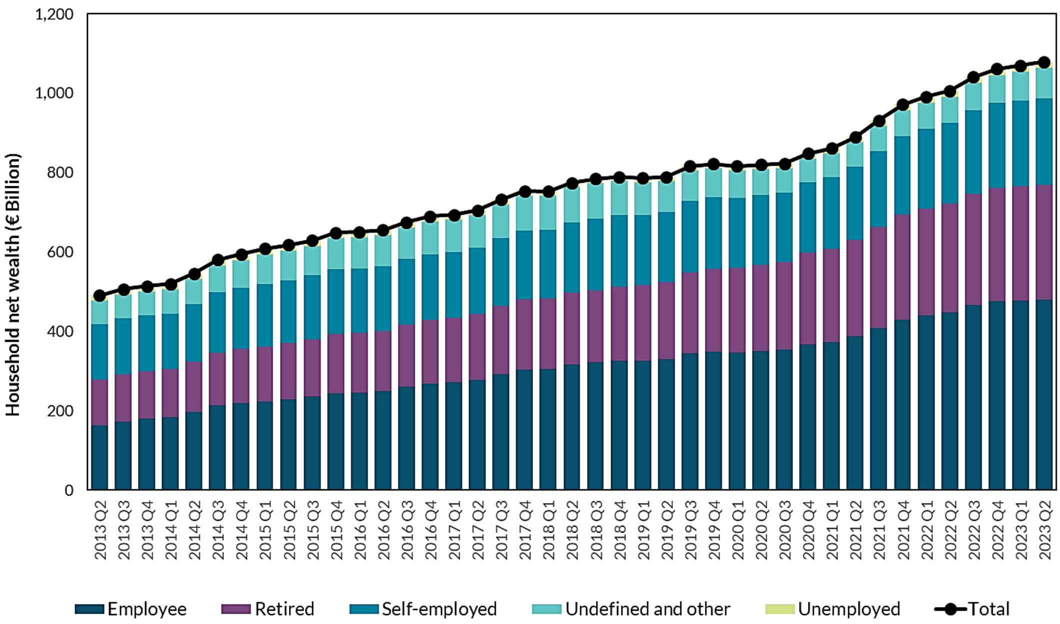
Ultimately, this *Article* showed that new DWA data provides a useful resource for policymakers interested in studying how the wealth of individual sections of the population evolved between specific points in time. For instance, future avenues of work could include distributional analyses on the accumulation of bank deposits during COVID-19, or on the development of housing wealth throughout the pandemic and the recent rise in inflation and interest rates.

Moreover, government and central bank economists engaged in macroeconomic and macro-financial modelling may build on information from this dataset to further consider the distributional implications of specific policies, or focus their analyses on more narrow time frames.

Further improvements to the DWA are still ongoing under the auspices of the EG DFA, in line with the guidance of the OECD and the goals of the G20 Data Gaps Initiative. Some areas of future work may entail improving the quality of the data sources at the basis of the compilation and considering the inclusion of additional wealth instruments or new socio-economic breakdowns (such as the household's income level), as well as developing technical improvements for the estimation of the time series.

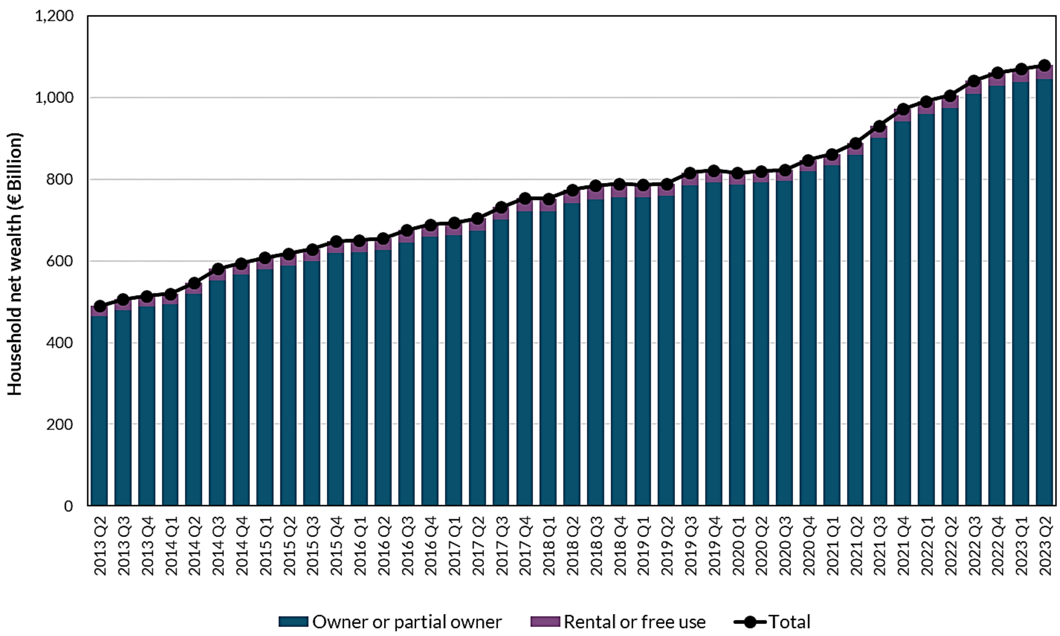
Appendix

Figure A.1: Employed and retired households combined own more than 70 per cent of total net wealth in Ireland



Source: author's calculations based on DWA data.

Figure A.2: Irish home-owners own almost the totality of net wealth in the country



Source: author's calculations based on DWA data.

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