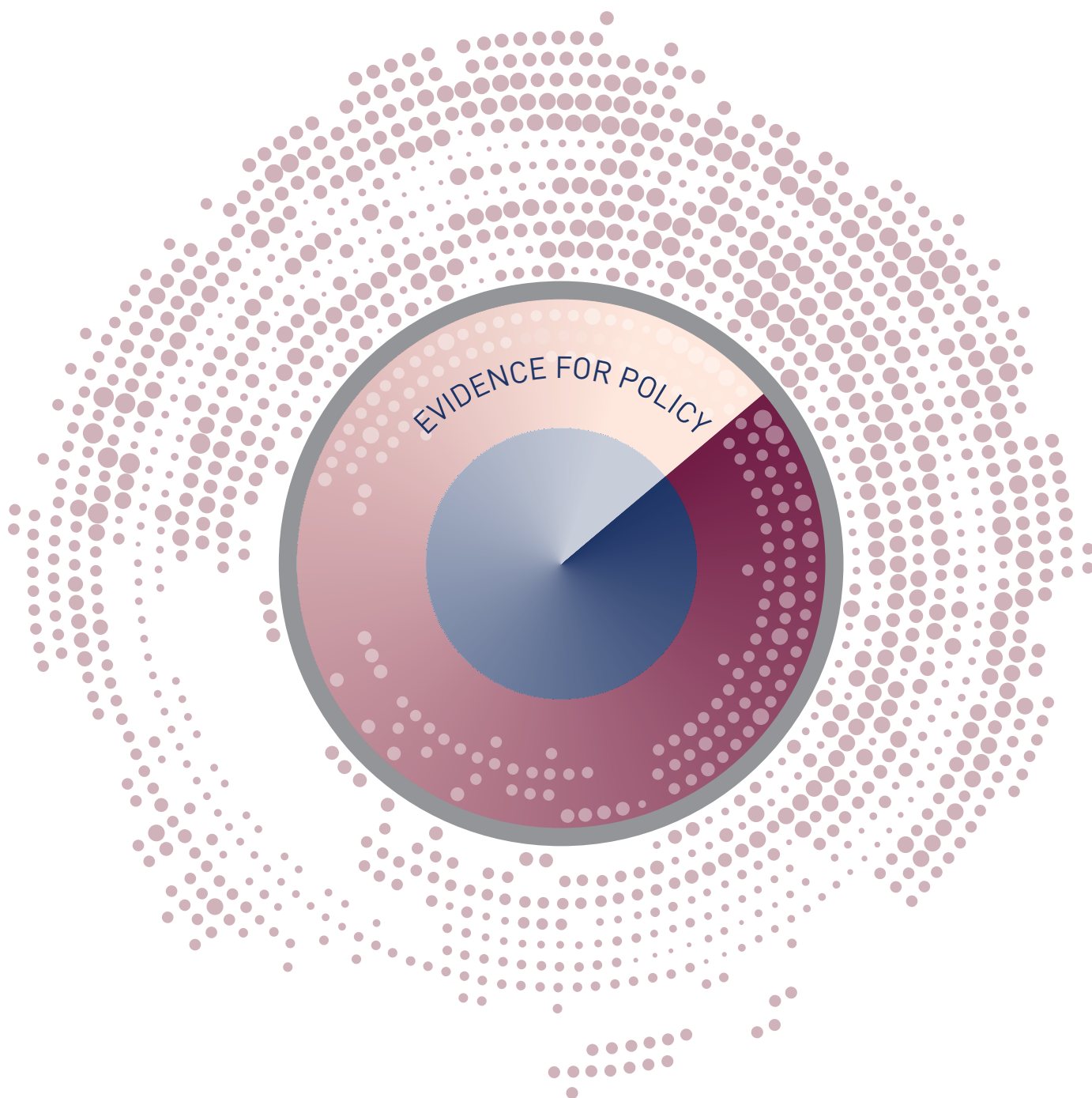


QUARTERLY ECONOMIC COMMENTARY

SPRING 2022

KIERAN MCQUINN, CONOR O'TOOLE, WENDY DISCH, EVA SHIEL AND
EOIN KENNY



QUARTERLY ECONOMIC COMMENTARY

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Spring 2022

The forecasts in this *Commentary* are based on data available by 12 March 2022

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

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SUMMARY TABLE

	2021	2022	2023
Output (Real Annual Growth %)			
Private Consumer Expenditure	5.7	5.6	4.2
Public Net Current Expenditure	5.3	4.5	3.0
Investment	-37.6	6.8	7.9
<i>Of which: Modified Investment</i>	9.7	6.3	7.4
Exports	16.6	7.0	6.0
Imports	-3.7	8.0	7.0
Gross Domestic Product (GDP)	13.5	6.2	4.3
Gross National Product (GNP)	11.5	4.9	3.4
Domestic Demand	-16.6	5.9	5.4
<i>Of which: Modified Domestic Demand</i>	6.5	5.0	4.5
Labour Market			
Employment Levels ('000)	2,179	2,477	2,541
Unemployment Levels ('000)	368	166	129
Unemployment Rate (as % of Labour Force)	16.1	6.3	4.8
Public Finances			
General Government Balance (€bn)	-7.1	1.1	3.2
General Government Balance (% of GDP)	-1.7	0.2	0.6
Inflation (Annual Growth %)			
Inflation (CPI)	2.4	6.7	5.0

Notes: The employment level for 2021 is based on the COVID-adjusted level of employment at the end of each quarter published by the CSO along with the quarterly LFS. As a result it represents a lower bound estimate for employment in 2021. The unemployment rate and level are based on the monthly unemployment and the COVID-adjusted monthly unemployment series published by the CSO.

Import forecasts for 2022 and 2023 refer to underlying activity. However, if National Accounts data reveal a significant impact of distortionary activity on import levels later in the year, modified and headline forecasts will be provided in future *Commentaries*.

Modified Domestic Demand refers to Modified Final Domestic Demand, which excludes large transactions of foreign corporations that do not have a large impact on the domestic economy. Definition available here: <https://www.cso.ie/en/interactivezone/statisticexplained/nationalaccountsexplained/totaldomesticdemandandmodifiedtotaldomesticdemand/#:~:text=Modified%20Total%20Domestic%20Demand%20goes%20further%20in%20trying,to%20exclude%20certain%20items%20that%20are%20in%20TDD>. Modified investment excludes investment in aircraft for leasing and investment in R&D from abroad.

Inflation is measured by the annual percentage change in CPI.

The Irish Economy – Overview

- The Russian invasion of Ukraine will have a negative impact on global economic activity and further exacerbate inflationary pressures, which had already been accumulating.
- Furthermore, the longer the conflict lasts, the greater the degree of uncertainty, which has adverse implications for investment and consumption decisions and international trade. Box A in the Risk Analysis section of the *Commentary* summarises the implications of this development on the Irish economy.
- Notwithstanding the significant headwinds associated with the Ukrainian crisis, we still see domestic economic activity increasing in 2022 with GDP and modified domestic demand (MDD) growing by 6.2 and 5.0 per cent respectively. This is, however, somewhat less than the forecasts in our previous *Commentary*,¹ reflecting the impact of the Ukrainian crisis. We expect growth of 4.3 and 4.5 per cent respectively in 2023 for GDP and MDD.
- Improvements in the labour market are ongoing with unemployment continuing to fall and likely to decline to 5.0 per cent by the end of 2022. The public finances will benefit from the performance of the economy and this year the General Government Balance (GGB) is set to be positive for the first time since 2019. However, there are significant downside risks for the public finances owing to the geopolitical crisis.
- The fallout from the recent invasion of Ukraine by Russia will, amongst other issues, further exacerbate inflationary pressures, which have already been evident in the economy. Any rise in inflation will pose significant challenges for households in terms of the cost of living. It also poses major questions concerning the future sources of energy used across Europe.
- In Box B in this *Commentary*, Doorley, Regan and Roantree examine recent Government measures introduced to deal with the pressures of inflation on household budgets. They argue that policymakers may need to consider greater targeting of any future support measures unless they wish to adopt a more pro-cyclical fiscal stance.
- Continuing our coverage of environmental related matters, Box C in the *Commentary* by De Bruin and Yakut assesses the impact of the removal of fossil fuel subsidies (FFS). They highlight the gain from removing FFS and how this needs to be a part of Ireland's climate change policy.

¹ In the Winter 2021 *Commentary*, our 2022 forecast of GDP and MDD was 7.0 per cent and 7.1 per cent, respectively.

Risk Analysis

The Irish economy experienced a robust recovery from COVID-19 in 2021 and is expected to continue to grow in 2022. Economic growth is also expected across the euro area in the near term with the European Central Bank (ECB) forecasting increases in GDP of 3.7 and 2.8 per cent for 2022 and 2023, respectively.² While we remain optimistic about near-term economic conditions, projections for economic growth are made with a higher than anticipated degree of uncertainty given the emergence of several risk factors.

The military invasion of Ukraine by Russia will have considerable economic repercussions on a global scale. In Box A to the *Commentary*, McQuinn and O'Toole discuss the exposure of the Irish economy to the ongoing tensions. This risk analysis discusses the main channels through which Ireland may be impacted by escalations in the ongoing conflict: trade linkage and supply chain fragmentation; disruptions in energy supply; upward pressure on inflation; potential interest rate hikes; and the response to the humanitarian crisis. In particular, we consider the downside risks to the forecasts in the *Commentary* if conditions in the Ukraine crisis were to deteriorate further or continue on a prolonged basis.

In an attempt to weaken the Russian economy and its military operations, pressure is mounting to impose full or partial bans on imports of Russian oil and gas, as these exports account for approximately one-fifth of Russia's economy.^{3,4} Thus far, the UK, the US and Canada have made plans to ban imports of Russian oil and gas. Over the course of the year and in the event of escalations, there is potential for a wider international embargo of these imports to materialise. As the Eurozone is far more reliant on Russian energy sources than the aforementioned countries, any supply disruptions or shortages would have serious repercussions for the European economy. The strain on energy supplies would see a significant increase in fuel costs and this would likely feed through to other prices. The spike in inflation associated with these costs would likely lead to a downturn in consumer spending and investment activity. If this were to occur, forecasts of consumption, investment, and the public finances would be revised downwards. Furthermore, there is a considerable risk that, should tensions increase, further disruptions to gas and oil supplies might occur, and in a worst case, end-user rationing might be required in Europe.

² See ECB projections available here: https://www.ecb.europa.eu/pub/projections/html/ecb.projections202203_ecbstaff~44f998dfd7.en.html.

³ Canada announced bans on crude oil. See: 'Canada to ban imports of crude oil from Russia', BBC News.

⁴ The US and the UK announce bans on oil and gas imports. See: 'US and UK ban Russian oil and gas imports in drive to punish Putin', *Financial Times* (ft.com).

In addition to oil and gas, Russia and Ukraine are significant exporters of global wheat and corn supplies and fertiliser components. It is likely that, regardless of the duration of hostilities, disruptions to the supply of these commodities are likely to persist and economic sanctions to remain in place. While price increases on these commodities indicate that the effects of the conflict are already being felt by the global economy, a prolonging of military action will cause prices to increase further. Higher input costs for the agricultural sector and increased food costs will affect farmers and consumers everywhere. In Ireland, the agricultural sector will face challenges in dealing with shortages in these areas as prices rise. However, these effects are likely to be most severe in the Middle East, Africa and parts of Asia, which are heavily dependent on food products from Russia and Ukraine.⁵ The strain on global food markets is likely to impose further upward pressure on global inflation as well as increased risks to food security in the most affected regions.

Pre-dating Russia's invasion of Ukraine, central banks were already wary of the accelerating growth in inflation rates. Increases in the Consumer Price Index at the end of 2021 prompted both the Bank of England and the US Federal Reserve to raise interest rates. However, given that these inflationary pressures have emerged largely as a result of shocks to the energy sector and not economic overheating, the ECB has, thus far, not deemed a rate increase necessary for the euro area. However, an unwinding of pandemic-related emergency asset purchases and a reduction in longer term asset purchases have been agreed, which indicates a tightening of the monetary policy stance. It is likely that recent elevated rates of inflation will persist due to the increased pressures associated with the current geopolitical environment. The euro area would likely see an interest rate increase sooner than anticipated if these pressures lead to price increases in sectors outside of energy and food.

Similarly, central banks may tighten the response to inflationary pressures further if recent price increases cause inflation expectations to become entrenched and cause a wage-price spiral. If interest rates were to increase, this could threaten the recovery of euro area economies from the pandemic. Investment would decline due to increased cost of borrowing while consumption would decrease due to increased returns on savings and higher mortgage interest payments.

Further increases in inflation could result in monetary policy rates being tightened by the ECB more aggressively than had been anticipated. Such a policy could result in higher debt servicing costs for firms and households, lower credit demand, and

⁵ <https://www.economist.com/finance-and-economics/2022/03/12/war-in-ukraine-will-cripple-global-food-markets>.

thus lower investment and consumption. Previous research by Fahey et al. (2018)⁶ considered these risks in the context of Ireland's mortgage market, noting a rise in default risks as interest rates increase.

Additionally, the heightened risk of cyberwarfare by Russia is not to be dismissed. The Cybersecurity and Infrastructure Security Agency in the US has issued warnings to American organisations regarding the possibility of Russian threats.⁷ If retaliations for sanctions imposed on Russia are likely to occur in cyberspace, significant costs may be imposed to global trade, investment activity and ongoing business operations. If some of these risks were to materialise, there could be significant implications for the public finances. If elevated rates of inflation persist, it is likely that low-income households who are largely dependent on social transfers for their income would require further government assistance in order to adapt to escalated living costs. Particular sectors of the economy may also require support to deal with the inflationary pressures; for example the agricultural sector, which could be particularly important in dealing with potential shortages of cereal and grain. Finally, the humanitarian crisis in Ukraine may require the provision of significant assistance to displaced refugees. Estimates already anticipate that Ireland could accept tens of thousands of refugees.⁸ An increase in the population of this scale will likely lead to significant costs to the public finances in order to provide adequate housing and a sustainable transition for those in need of assistance.

While the devastating events in Ukraine and their implications for the global economy are likely to be the greatest risk factor at present, concerns remain regarding the trajectory of the COVID-19 pandemic. Despite the successful development of vaccinations against the virus, the emergence of certain variants and differences across countries in the policy responses will continue to have implications for the global economy. In particular, China's 'zero tolerance' policy to outbreaks of COVID-19 may contribute to further slowdowns in global trade. Most recently, manufacturing plants in Shenzhen have temporarily halted production as part of stringent public health measures.⁹ While forecasts in this *Commentary* assume that public health restrictions remain lifted throughout 2022, the emergence of variants of the virus and international responses to such outbreaks will continue to pose a risk to supply chains and global output.

⁶ Fahy, M., K. McQuinn, C. O'Toole and R. Slaymaker (2018). 'Exploring the implications of monetary policy normalisation for Irish mortgage arrears', Special Article, *Quarterly Economic Commentary*, Spring QEC2019SPR_SA_Fahy. See: <https://www.economist.com/europe/2022/02/23/will-war-in-ukraine-lead-to-a-wider-cyber-conflict>.

⁷ See: <https://www.economist.com/europe/2022/02/23/will-war-in-ukraine-lead-to-a-wider-cyber-conflict>.

⁸ See: 'Up to six million refugees could arrive from Ukraine into EU, Coveney says' (irishtimes.com).

⁹ See: <https://www.globaltimes.cn/page/202203/1254794.shtml>.

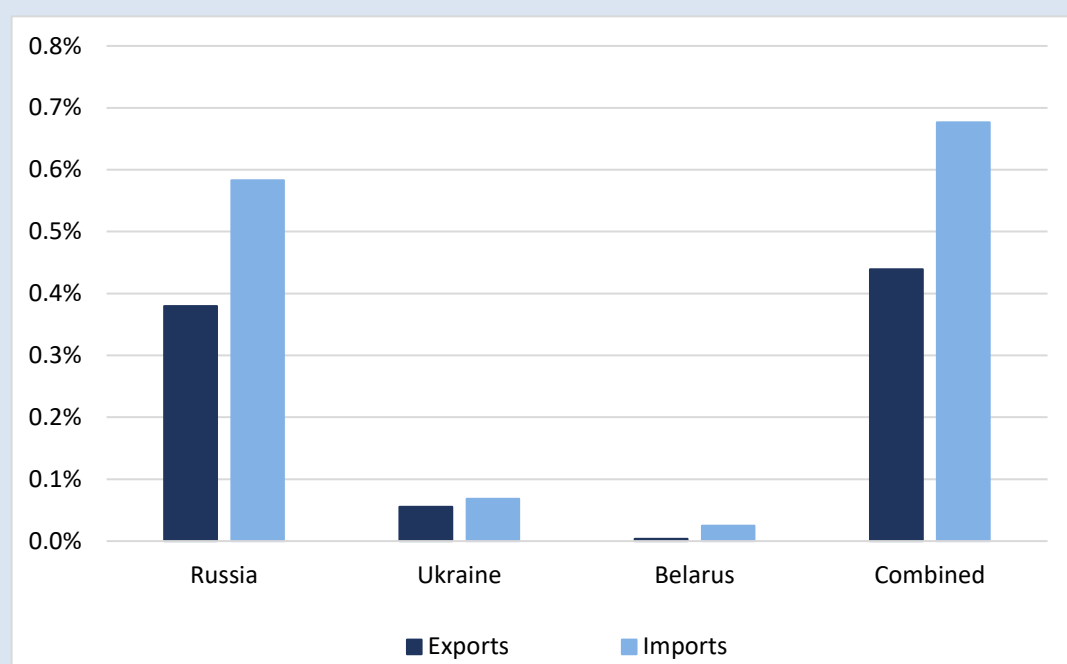
BOX A**GEOPOLITICAL TENSIONS AND THE IMPACT ON THE IRISH ECONOMY**

The invasion of Ukraine by Russia on 21 February 2022 is already having a significant impact on global economic activity. The scale of trade-related and financial sanctions imposed on Russia is unprecedented and reflects the scale of global opposition to the hostile actions taken. In this Box we discuss the likely implications for the Irish economy of the substantial increase in geopolitical uncertainty and the implications of the widespread sanctions that have been adopted since late February.

Direct trading activity

In terms of direct trading linkages, individual trade between Ireland and Russia, Ukraine and Belarus is very limited. Figure A.1 documents the proportion of total Irish merchandise exports and imports (2021) with these jurisdictions.

FIGURE A.1 PROPORTION MERCHANDISE EXPORTS AND IMPORTS BETWEEN IRELAND AND RUSSIA, UKRAINE AND BELARUS



Source: Central Statistics Office.

The combined level of trade for both imports and exports is less than 1 per cent. Thus any disruptions are unlikely to have major direct macroeconomic consequences for the Irish economy. Despite the low level of overall trade integration, there are some specific merchandise trade products, both on the import and export side, where Russia in particular accounts for a sizable share of Irish trade in that specific category. Table A.1 presents selected categories of goods imports and exports from Russia.

TABLE A.1 GOODS IMPORTS AND EXPORTS FROM RUSSIA TO IRELAND BY CATEGORY

TRADE CATEGORY	% of Total Irish Trade with Russia	% of Total Irish Trade in this product
MERCHANDISE IMPORTS		
Petroleum, petroleum products and related materials	39%	6%
Coal, coke and briquettes	23%	67%
Fertilisers, manufactured	22%	26%
Feeding stuffs for animals, excluding unmilled cereals	6%	3%
MERCHANDISE EXPORTS		
Metalliferous ores and metal scrap	25%	14%

Source: Central Statistics Office.

On the import side, there are some high-level dependencies, with imports of petroleum etc. accounting for 6 per cent of the total Irish imports of this item. The dependency is even higher for coal, coke and briquettes; Russia supplied 67 per cent of total Irish imports in this category. For manufactured fertilisers, over a fifth of Irish imports come from Russia. On the export side, metal ores to Russia account for 14 per cent of total Irish exports of this item.

Services exports and import data from bilateral flows data between Ireland and Russia also indicate a reasonably low level of direct dependence (Table A.2). The export share is considerably higher than the import share and this is accounted for by exports of other business services broadly defined.

TABLE A.2 SERVICES EXPORTS AND IMPORTS BETWEEN IRELAND AND RUSSIA – % OF TOTAL TRADE

RUSSIA	IMPORTS	EXPORTS
2019	0.2%	1.1%
2020	0.1%	1.3%

Source: UNCTAD.

These data indicate that while overall the direct trade dependencies are low, which should insulate Ireland from any direct economic shock, there are specific items in energy and agricultural production where Russia is an important trading partner. This may cause sector-specific shocks if trade disruptions occur in these areas.

Global Economic Shock and Greater Levels of Uncertainty

As a small, open and highly globalised economy, the greatest impact on the Irish economy will come through any general reduction in international trade. The radical shift in the geopolitical landscape will inevitably result in a sharp rise in international business uncertainty. This may lead to a major shift in businesses' views on international markets (particularly emerging Eastern European and central Asian markets regarding how and where they will be able to sell in the new environment), leading to lower investment and

employment growth. This uncertainty is likely to drive growth lower in the general European economy through both investment and potentially precautionary savings channels.

The Irish economy, owing to its small and open nature, is particularly sensitive to significant changes in global economic activity; McQuinn (2019) examined the role of uncertainty due to Brexit on the Irish economy. Preliminary estimates from the European Central Bank (ECB) indicate that the conflict could reduce economic output in the euro area by up to 0.4 per cent this year.¹⁰ Previous modelling work done using COSMO, the large scale macro-econometric model of the Irish economy, (see Bergin et al., 2017), would indicate a one-for-one relationship between global and domestic economic activity. Current estimates by NIESR (Liadze et al., 2022) indicate that the broader global economy is likely to suffer a reduction in the pace of economic growth of approximately 1 per cent by 2023 due to the military invasion. It must be noted that due to the fluid nature of the current situation, these estimates were published quite soon after the Russian invasion had occurred and will almost certainly be subject to future revision.

Inflationary pressures

The last nine months has seen an increase in international inflationary conditions; these are mainly due to the aftermath of the pandemic and developments in international energy markets. The rapid deterioration in the relationship between Western economies and Russia may result in either a prolonging or an escalation of these inflationary pressures. Given the reliance of many European countries on Russian gas, further restrictions on the supply of gas will likely lead to higher prices in the future as will the general uncertainty and the moves by Western companies to divest from joint Russian energy ventures. In terms of further sanctions, if Western authorities decide, for example, to reduce European consumption of Russian gas, this would almost inevitably lead to higher energy bills over the short- to medium-term (see McWilliams et al., 2022, for more on this). These effects would likely be most acute once current storage backups are run down. Liadze et al. (2022) expect global inflation to be 3 percentage points higher in 2022 due to the conflict and 2 percentage points higher in 2023.

The response of monetary authorities to inflationary pressures due to the geopolitical issue is likely to be somewhat nuanced. On the one hand, any persistence in the inflationary pressures currently being experienced across the euro area would more than likely lead to the ECB tightening monetary policy; however, if there is a significant slowdown in the post-COVID economic recovery across the Eurozone due to the geopolitical issue, the ECB may be reluctant to increase policy rates.

Other inflationary pressures which may emanate from the crisis are through increases in agricultural prices and raw metal materials. Russia has a large market share in the world wheat market so it could cause disruptions. Combined, Russia and Ukraine account for

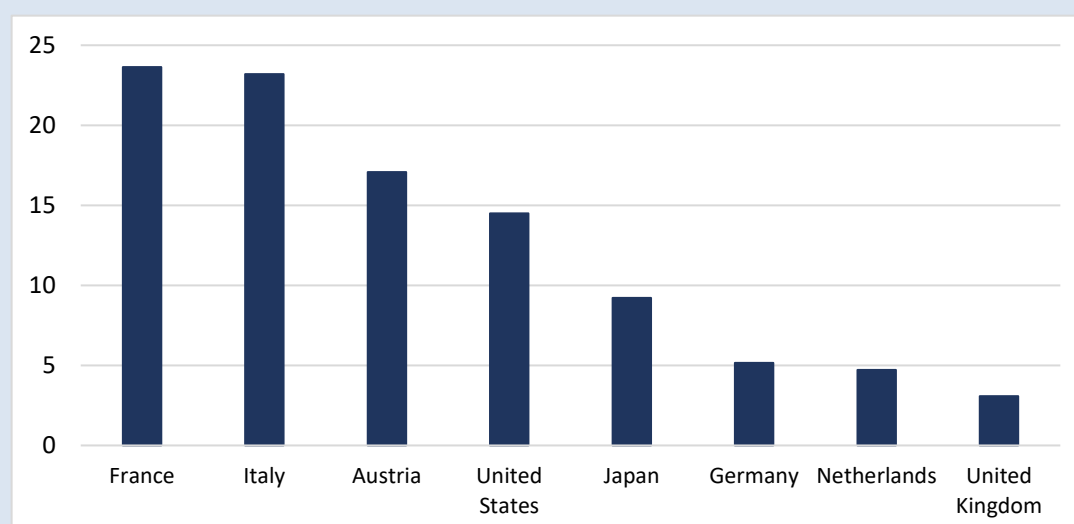
¹⁰ <https://www.reuters.com/business/exclusive-ecb-policymakers-told-ukraine-war-may-shave-03-04-off-gdp-2022-02-25/>.

approximately 25 per cent of the world wheat market and approximately 20 per cent of corn and other coarse grains (Liadze et al., 2022). Undoubtedly output for these vital foodstuffs will be lower this year given the military invasion.

Financial stability

The scale of financial sanctions undertaken by Western authorities in light of the Russian invasion is unprecedented; a number of Russian banks have been locked out of the SWIFT system of banking,¹¹ while reserves of the Russian Central Bank held by the G7 have been frozen, thereby limiting the ability of the Russian Central Bank to support the rouble. It is difficult to fully envisage the implications of these actions. However, the main financial stability risks which are likely to occur are for those Western banks that hold Russian assets or have large Russian exposures. Figure A.2 plots the main exposures by country of consolidated banking systems to Russian residents.

FIGURE A.2 EXPOSURES OF COUNTRY'S CONSOLIDATED BANKING SYSTEMS TO RUSSIAN RESIDENTS (\$ BILLION)



Source: Bank of International Settlements.¹²

Ireland's financial system's direct exposure to Russian lenders is minimal at just \$2 million; this compares with the significant exposure of the French, Italians and Austrians in a European context.¹³ However, borrowing costs globally amongst financial institutions could increase due to greater levels of risk premia if heightened levels of uncertainty were to prevail. There is also the possibility of contagion effects, were a Russian sovereign bond default to occur, both to counterparties holding those exposures and to sovereigns with Russian linkages.

¹¹ SWIFT is a messaging network used by banks and financial institutions globally for quick and faultless exchange of information pertaining to financial transactions.

¹² https://www.bis.org/statistics/consstats.htm?m=6_31_70.

¹³ As noted by Borgen (2022), the ownership structure of financial institutions and especially the relationship between the parent company and its subsidiary is particularly important in this context. These relationships are not apparent in the consolidated data.

One area of the financial sector of considerable importance from a domestic perspective is the considerable amount of Russian financing involved in funds activity in the Irish Financial Services Centre (IFSC). Stewart and Doyle (2018) examined the number of firms with a Russian connection operating in the IFSC under the ‘Section 110’ tax treatment, over the period 2007-2015. They identified up to 70 firms with total assets of €62 billion availing of the scheme. However, the impact of these firms on the domestic economy in terms of corporate taxation and administrative costs paid is quite low. Therefore, while any reversal of fund flows, or sanctions to ban flows, could lead to liquidity or solvency issues in the funds and thus increase the default risks, this would likely result in only reputational risk for the Irish financial sector as these assets are owned by neither Irish firms nor households.

Other channels

One sector of the domestic economy which is certain to be impacted by the present crisis is the Irish aircraft leasing industry. This sector of the economy has grown substantially in recent years with Irish lessors managing more than €100 billion in assets. The sector faces significant difficulties in ending and recovering Irish-owned aircraft from Russia under the new sanctions. The recent re-registering of foreign-owned aircraft in Russia could lead to significant losses in the industry. If Russia were to seize the aircraft, leasing companies would likely face costly consequences, such as default and insurance claims.¹⁴

Apart from the negative impact on the industry itself, any sharp reversal in aircraft leasing activity is also likely to impact the Irish National Accounts through investment flows and imports. The cancellation of existing leases is likely to lead to lower transport service exports to Russia.

Finally, the humanitarian crisis in Ukraine may require significant assistance to displaced refugees. Estimates already anticipate that Ireland could accept tens of thousands of refugees.¹⁵ A sudden surge of refugees of this scale will likely require considerable public finance support in order to provide for accommodation and other needs.

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¹⁴ See: <https://www.irishtimes.com/business/irish-aircraft-lessors-face-billions-in-write-offs-as-planes-re-registered-in-russia-1.4826923>.

¹⁵ See: ‘Up to six million refugees could arrive from Ukraine into EU, Coveney says’ (irishtimes.com).

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This Box was prepared by Kieran McQuinn and Conor O'Toole.

The Domestic Economy

OUTPUT

Key Points

- *Forecasts subject to considerable uncertainty given the crisis in Ukraine.*
- *Growth outlook reduced compared to Winter Commentary.*
- *Modified total domestic demand in forecast to increase by 5.0 and 4.5 per cent in 2022 and 2023 respectively.*

Significant uncertainty shrouds the outlook for most Western economies in light of the terrible developments in Ukraine. Key drivers of growth such as consumption and investment are likely to be adversely impacted by greater levels of geopolitical risk, while global trade is set to be impacted in a number of different ways.

In Box A to the Risk Analysis section of the *Commentary* the potential impacts of recent developments are assessed from an Irish perspective. While Ireland's direct trade exposure to both Russian and Ukrainian markets is limited, it is clear that these events will have an impact on the domestic outlook. In terms of the forecasts in the present *Commentary*, we assume that all of the major economic and financial sanctions which have been imposed to date will continue for the duration of the forecast period.

In Table 1 we compare the forecasts for 2022 from the Winter 2021 *Commentary* with the equivalent forecasts from the present *Commentary*. This provides an indication of the impact of the Ukrainian crisis on the major Irish macroeconomic variables. It is clear from the Table 1 that all of the major components of growth are negatively impacted, while the new unemployment and inflation rate forecasts for 2022 are now higher than was anticipated at the end of 2021.

TABLE 1 DIFFERENCE BETWEEN WINTER 2021 AND SPRING 2022 FORECASTS FOR 2022 (%)

	Winter 2021	Spring 2022
Private Consumer Expenditure	7.8	5.6
Public Net Current Expenditure	3.0	4.5
Investment	8.4	6.8
Exports	9.0	7.8
Imports	10.0	8.0
GDP	7.0	6.2
Modified Domestic Demand	7.1	5.0
Unemployment Rate (as % of Labour Force)	5.8	6.3
Inflation (CPI)	4.0	6.7

Source: Quarterly Economic Commentary.

One positive feature of 2022 to date has been the absence of any need for further health restrictions. While incidences of COVID-19 are still quite high, most sectors of the economy are now operating free of any restrictions. In 2021, the Irish economy grew by 13.5 per cent in terms of GDP, and modified domestic demand – a better indicator of domestic activity – increased by 6.5 per cent.

The difference in growth rates between domestic and foreign-owned sectors in the economy is also evident from Table 2 which presents the growth rate of gross value added for foreign-owned multinational (MNE) dominated sectors and for other sectors in the economy.

TABLE 2 GROSS VALUE ADDED GROWTH RATES IRISH ECONOMY 2016-2021 (%)

	Foreign-owned MNE dominated	Other
2016	0.4	1.9
2017	10.4	4.4
2018	16.4	5.8
2019	7.5	3.7
2020	23.1	-8.7
2021	21.9	5.0

Source: Central Statistics Office.

In 2020 and 2021 the foreign-owned MNE-dominated sector in the Irish economy registered strong growth of over 20 per cent per annum. While 'Other sector' experienced a decline in 2020 of 8.7 per cent, it registered an increase of 5 per cent in 2021.

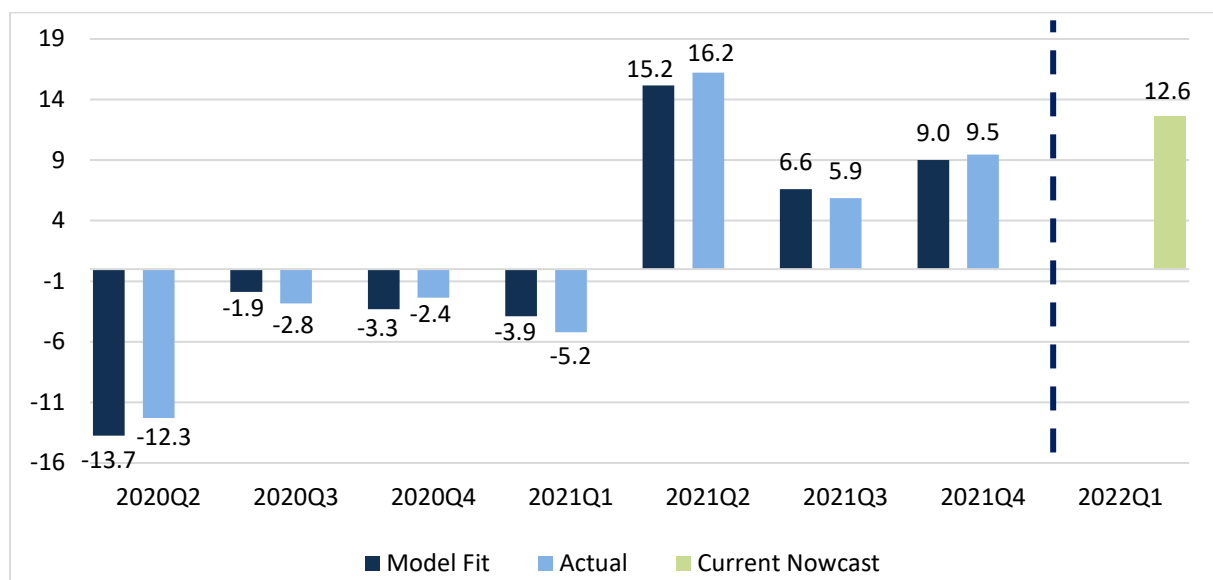
In terms of headline GDP, we now expect the economy to grow by 6.2 per cent; this is down somewhat on our forecasts from the Winter *Commentary* reflecting

the adverse impact of the Ukrainian crisis on economic activity. We now expect consumption to grow by 5.6 per cent this year and investment growth is also marginally down when compared with our previous forecasts. We have also revised downwards our outlook for trade. Notwithstanding these developments we still see the Irish economy growing, both in terms of GDP and modified domestic demand (MDD), by 5 per cent, which is a significant performance.

We also expect the economy to grow robustly in 2023 with both GDP and MDD expected to grow by 4.3 and 4.5 per cent respectively. However, there is a considerable degree of uncertainty surrounding these forecasts depending on the scale and duration of the conflict in Ukraine.

The Nowcasting model (Egan, 2021)¹⁶ currently employed to support the regular forecasting exercise in the *Commentary* indicates that MDD is expected to grow by 12.6 per cent in Q1 2022 on an annual basis. This strong growth is driven largely by base effects; due to the strict public health measures, MDD declined 5.2 per cent in Q1 2021. We anticipate the rate of growth in modified domestic demand to decline over the course of the year and will average 5.0 per cent in 2022 relative to 2021. Figure 1 shows the performance of the Nowcasting model compared to actual growth in MDD since Q2 2020.

FIGURE 1 NOWCAST OF MODIFIED DOMESTIC DEMAND FROM Q2 2020 TO Q1 2022



Source: Central Statistics Office and authors' calculations.

¹⁶ Egan P. (2021). 'Nowcasting Modified Domestic Demand using Monthly Indicators'. Economic and Social Research Institute Working Paper, No. 716.

DEMAND

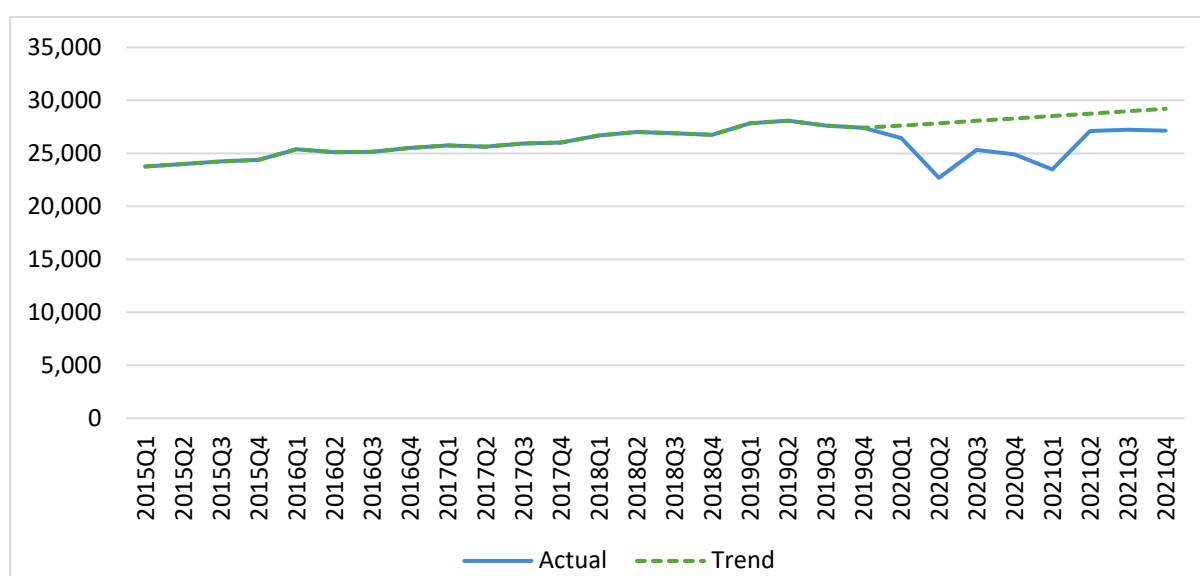
Key Points

- Household consumption increased in 2021 relative to 2020, however it remains below pre-pandemic levels.
- The savings ratio remains above pre-pandemic levels, however we expect to see an unwinding of savings in 2022.
- Consumption to grow at 5.6 per cent for 2022, which is less than previously expected due to increased inflation and uncertainty stemming from the Russian invasion of Ukraine.

Figure 2 presents the annual level of consumption expenditure expressed on a quarterly basis for the period 2015-2021. To contextualise the impact of the pandemic on the overall level of household spending, included in Figure 2 is a linear trend which extrapolates the Q4 2019 level of consumption using the average quarter-on-quarter growth rate over the period 2015-2019 (approximately 0.8 per cent).

Despite the robust recovery in 2021, the level of household expenditure remains below what may have been expected had the economy continued to grow in line with pre-pandemic trends. While the rate of growth has slowed since the robust increase in Q2 2021, the year-on-year growth rate in Q4 2021 was 9 per cent.

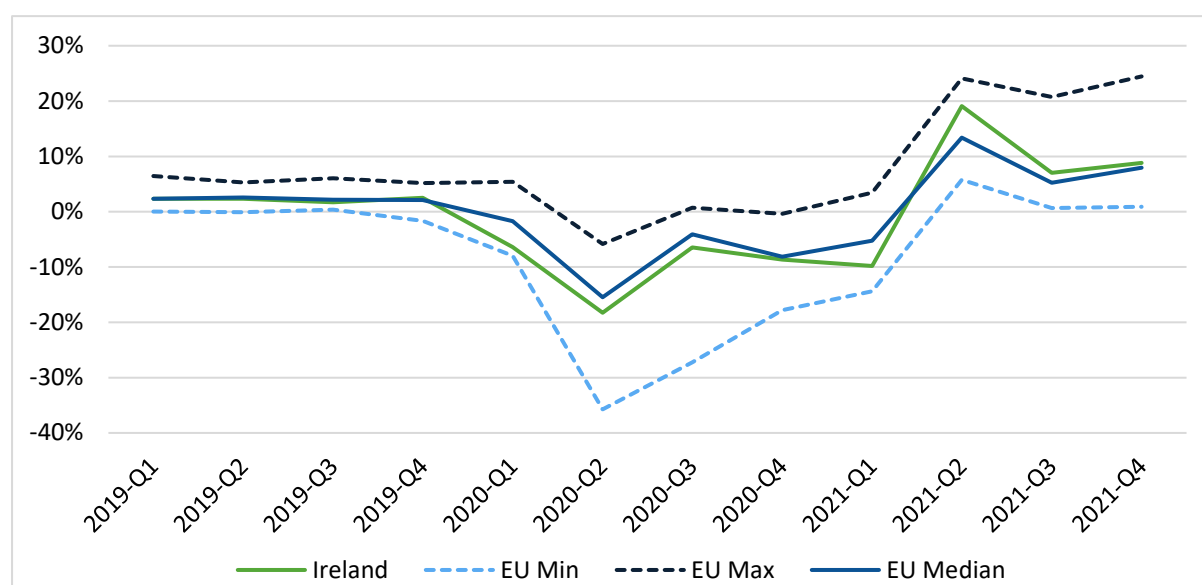
FIGURE 2 QUARTERLY PERSONAL EXPENDITURE ON CONSUMER GOODS AND SERVICES – CONSTANT MARKET PRICES AND SEASONALLY ADJUSTED – LEVELS (€)



Source: Central Statistics Office and authors' calculations.

The annual change in consumption in Ireland in a comparative European context is presented in Figure 3. In general, throughout 2020 the drop in consumption, due to public health restrictions, was larger in Ireland than the median of other European countries. However, the subsequent recovery in Ireland was stronger than that of the EU, as the growth in consumption in Ireland surged above the EU median. In Q4 2021, Ireland's growth rate was just slightly above the EU median.

FIGURE 3 QUARTERLY FINAL CONSUMPTION EXPENDITURE OF HOUSEHOLDS – GROWTH RATES – YEAR-ON-YEAR EUROPEAN COMPARISON (SEASONALLY AND CALENDAR ADJUSTED)



Source: Authors' calculations using Eurostat data.

Note: Due to missing data for Ireland Q4 2021, we estimated Q4 2021's value by growing forward Q3 2021's value using the quarter-on-quarter growth rate calculated with seasonally-adjusted CSO data.

The recovery in 2021 can be identified in the monthly retail sales data (Panel A Figure 4). Total expenditure saw steady growth throughout the year, with the year-on-year growth rate in January 2022 reaching 19 per cent. Retail sales in bars, which experienced one of the largest falls in expenditure over the duration of the pandemic, saw a steady increase from June to October 2021. In contrast, December 2021 saw a large fall in expenditure in bars, declining 30 per cent from November 2021. This decrease in expenditure is in line with the re-introduction of public health restrictions.

A drop in expenditure in the motor and fuel index can be seen from August 2021; this slowdown in spending is likely due to higher energy prices, as well as increased prices in other commodities. A further acceleration of energy price inflation is likely, given the invasion of Ukraine by Russia. In addition, it is expected that there will be hikes in international grain prices, as both Russia and Ukraine are the largest

and fifth-largest wheat exporters, respectively.¹⁷ This will disrupt global supply chains and inevitably feed into higher food prices. Food sales, which remained steady throughout 2021, have already experienced declines in 2022 (-6 per cent in January 2022).

Focusing on the sub-indices in panel B of Figure 4, expenditure on items like clothing, textiles and footwear saw a large jump in May 2021, and has since grown steadily. In addition, retail sales in both electrical goods and household equipment were steady over the year, with some fluctuations throughout. Books, newspapers, and stationery expenditure fluctuated during the first half of the year, stabilising close to its pre-pandemic level from August 2021 onwards.

¹⁷ <https://www.economist.com/finance-and-economics/2022/03/12/war-in-ukraine-will-cripple-global-food-markets>.

FIGURE 4 RETAIL SALES INDEX – MAIN ITEMS

Source: Central Statistics Office.

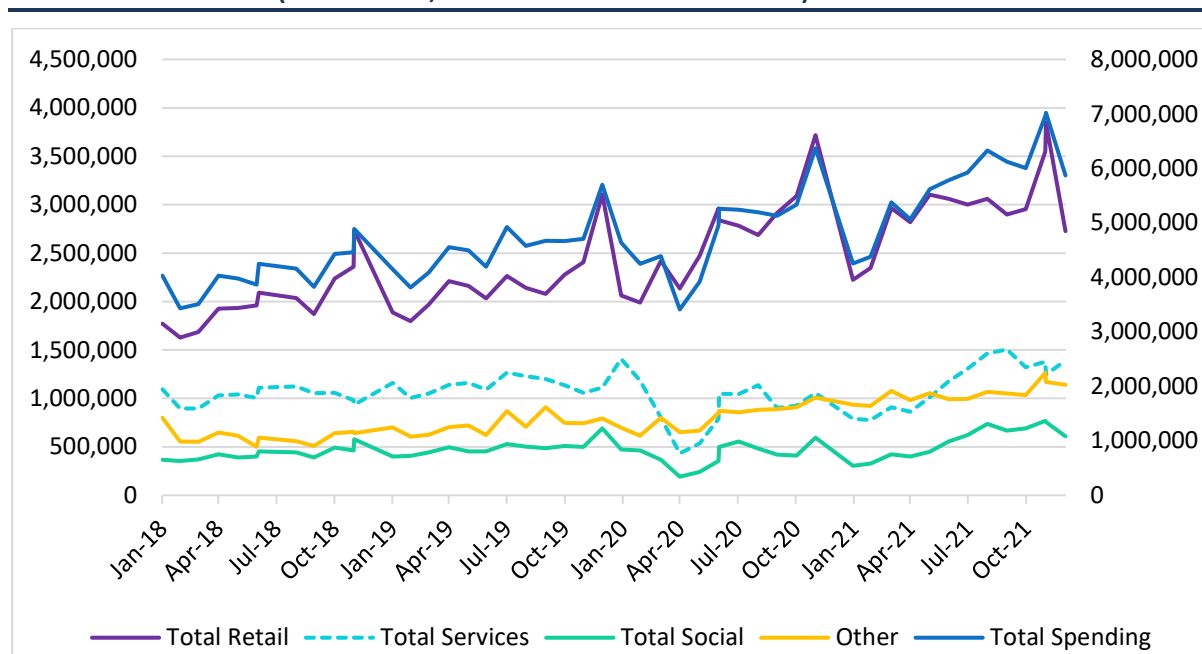
Note: Retail Sales Index Volume Adjusted data (based 2015=100).

Total expenditure on personal credit and debit cards,¹⁸ as shown in Figure 5, has continued to grow throughout 2021, with the year-on-year growth rate in December 2021 at 10 per cent. Expenditure increased further in January 2022

¹⁸ Note that credit card and debit card expenditure does not include cash expenditure, and therefore is not reflective of the overall expenditure in the economy, just a part of it.

(38 per cent) although the high growth is due, in part, to the ongoing public health restrictions that occurred in January 2021.

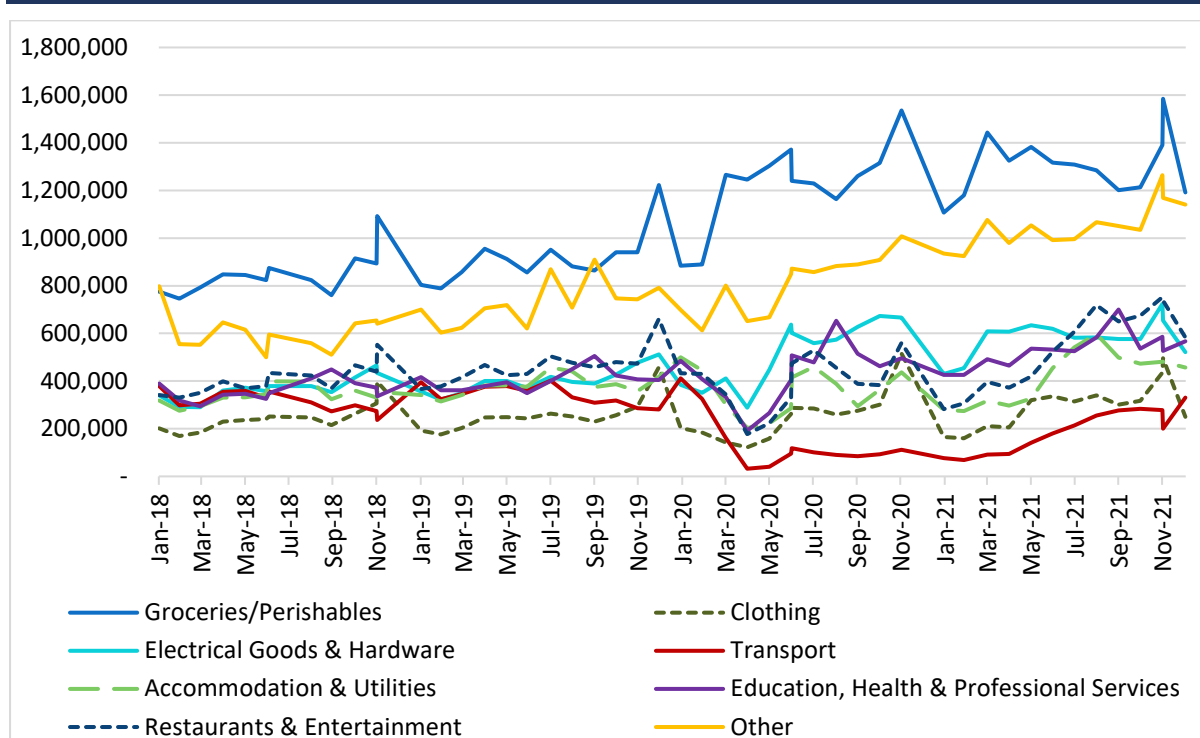
FIGURE 5 TOTAL EXPENDITURE FROM PERSONAL CREDIT CARD (LHS) + DEBIT CARD (RHS) DATA (NOMINAL €, NON-SEASONALLY ADJUSTED)



Source: Central Bank of Ireland.

Given that credit and debit card data are nominal and non-seasonally adjusted, some expenditure patterns may be attributed to changing price levels and seasonality. However, examining a broader group of expenditure categories may provide additional insight, as shown in Figure 6.

FIGURE 6 EXPENDITURE FROM PERSONAL CREDIT CARD + DEBIT CARD DATA – SUB-SECTIONS (NOMINAL, NON-SEASONALLY ADJUSTED)



Source: Central Bank of Ireland.

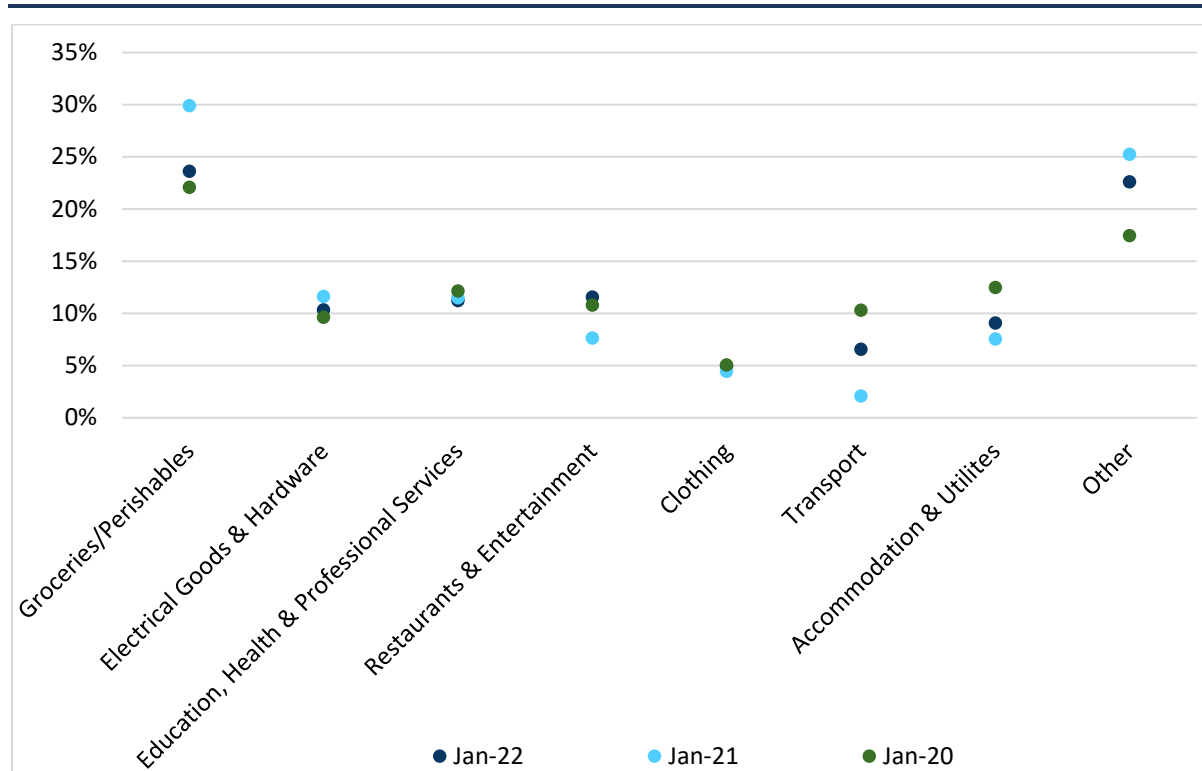
Throughout 2021, as public health restrictions were eased, many households bought goods and services that were previously unavailable due to the pandemic. For example, transport expenditure, which was heavily impacted over the pandemic, increased over 2021, and experienced a jump in January 2022, in line with the removal of public health restrictions; its year-on-year growth rate stood at 330 per cent in January 2022. However, it remains 20 per cent below pre-pandemic levels.¹⁹ In addition, restaurants and entertainment expenditure also grew significantly throughout 2021, with an average quarter-on-quarter growth rate of 5 per cent. On an annual basis, spending in this sector increased 106 per cent in January 2022 compared to its level in January 2021, which is unsurprising given the adverse epidemiological situation last January. Spending on accommodation and utilities also increased over the year, with an annual growth rate of 64 per cent.

One important aspect of the recovery in household expenditure is the degree to which spending patterns have changed through the pandemic. To gain a more granular insight into the recovery trends, Figure 7 presents the share of expenditure in January 2020, 2021, and 2022. Expenditure remains below pre-pandemic levels for transport, and accommodation and utilities, however, it has

¹⁹ Compared to January 2020.

surpassed its January 2021 level. Other items such as restaurants and entertainment and groceries/perishables are returning to their pre-pandemic level. Expenditure on items such as clothing, education, and health and professional services remained stable throughout the pandemic.

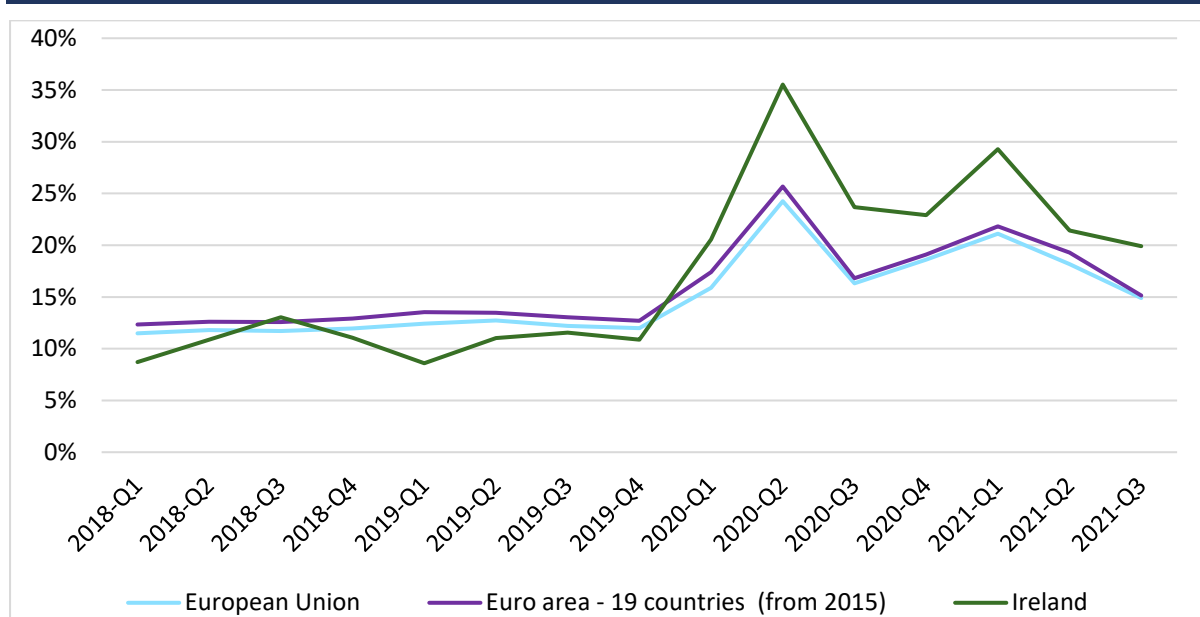
FIGURE 7 SHARE OF EXPENDITURE FROM CREDIT CARD (PERSONAL) + DEBIT CARD DATA IN 2019, 2020, 2021 (NOMINAL, NON-SEASONALLY ADJUSTED)



Source: Central Bank of Ireland.

A notable feature of the pandemic has been a marked increase in the savings ratio (the share of disposable income diverted into savings). Figure 8 presents the savings ratio for Ireland, the euro area, and the European Union as a whole. It is clear the savings ratio in Ireland increased dramatically over the pandemic. Throughout 2021, there was a gradual reduction in the savings ratio as the economy recovered from the pandemic. However, Ireland's savings ratio is still elevated compared to both the current EU rate and its pre-pandemic rate (in Q3 2021, Ireland's saving ratio was 72 per cent higher relative to Q3 2019).

FIGURE 8 SAVINGS RATIO – IRELAND AND EUROPEAN ECONOMIES – GROWTH RATES (% , SEASONALLY AND CALENDAR ADJUSTED)



Source: Central Statistics Office.

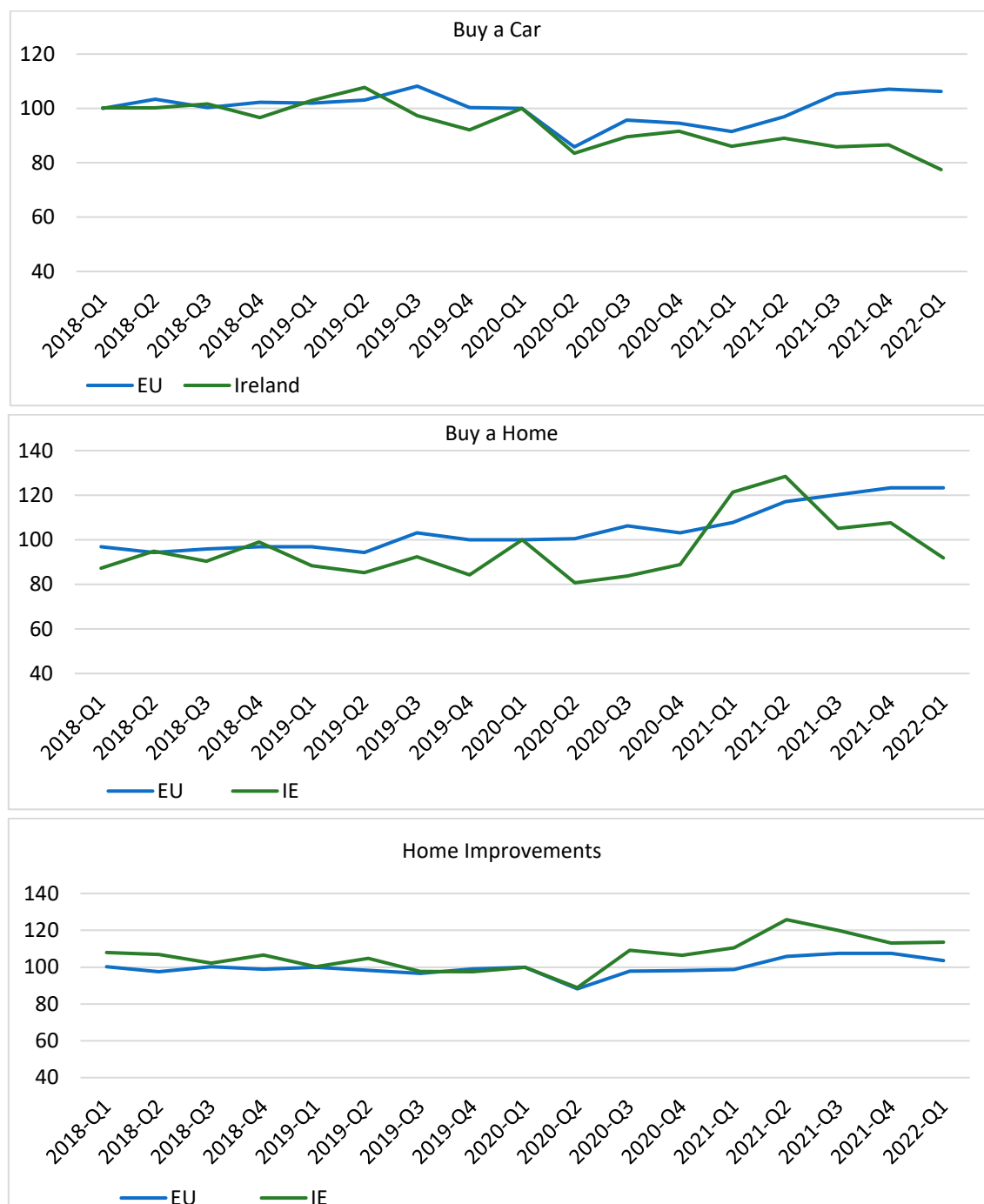
How households use these higher savings is going to define the nature and composition of the economic rebound. For households who are saving, the following choices are available: a) continue saving; b) increase expenditure on non-durable goods and services (such as holidays and recreation); c) purchase durables (such as cars); or d) invest these funds for example into financial assets or housing (either through improvements or new purchases) or clearing debt.

To gain some insight into the preferences of Irish households in this regard, we can draw on the European Commission Consumer Sentiment Survey which provides information on expectations of the propensity to make large purchases on a) cars and other motor vehicles; b) house purchase; and c) home improvements, over the next 12 months. The figures in index form (Q1 2020 = 100) are presented for Ireland and the EU for each item in Figure 9. It appears that Irish households are more likely to channel funds into house purchase and home improvements relative to car purchases since the onset of the pandemic. However, households' intentions to buy a home have fallen in recent months, reflecting the challenging nature of house purchasing in Ireland. In contrast, households' intentions to carry out home improvements have remained high.

The level of household spending and saving is impacted by the level of uncertainty and inflation in an economy. Given the crisis in Ukraine, households could attempt to save rather than spend (i.e. engage in precautionary savings). However, in this case, essential items such as fuel and other inelastic products, are experiencing large inflationary pressures, thus making it likely that many households will

continue to purchase such items. Indeed, these inflationary pressures are likely to disproportionately affect lower income households who spend a higher share of their budget on food and energy items, both in Ireland and globally (IMF, 2022).²⁰

FIGURE 9 EXPENDITURE EXPECTATIONS

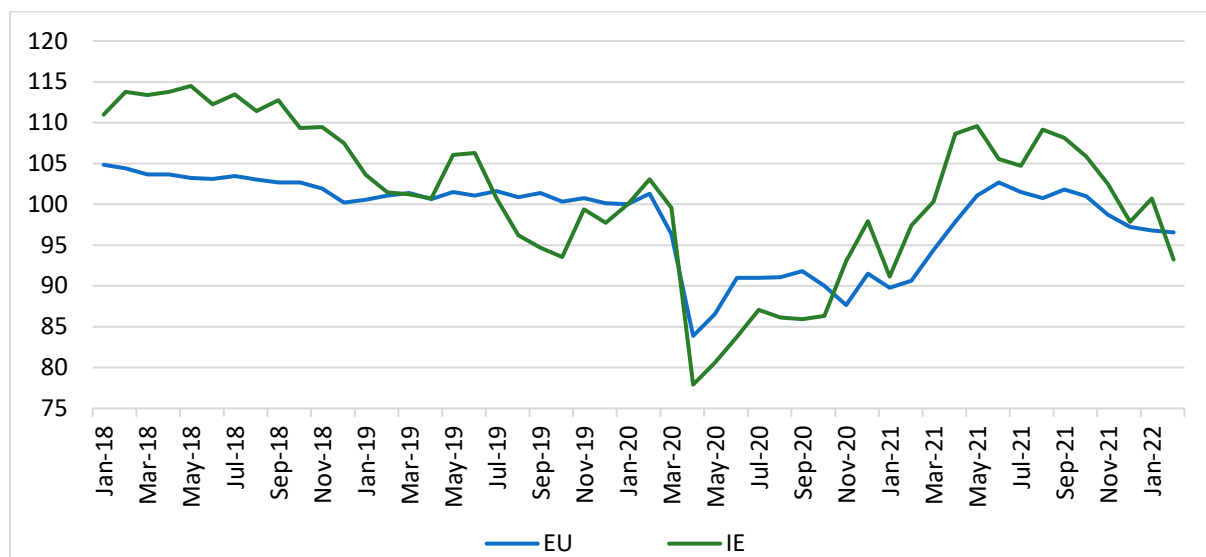


Source: European Commission.

²⁰ <https://www.imf.org/en/News/Articles/2022/03/05/pr2261-imf-staff-statement-on-the-economic-impact-of-war-in-ukraine>.

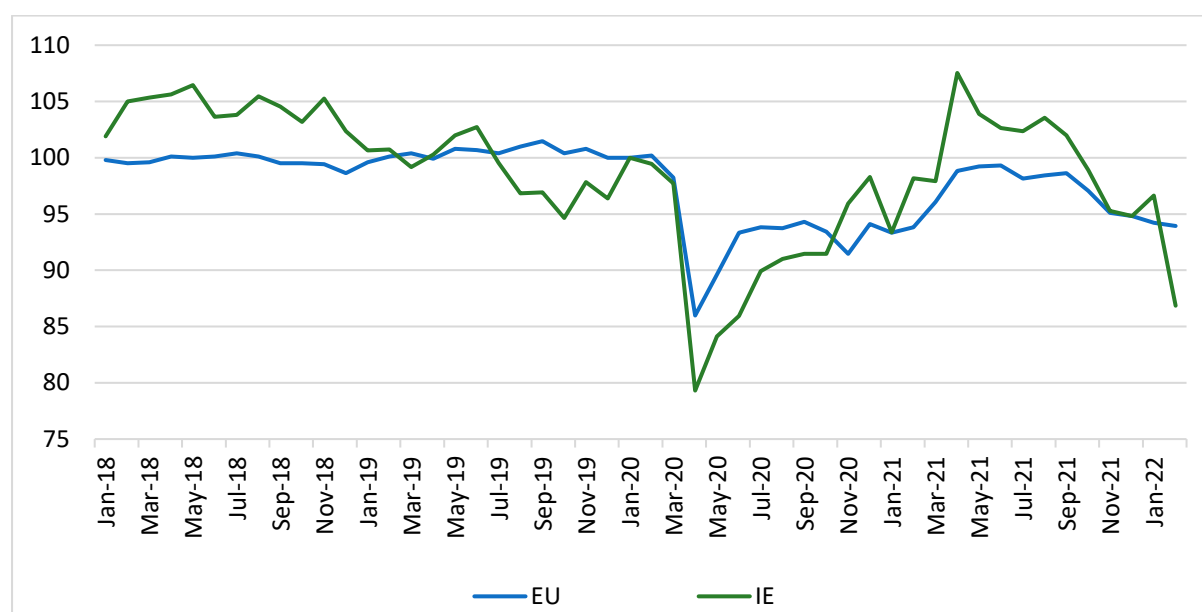
A major conflict such as that now ongoing in Ukraine leads to a substantial escalation in global uncertainty levels, which will likely dampen consumer confidence. Looking at the Consumer Confidence Indicator (January 2020 = 100) in Figure 10, provided by the European Commission, we can compare the consumer confidence in Ireland and the EU. One can clearly see that Ireland's Consumer Confidence Index has been higher than the EU's average since December 2020. However, in February 2022, Ireland's index fell below the EU's. Explanations for this large drop in February 2022 (7 per cent lower than January 2022, and 4 per cent lower than February 2021) is likely down to the fact that inflationary pressures are somewhat larger in Ireland than they are in the rest of the euro area, due to the relatively strong pace of Irish economic growth. Given the heightened uncertainties around the economic outlook, it is not surprising that Irish households are unsure about the future.

FIGURE 10 CONSUMER CONFIDENCE INDICATOR



Source: European Commission.

Figure 11 compares Ireland's expectations on the financial situation over the next 12 months with that of the EU's. Over the first quarter of 2021, the forecast for Ireland was positive, and above that of the EU's. However, in the latter half of the year, the Irish indicator decreased. In January 2022, the Irish indicator experienced the largest month-on-month decline (-10 per cent) since April 2020. Once again, this is likely a fallout from the ongoing conflict in Ukraine, and in particular its impact on rapidly rising commodities prices, as many Irish households will face increasing living costs over the course of the year if the conflict persists.

FIGURE 11 EXPECTATIONS ON FINANCIAL SITUATION OVER THE NEXT 12 MONTHS

Source: European Commission.

Consumption forecasts

There are two contradicting economic forces currently at play which are affecting Irish consumption; the improving COVID-19 epidemiological situation and the deteriorating geopolitical conflict in Ukraine. A robust recovery in consumption is evident throughout 2021, driven mainly by looser public health restrictions, and as most sectors of the economy are now operating free of any restrictions, it was expected that this recovery would persist into 2022. However, the deteriorating geopolitical situation in Ukraine is set to have a negative impact as consumption decisions are adversely impacted by the greater levels of uncertainty associated with the conflict and the expected increase in inflation which is set to occur.

The drop in consumer sentiment in the early part of 2022 points to a dampening in the consumption outlook even as the epidemiological and immunological situation improved and prior to the Russian invasion of Ukraine. In particular, energy and food prices are set to increase above what was previously expected. Therefore, our expectation for consumption growth in 2022 is lower than we previously forecast. We now expect consumption to grow by 5.6 per cent in 2022 and by 4.2 per cent in 2023. The reason for the positive growth in the face of such uncertainty is the rebound from the pandemic allied to the significant increase in household savings which have been accumulated by households during the last two years. We are assuming that some element of those savings will help households to smooth their consumption, although in times of uncertainty households do tend to save more.

TRADED SECTOR

Key Points

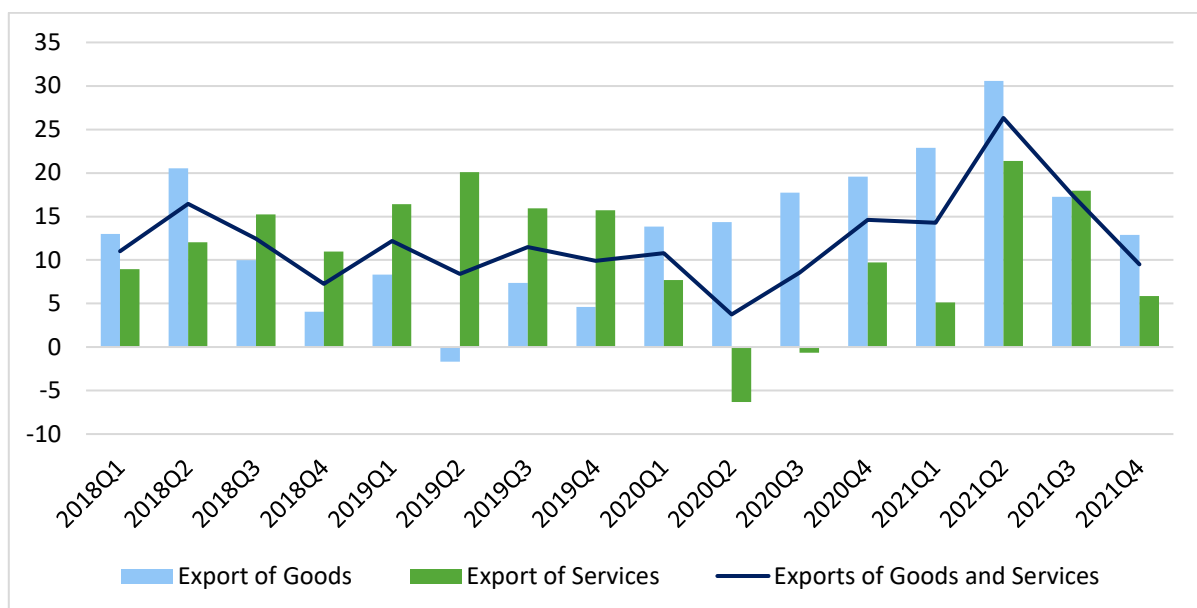
- Irish net exports were €187 billion in 2021, up €98.1 billion compared to 2020.
- Exports grew by 1.3 per cent in Q4 2021 compared to Q3 2021 on a seasonally-adjusted basis.
- Seasonally-adjusted imports grew 22.7 per cent on a quarterly basis in Q4 2021.
- Trade forecasts subject to considerable uncertainty due to the Ukrainian crisis.

Import and Export Activity

The robust performance of the export sector was a major contributor to Ireland's economic growth in 2021. Exports experienced growth of 16.6 per cent relative to 2020 while imports declined by 3.7 per cent. The joint impact of these changes was to increase Irish net exports to just under €187 billion in 2021, an increase of €98.1 billion compared to 2020.

Exports of both goods and services experienced continued growth in the final quarter of 2021, albeit at a slower pace. Figure 12 shows the annual growth rate in Irish exports by quarter. In Q4 2021, goods and services exports increased 12.9 per cent and 5.9 per cent per annum, respectively.

FIGURE 12 SEASONALLY-ADJUSTED EXPORTS (VOLUME, Y-O-Y %)



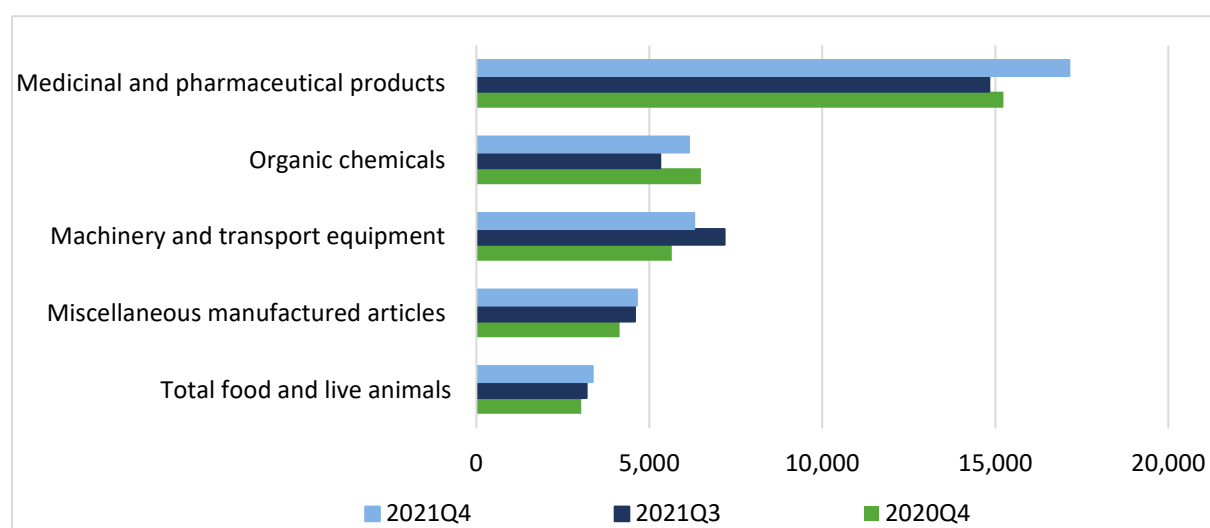
Source: Central Statistics Office, Quarterly National Accounts.

Medicinal and pharmaceutical products continued to account for a high share of Irish goods exports in 2021, at 37.9 per cent of total (Figure 13). In Q4 2021, these

exports increased by 15.6 per cent compared to Q3 2021, and 12.5 per cent compared to Q4 2020. Exports of total food and live animals increased 11.1 per cent in Q4 2021 per annum and increased by 4.1 per cent in 2021 relative to 2020. Machinery and transport equipment also grew 12.2 per cent on an annual basis in Q4 2021 and 8.5 per cent in the year overall. Organic chemical exports were one of the only export commodities to decline in 2021 relative to 2020 (-17 per cent). In the final quarter of 2021, these exports declined 5.4 per cent relative to Q4 2020.

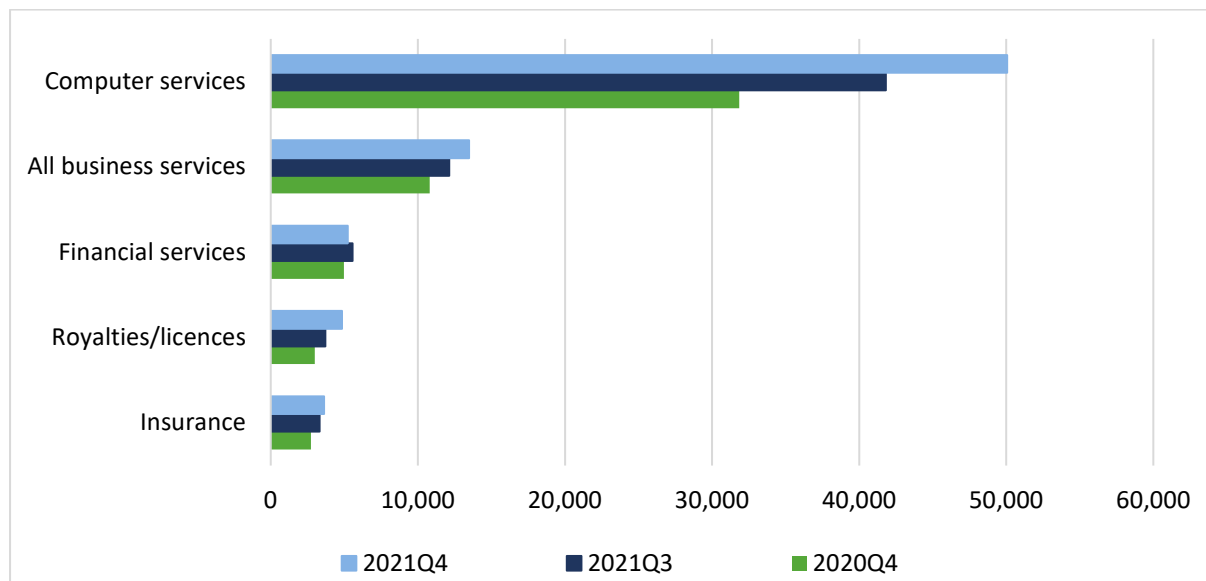
The growth in exports across a variety of commodity groups in 2021 is in contrast with the sector-specific growth that we witnessed early in the pandemic. This suggests that growth is being experienced across the economy, rather than concentrated in a select few industries.

FIGURE 13 GOODS EXPORTS BY COMMODITY GROUP (VALUE, € MILLION)



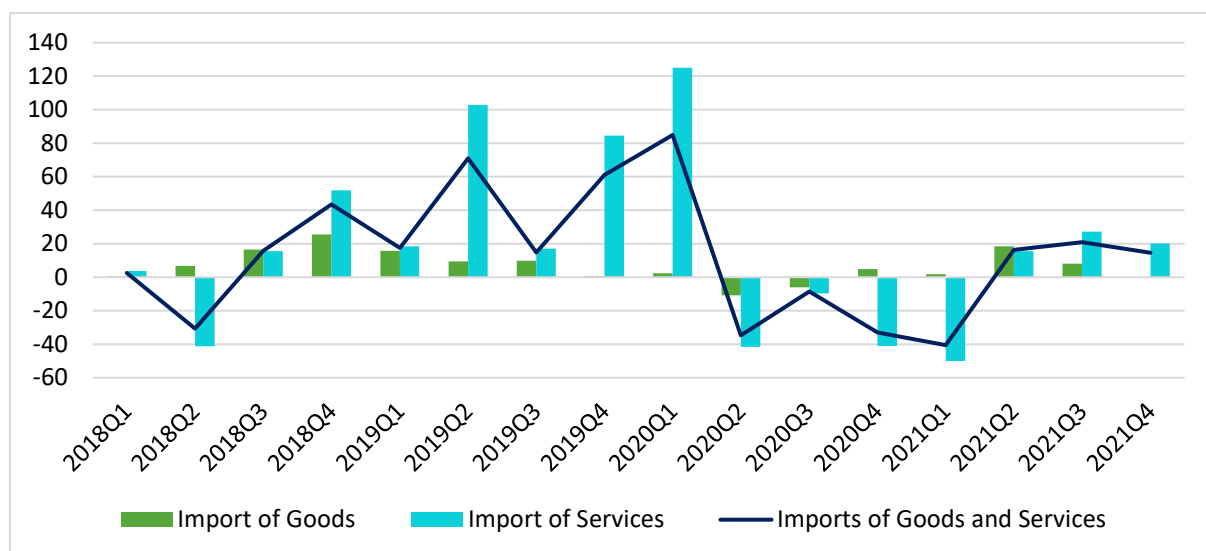
Source: Central Statistics Office.

Services exports increased substantially in 2021 relative to 2020. Computer services grew 26.6 per cent per annum in 2021, experiencing 21.7 per cent growth per annum in the final quarter (Figure 14). Insurance service exports also increased 17.3 per cent overall in 2021, with both quarterly and annual growth continuing into Q4 2021. Despite increasing 14.6 per cent in 2021 relative to 2020, financial service exports declined in Q4 2021 by 10.8 per cent on an annual basis.

FIGURE 14 SERVICES EXPORTS BY COMPONENT (VALUE, € MILLION)

Source: Central Statistics Office, Current Account: Merchandise and Services.

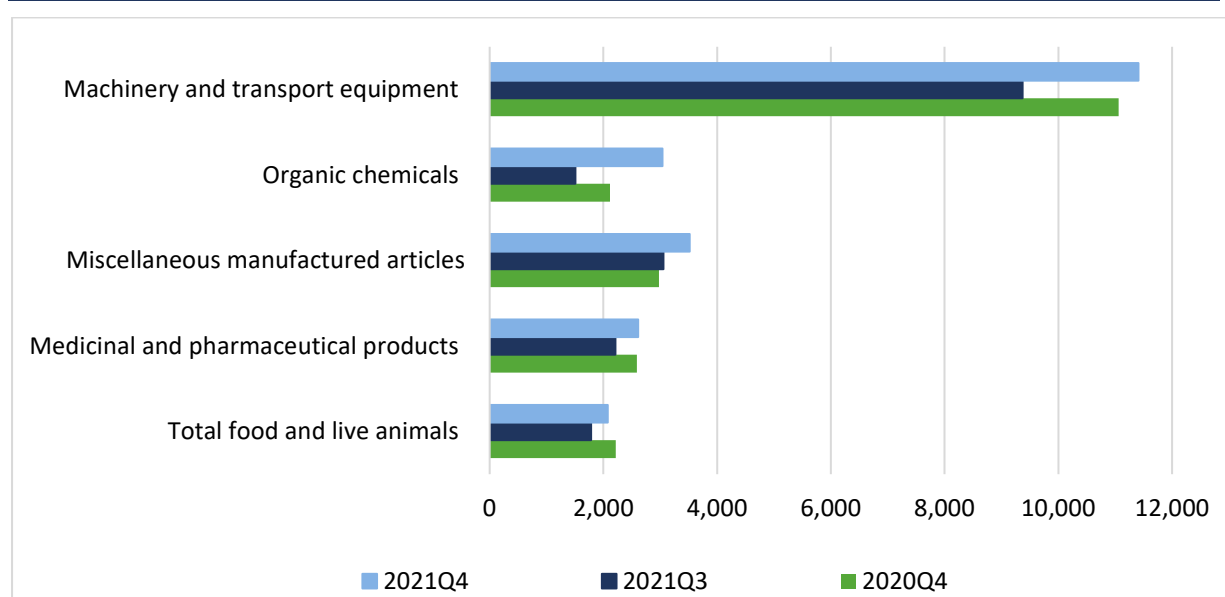
Figure 15 shows the annual change in seasonally-adjusted imports of goods and services. Imports declined 3.7 per cent in 2021 relative to 2020, largely due to the significant drop in imports in the first quarter (-40.5 per cent per annum). With the easing of public health restrictions, goods and services imports increased in the last three quarters of 2021, however goods imports declined slightly in the final quarter of 2021 (-0.4 per cent per annum). Services imports increased 20.2 per cent in Q4 2021 from Q4 2020.

FIGURE 15 SEASONALLY-ADJUSTED IMPORTS (VOLUME, Y-O-Y %)

Source: Central Statistics Office.

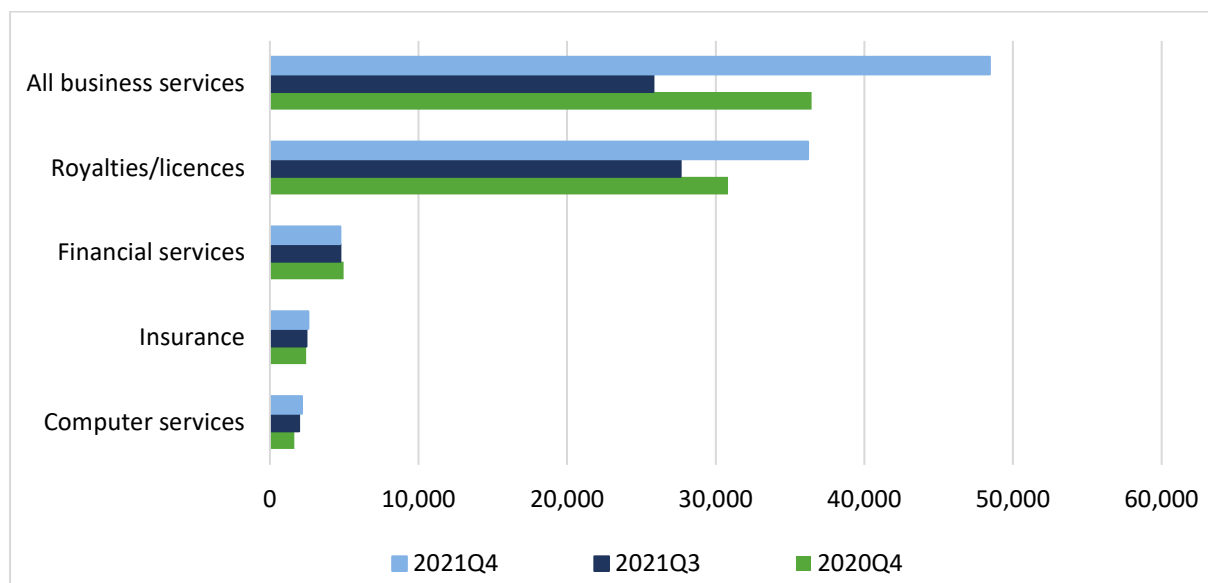
Goods imports increased across nearly all major commodity groups in 2021 compared to 2020 (Figure 16). Machinery and transport equipment, which accounts for the largest share of goods imports (39.2 per cent), increased 20.1 per cent per annum in 2021. In Q4 2021, imports in this group had increased 3.1 per cent and 21.7 per cent relative to Q4 2020 and Q3 2021, respectively. Increased import growth also occurred in Q4 2021 for organic chemicals, miscellaneous manufactured goods, and medicinal and pharmaceutical products. However, imports of total food and live animals declined overall in 2021 (-8.5 per cent per annum) as well as in Q4 2021 (-6.4 per cent per annum).

FIGURE 16 GOODS IMPORTS BY COMMODITY GROUP (VALUE, € MILLION)



Source: Central Statistics Office.

Services imports declined overall in 2021 relative to 2020 by 7.1 per cent. Imports of business services, which includes services such as R&D and operational leasing, and computer services, increased over 30 per cent in Q4 2021 relative to Q4 2020 (Figure 17). Imports of royalties and licenses also increased substantially in the final quarter of 2021 (17.5 per cent year-on-year and 31.0 per cent quarter-on-quarter). Financial services imports remained largely unchanged on a quarterly basis in Q4 2021 but fell 4.3 per cent on an annual basis.

FIGURE 17 SERVICES IMPORTS BY COMMODITY GROUP (VALUE, € MILLION)

Source: Central Statistics Office.

Components of Export Growth

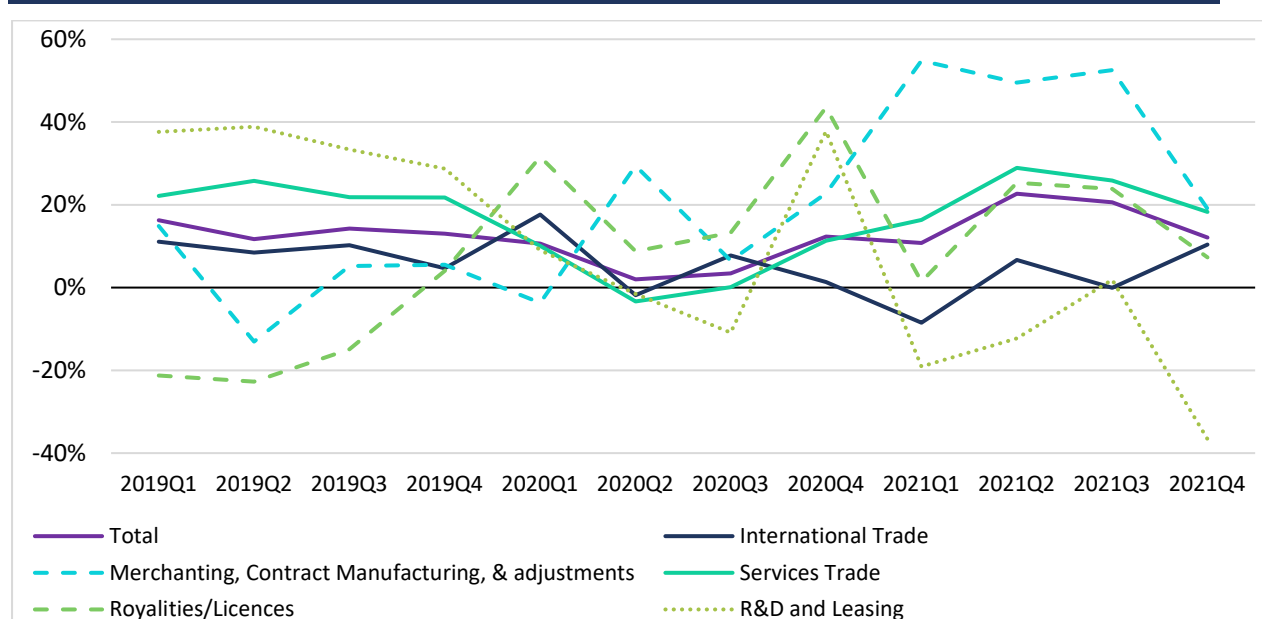
In order to quantify ‘traditional’ export activity, in which the supplier of a good or service is located within Ireland and the recipient is located abroad, a number of activities must be removed. Activities such as Merchanting, contract manufacturing, and other adjustments involve a change of ownership or purchases abroad.²¹ These activities, along with research and development (R&D), leasing, and royalties and licensing are strongly tied to the activities of multinational firms and therefore should be assessed separately from other trade activities. Other multinational activities related to traditional export activity are included in the remaining accounts used by the CSO to distinguish different types of international trading activity – these are the International trade account and the Services trade account which are used as our measure of traditional export activity.

Figure 18 provides a breakdown of exports by traditional export activities, such as International trade and Services trade, as well as the main components of exports related to financial activities. Traditional export activity performed well throughout the pandemic; both Services trade and International trade increased in 2021 on an annual basis (22.1 per cent and 1.8 per cent, respectively). International trade, which had contracted notably during periods of lockdown, grew 10.4 per cent in Q4 2021 relative to Q4 2020.

²¹ Details provided by the CSO can be found here: ‘Explaining Goods Exports and Imports 2012-2016’ – Central Statistics Office.

While traditional export activity grew overall throughout the pandemic, financial activities related to multinational operations are the main driver of Ireland's impressive export growth. Exports related to Merchanting, contract manufacturing and adjustments grew 19.0 per cent per annum in Q4 2021 and experienced overall growth of 42.4 per cent relative to 2020. Exports related to royalties and licenses increased on an annual basis in all four quarters of 2021, contributing to an increase of 13.8 per cent compared to 2020. Research and development and leasing activities were the only component related to financial activities to experience a decline in 2021. Exports in this category declined 36.6 per cent per annum in Q4 2021.

FIGURE 18 EXPORT GROWTH BY COMPONENT (Y-O-Y %)

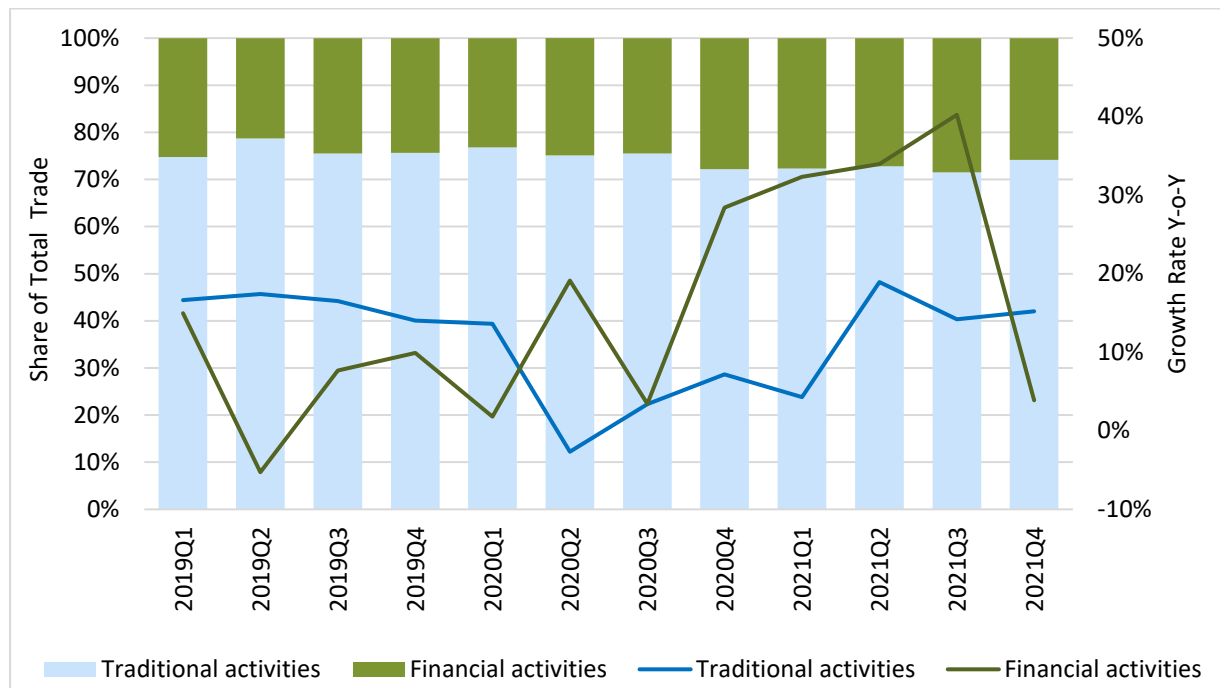


Source: QEC calculations using data from the Central Statistics Office.

International and Services Trade are the primary components of Ireland's trade exports, accounting for 72.7 per cent of total exports in 2021. Figure 19 shows the share of International and Services Trade exports compared with that of Finance-related exports (Globalisation activities and adjustments; R&D and leasing; and Royalties and licensing). Since Q1 2019, Financial activities have accounted for roughly one-quarter of total exports. The corresponding annual growth rates in Figure 19 highlight the volatility of the Multinational Trade Activity as opposed to the relatively more predictable performance of International Trade and Services exports. While the latter declined notably at the onset of the pandemic in Q2 2020, it has since experienced steady growth, increasing 13.1 per cent overall in 2021 relative to 2020. Exports related to financial activities have contributed significantly to Ireland's robust export sector. These exports increased 13.3 per cent and 25.6 per cent on an annual basis in 2020 and 2021, respectively. In the last quarter of 2021, growth in these exports did slow considerably, increasing

3.9 per cent relative to Q4 2020. While finance-related exports are significant to the Irish economy, it is useful to see that exports from traditional activities are also performing well and have experienced significant growth despite the effects of the pandemic.

FIGURE 19 EXPORT GROWTH BY COMPONENT (Y-O-Y %)



Source: QEC calculations using data from the Central Statistics Office.

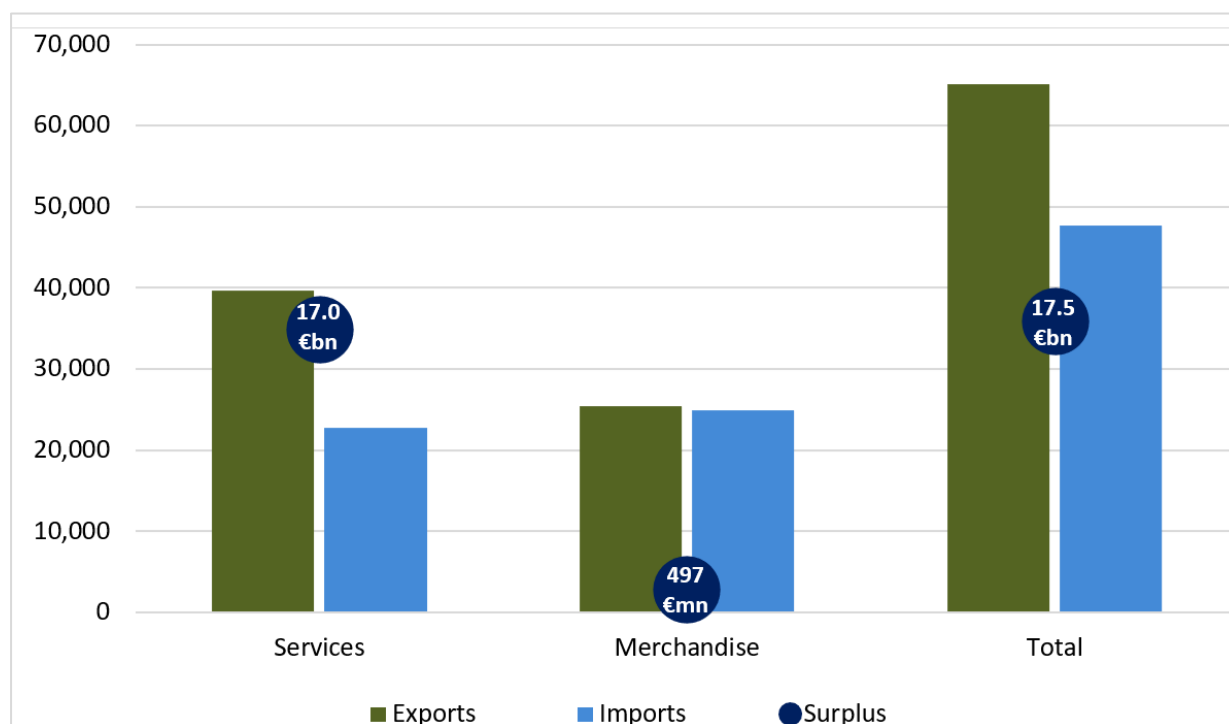
Brexit and Trade

Irish trade has been strongly affected by the ongoing negotiations and implementation of the Trade and Cooperation Agreement between the UK and the EU. Non-tariff barriers such as licensing, labelling and rules related to health and food safety have been implemented, although asymmetries in Customs checks in cross-border trade are reflected in the trade data presented in this *Commentary*. Since January 2020, goods from the UK to the EU have been required to comply with new procedures and import requirements of EU Member States. Meanwhile, imports from the EU to the UK have not been met with the same stringency, as full Customs checks in the UK were not implemented in 2021.²² In Q4 2021, the overall trade surplus with the UK was €4.3 billion, nearly double the total surplus in Q4 2020 (€2.2 billion). In 2021, the total surplus increased 55.5 per cent relative to 2020, reaching €17.5 billion (Figure 20). While many of the effects from the trade deal have proven beneficial for the Irish trade surplus, the implementation of more

²² For more information see: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1041528/2021_December_BordersOPModel.pdf.

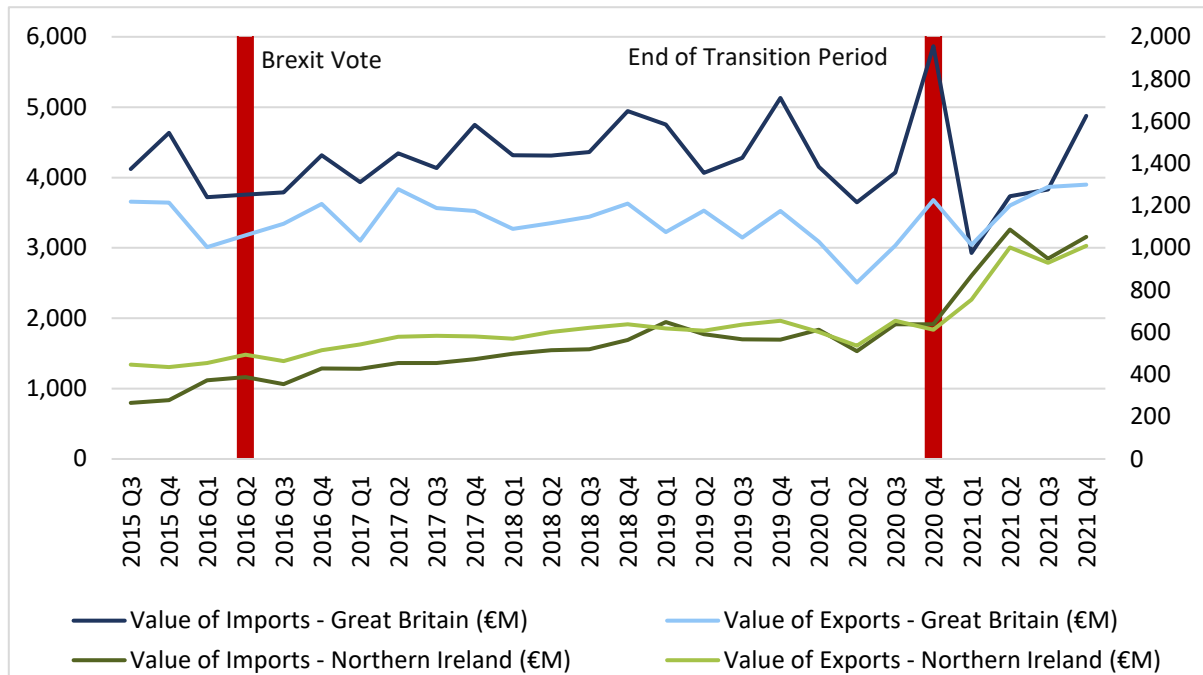
checks on goods moving from the EU into the UK is likely to slow down some aspects of Irish trade, and will likely lead to a decline in the total trade surplus in the near term.

FIGURE 20 **TRADE WITH THE UK IN 2021 (VALUE, € MILLION)**



Source: Central Statistics Office.

Monthly goods trade data offer an insight into the progression of the Trade and Cooperation Agreement's effect on Irish and UK trade. As the transition period came to a close, Q1 2021 marked a major shift in trade with the UK as the value of imports from Great Britain (GB) fell by just over 50 per cent from Q4 2020 to Q1 2021, while imports from Northern Ireland increased by 36 per cent in the same period (Figure 21). However, changes in trade since Q1 2021 have been more moderate. The value of imports from GB rose by 28.6 per cent in Q4 2021 on a quarterly basis, although they remain 16.1 per cent less than their value in Q4 2020. The value of exports to GB remained largely unchanged on a quarterly basis but increased 5.9 per cent in Q4 2021 relative to Q4 2020. The value of trade between Ireland and Northern Ireland increased in Q4 2021, with the value of imports and exports each increasing by 66.0 per cent.

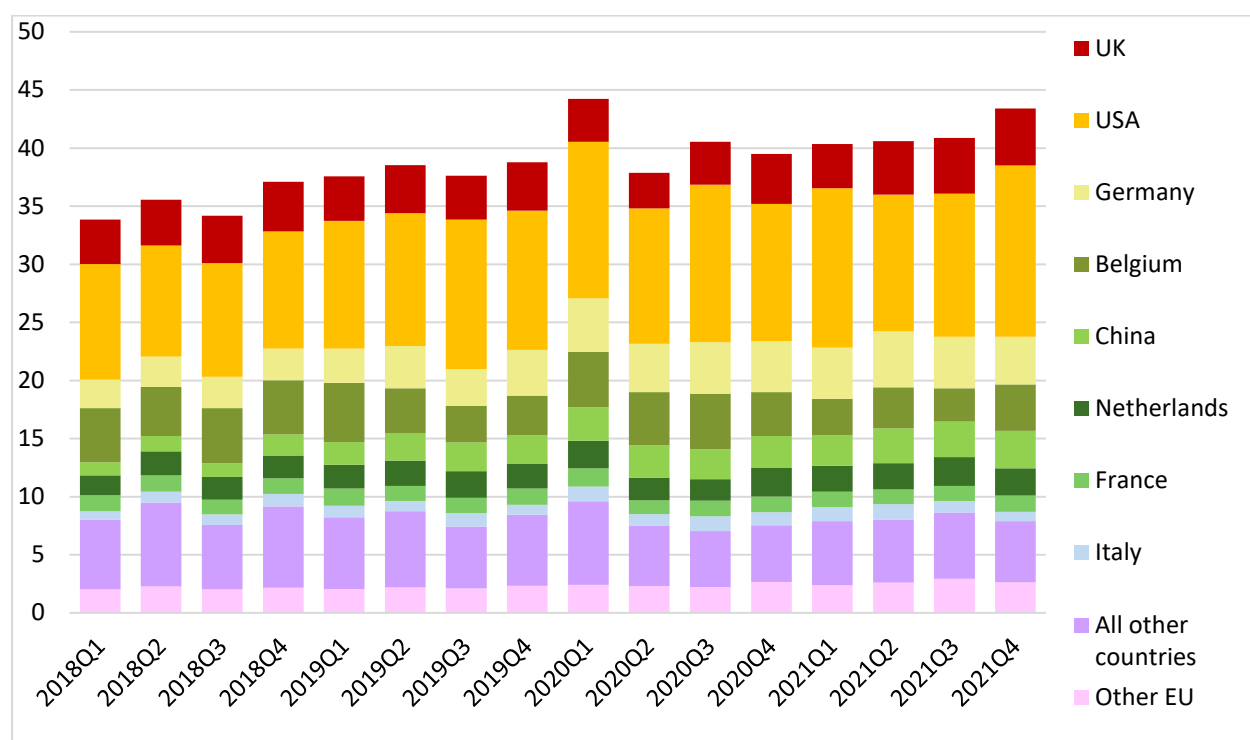
FIGURE 21 TRADE WITH GREAT BRITAIN (LHS) AND NORTHERN IRELAND (RHS) (VALUE, € MILLION)

Source: QEC calculations using Central Statistics Office data.

Imports and Exports by Trade Partner

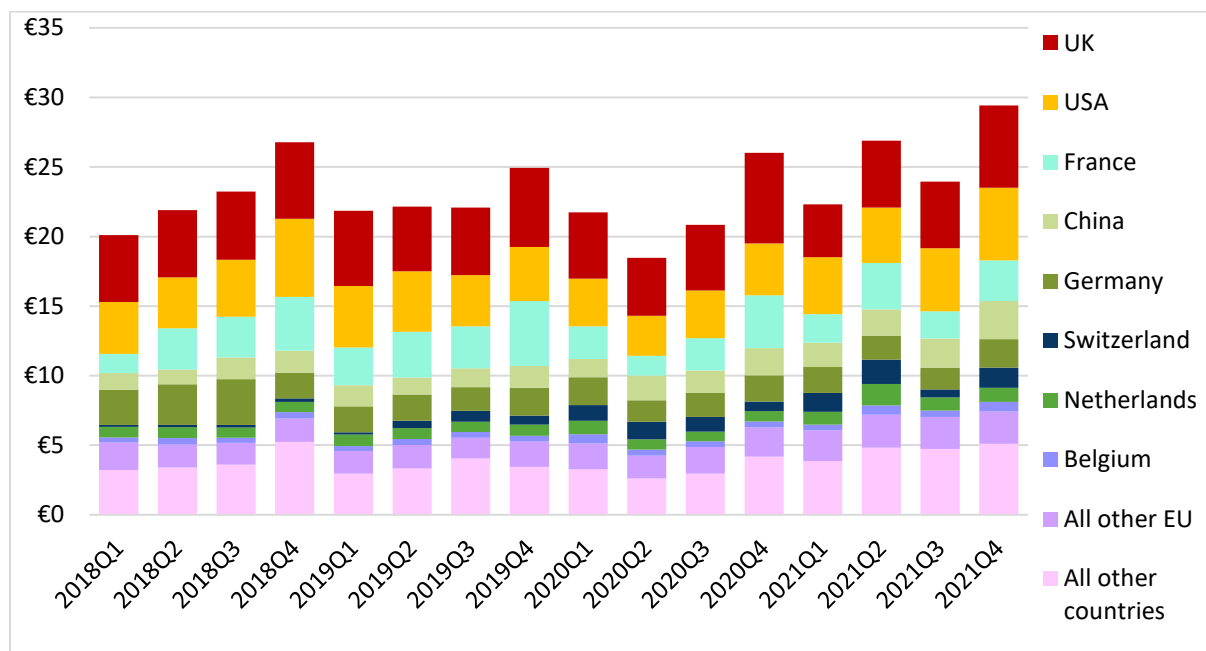
While the ongoing issues surrounding Brexit and Customs checks between the EU and the UK will continue to impact Irish trade, the uncertainty regarding the geopolitical conflict between Ukraine and Russia and its related impacts on trade will likely be a larger influence on Irish trade in the near term. In Box A of this *Commentary*, McQuinn and O'Toole discuss the trade items most likely to be impacted by the conflict. As a small, open economy, the impact on global trade is highly likely to impact Ireland's overall economic outlook. Understanding the risks of Ireland's key trade partners will therefore be essential in gauging the outlook for the Irish economy.

Figure 22 shows the total value of Ireland's exports to its ten largest trading partners between Q1 2018 and Q4 2021. The US accounted for 33.9 per cent of all Irish exports in Q4 2021 (€14.6 billion). In Q4 2021, exports to the US grew 24.6 per cent relative to Q4 2020 and increased 3.9 per cent overall in 2021. Exports to China increased notably in 2021 relative to 2020 (7.8 per cent) as did exports to Other EU countries (10.2 per cent).

FIGURE 22 **MERCHANDISE EXPORTS BY KEY TRADING PARTNER (VALUE, € BILLION)**

Source: QEC calculations using Central Statistics Office data.

The UK and the US accounted for the two largest shares of total imports to Ireland (18.8 and 17.4 per cent, respectively) (Figure 23). The UK was the only main trading partner to experience a decline in imports to Ireland between 2020 and 2021 (-4.0 per cent). This is likely due to the implementation of the trade barriers associated with the Trade and Cooperation Agreement. All other key trading partners benefitted from increases in the value of imports to Ireland in 2021, as both global and domestic trade recovered from pandemic-related slowdowns.

FIGURE 23 **MERCHANDISE IMPORTS BY KEY TRADING PARTNER (VALUE, € BILLION)**

Source: QEC calculations using Central Statistics Office data.

Trade Outlook

The increases experienced in the total value of merchandise imports and exports in 2021 reflects the recovery of both the international and domestic trade market to COVID-19. However, the adverse economic spill-over associated with the war in Ukraine is likely to disrupt these improvements. In the euro area, the financial response to the conflict as well as the disturbances to Europe's energy markets are likely to impact international trade. Higher costs, particularly in essential items such as fuel, will weaken demand and increase uncertainty regarding investment decisions. Projections for GDP in the Eurozone for 2022 have been revised downward in the wake of the crisis, while expectations regarding inflation have risen.²³

Given these risks, we have revised expectations for trade downwards with respect to our forecasts in the *Winter Commentary*. In the current year, we anticipate imports and exports to increase 8.0 and 7.0 per cent, respectively. In 2023, imports and exports are forecast to grow by 7.0 and 6.0 per cent, respectively.

²³ FocusEconomics (2022, March). *FocusEconomics Consensus Forecast Special Report: War in Ukraine*.

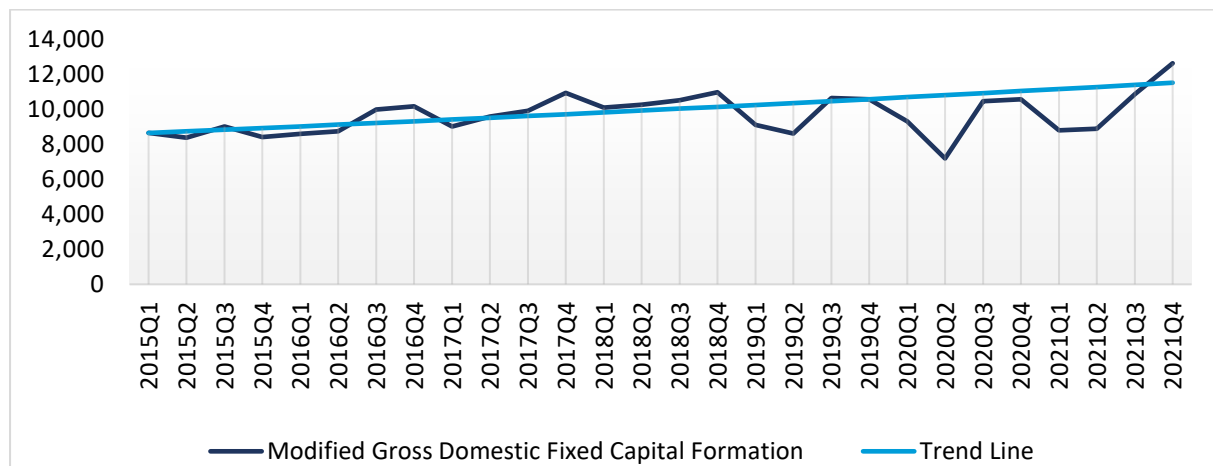
INVESTMENT

Key Points

- *Two countervailing economic forces are likely affecting global investment with higher geopolitical instability offsetting the improvement in the COVID-19 epidemiological and immunological situation.*
- *A clear rebound in investment was evident in 2021 driven by higher business confidence as the pandemic restrictions waned.*
- *However, the invasion of Ukraine by Russia is likely to lead to the postponement or reappraisal of investment activities globally. This will affect Ireland as a small open economy.*
- *Domestically, we expect housing investment to continue to increase with completions of approximately 26,000 residential units in 2022 and 30,000 units in 2023.*
- *Investment is forecast to increase by 6.8 per cent in 2022 and grow by 7.9 per cent in 2023.*

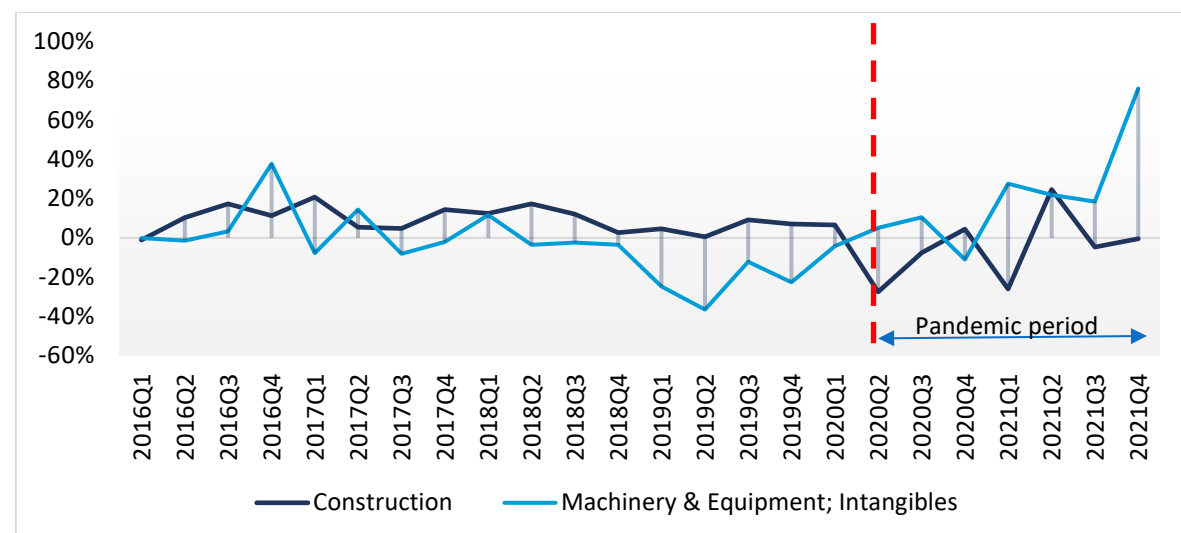
Overall Gross Domestic Fixed Capital Formation (GDFCF) declined by 37.6 per cent in 2021 compared to 2020. However, this was mainly driven by a sharp reversal in investment in intangibles. Focusing on the modified investment figures (excluding intangibles related to R&D intellectual property and aircraft leasing), the picture was less dramatic. Figure 24 presents the level of modified Gross Fixed Capital Formation in constant price terms for the period Q1 2015 to Q4 2021. A pre-pandemic trend line (based on the compound annual average growth rate in quarterly terms) is also presented to provide an indication of the investment level had the series grown in line with its previous outturn.

The impact of the pandemic is clear: notable drops are evident during the lockdown phases in 2020 and 2021 and sharp rebounds in the reopening phases. The final quarter of 2021 displayed a marked increase in investment which surpassed the pre-pandemic trend for the first time since the COVID-19 shock.

FIGURE 24 MODIFIED GROSS DOMESTIC FIXED CAPITAL FORMATION

Source: Central Statistics Office; Trend line calculated as quarterly annual compound growth rate between Q1 2015 and Q4 2019. Growth factor = 1.06 per cent per quarter.

The main component asset types within the business GFCF are construction (dwellings, improvements, and other construction), machinery and equipment, and intangible asset investment. Figure 25 presents the growth rate (year-on-year) of the subcomponents. Due to redactions, it is not possible to separate out machinery and intangibles.²⁴ As documented in the previous Winter 2021 *Commentary*, it is clear that the restrictions have had a significantly adverse impact on construction investment. Non-construction investment has recovered markedly in the past number of quarters.

FIGURE 25 SUBCOMPONENTS OF MGFCF – GROWTH RATES (Y-O-Y, %)

Source: Central Statistics Office; data are in constant prices.

²⁴ Indeed, the CSO does not provide separate data for these items and what is presented is the total minus construction investment.

Given the link between uncertainty and investment activity, the views of businesses on the state of the current operating environment are critically important. To gain insight into how business confidence has been impacted by the pandemic, we draw on the European Commission's data on business sentiment. The Commission monitors trends in business confidence on a monthly basis for four sectors; industry, services, retail and construction. The data presented are simple arithmetic averages of the positive/negative balance of responses in Figure 26.

FIGURE 26 BUSINESS CONFIDENT INDICATORS – IRELAND AND EU

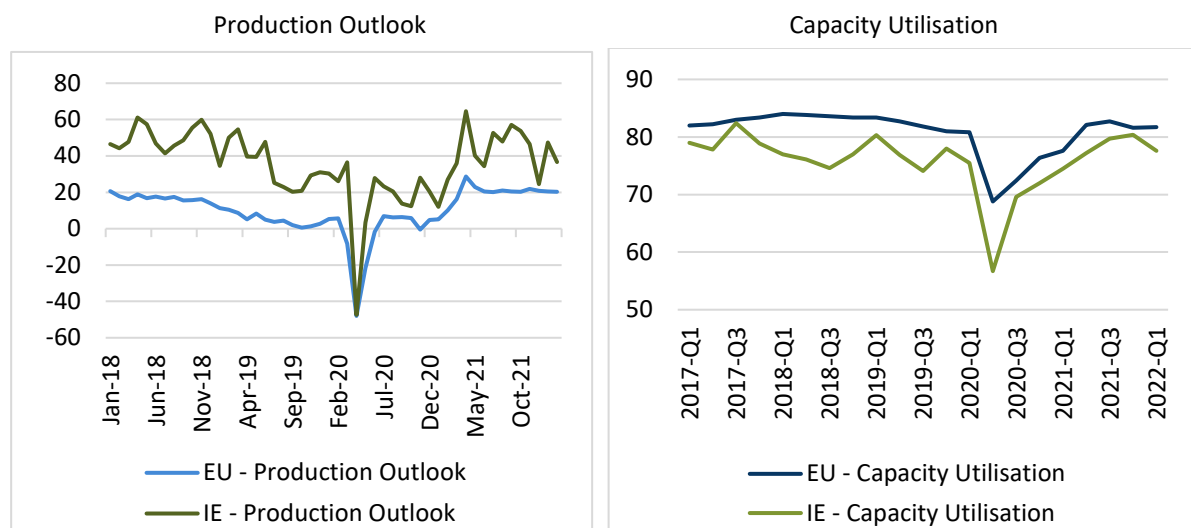


Source: European Commission.

The data for the four sectors are presented in Figure 26. The data for Ireland are juxtaposed with the overall European Union figures to give a cross-country benchmark. It is clear that sentiment has tracked the epidemiological situation, with the adoption of public health restrictions corresponding to large drops in sentiment in early 2020, and the easing of restrictions correlated with increases in sentiment. This pattern has continued through the period until summer 2021 where a cross-sectoral sentiment rebound can be seen. The rebound can be seen to stall somewhat in December 2021 as the Omicron variant surged in Europe. However, January and February 2022 displayed a rapid recovery in sentiment.

Two critical issues in terms of the path for future business capital investment are the outlook for demand and the degree of capacity utilisation of current resources. Indeed, the ability to cater for expanding demand through the use of existing capacity as the economy recovers is likely to determine the path of capital spending. Figure 27 presents the outlook for production and the existing capacity utilisation for Ireland and the rest of the EU from the business sentiment data. It is clear that the production outlook has improved in Ireland through 2021 but softened somewhat towards the end of the year. Capacity utilisation has also increased rapidly since the low point in April 2020 but remains below 80 per cent. It is therefore likely that Irish firms do have capacity to increase output and accommodate an increase in sales with current capacity. However, as capacity utilisation is above the pre-COVID level, any rapid improvement in outlook might encourage additional investment.

FIGURE 27 INDUSTRIAL PRODUCTION OUTLOOK AND CAPACITY UTILISATION – IRELAND AND EU



Source: European Commission – relates to industrial firms.

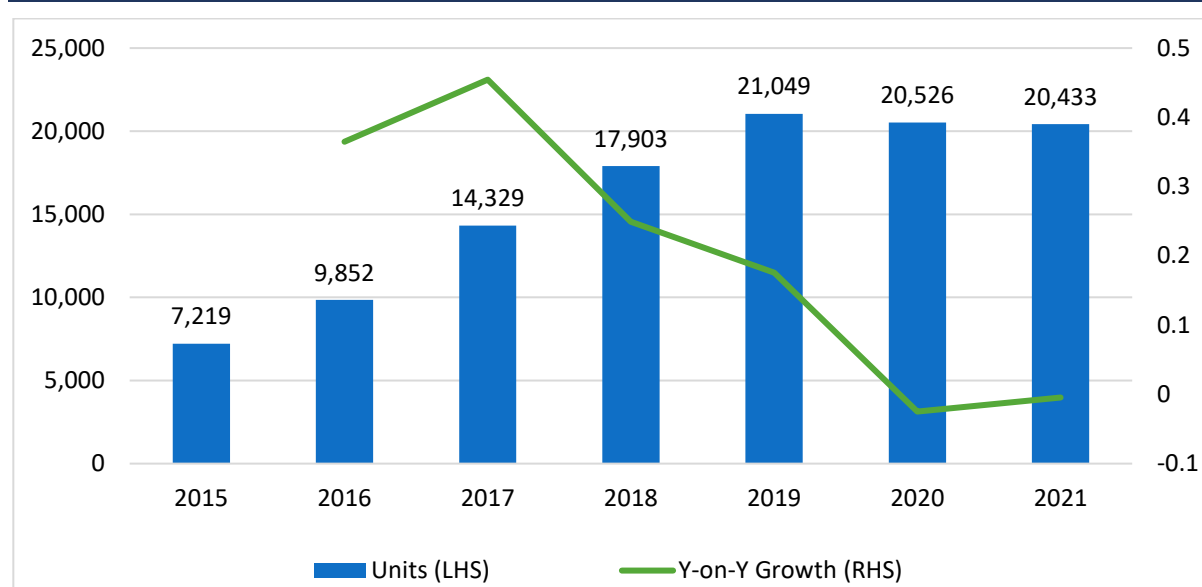
While the assessment above points to an improvement in the economic situation up to January 2022, recent events in Ukraine have changed this perspective. The invasion of Ukraine by Russia has raised geopolitical tensions to levels not seen in many years and caused disruptions to global markets. This is likely to dampen the willingness of businesses to invest given the heightened uncertainties around the economic outlook.

Housing completions

In Q4 2021 there were 6,937 new residential completions, a 5 per cent decline on the same period in the previous year. However, it must be noted that Q4 2020

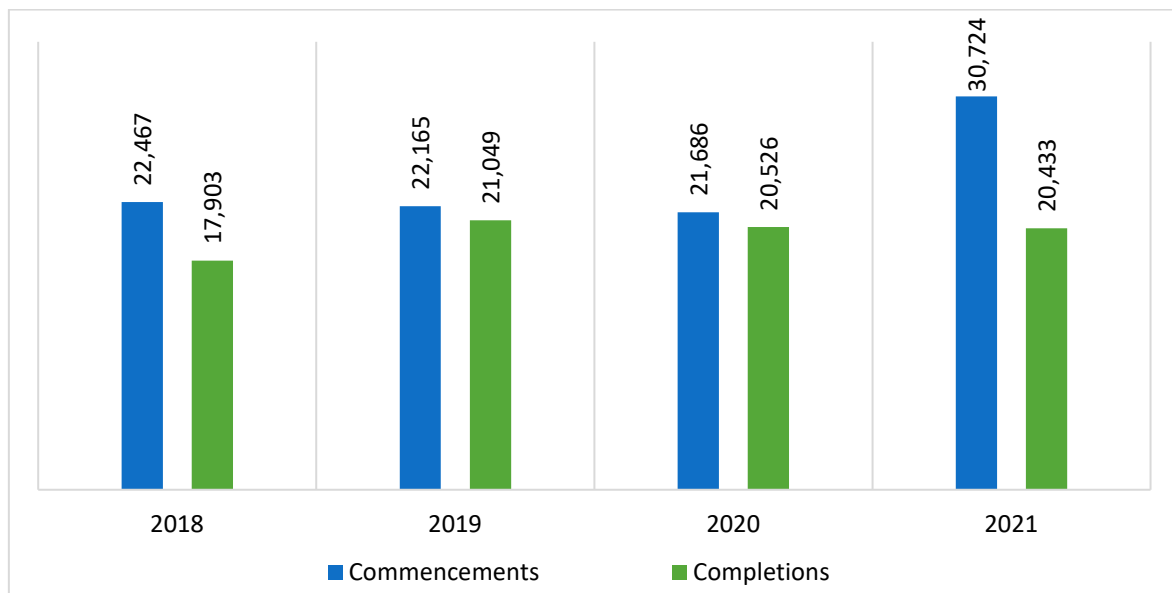
posted a high level of completions due to the earlier, public-health related sector shutdowns. Therefore, the year-on-year decline in the fourth quarter reflects pandemic-specific effects. The annual level of housing completions for the period 2015 to 2021 is presented in Figure 28. In total, 20,430 housing units were completed in 2021 which is marginally lower than the figure for 2020. The impact of the pandemic on the trend is very clear as the completions in 2021 remain below the pre-pandemic level of 21,000 in 2019.

FIGURE 28 HOUSING COMPLETIONS



Source: Central Statistics Office.

To gain insight into the potential path for housing completions, it is useful to explore trends in residential construction commencements. While the initial COVID pandemic impact led to a marked decline in the number of new commencements, this has risen substantially in 2021. In 2020, a total of 21,686 commencements occurred and this has increased to over 30,000 for 2021 (Figure 29). This represents a rapid increase in new unit starts and likely points to an escalation in the provision of new housing supply.

FIGURE 29 RESIDENTIAL COMMENCEMENTS AND COMPLETIONS

Source: Housing Agency and Central Statistics Office data.

Given this pick-up in commencements, it is likely that housing completions will rise in 2022 in a sustained fashion and continue to grow in 2023. Our forecasts for the number of new completions for 2022 is approximately 26,000 units, rising to 30,000 next year.

However, the economic and geopolitical fallout from the recent invasion of Ukraine by Russia could present considerable downside risks to the realisation of these forecasts. While general uncertainty and the broad outlook is one channel that may weigh on supply, the issue of building cost material may be the most direct linkage. If the current commodity price inflation continues and feeds through into direct building materials or labour costs, this is likely to dampen supply. Indeed, recent research by McQuinn (2021)²⁵ shows a high sensitivity of new supply to building costs: a one per cent increase in building costs lowers new supply by 1.4 per cent approximately. This elevated sensitivity highlights the risk to supply from the price inflation in commodities.

Investment forecasts

As discussed, the investment outlook is framed by the competing tensions of improved epidemiology and immunology but a deteriorating geopolitical outlook. On a global scale, this is set to dampen international investment which will impact Ireland as a small and highly globalised economy. While we still expect domestic

²⁵ McQuinn K. (2021) 'Updated models of the Irish housing and mortgage market', unpublished manuscript, Economic and Social Research Institute (ESRI).

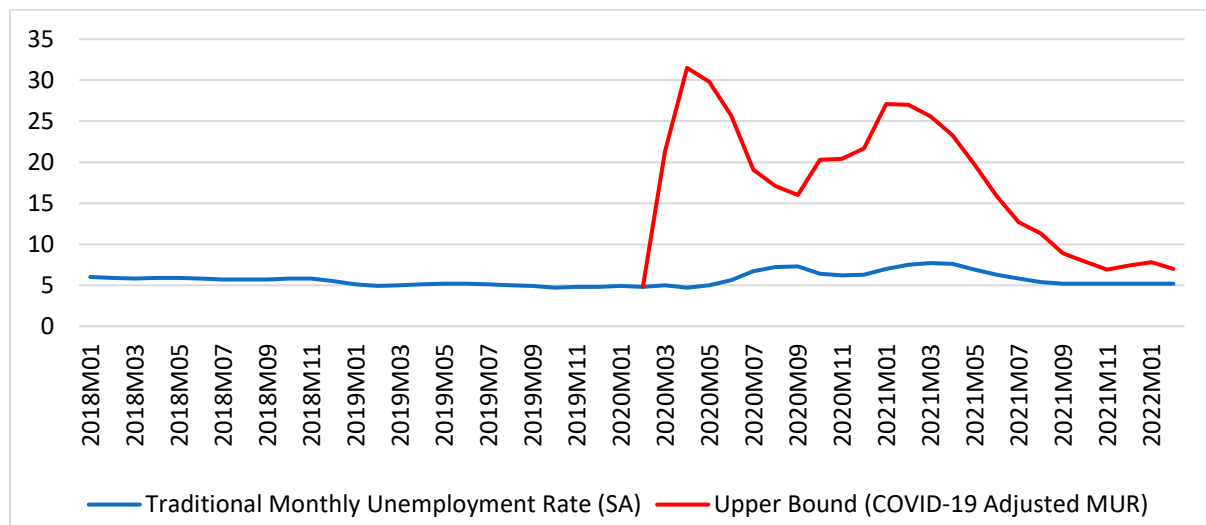
investment to accelerate this year (in particular in the housing market), we have lowered our forecast for 2022 to 6.8 per cent and set our forecast for 2023 to 7.9 per cent. Risks are likely to be on the downside, in particular if rapidly rising commodities prices dampen demand and this further lowers the sales outlook for enterprises. Foreign direct investment flows, of which Ireland is a major recipient, are also likely to be lower than otherwise would be expected, due to the geopolitical tensions.

LABOUR MARKET

Key Points

- *The COVID-adjusted unemployment rate was 7.0 per cent in February 2022.*
- *Approximately 53,700 people received the Pandemic Unemployment Payment (PUP) on 27 February 2022.*
- *Seasonally-adjusted average weekly earnings increased by 4.7 per cent across all sectors in 2021 relative to 2020.*
- *The average unemployment rate for 2022 is set to be 6.3 per cent.*

Unemployment in the Irish economy has been considerably volatile through the pandemic, in line with the tightening and loosening of public health restrictions. Prior to the pandemic, the unemployment rate stood at 4.8 per cent in February 2020. Throughout 2021, the unemployment rate fell from a high of 27.1 per cent in January to 7.4 per cent in December. Figure 30 shows both the traditional and the COVID-19 adjusted monthly unemployment rate from January 2018 to February 2022. With the reopening of the economy and the diminishing risks associated with COVID-19, many workers receiving supports have returned to work and as a result, the gap between the traditional and the COVID-adjusted unemployment rate has been shrinking rapidly. In February 2022, the COVID-adjusted rate stood at 7.0 per cent while the traditional unemployment rate was 5.2 per cent.

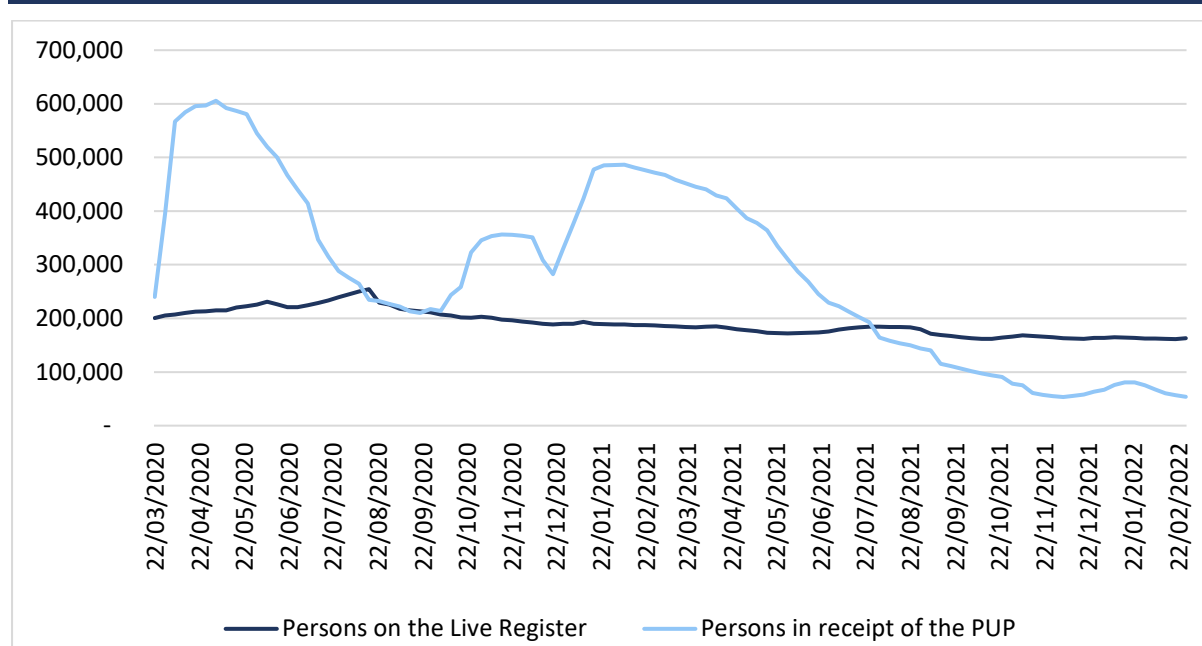
FIGURE 30 UNEMPLOYMENT RATE BY MONTH (%)

Sources: Seasonally-Adjusted Monthly Unemployment Rate Series and the COVID-19 Adjusted Monthly Unemployment Rate Series. Central Statistics Office.

The pandemic unemployment payment (PUP) established by the Government has provided income support to those affected by the pandemic and has been slowly phased out as the pressures from COVID-19 have largely subsided. The PUP was closed to new applicants from 8 July 2021, with a gradual reduction in rates from 7 September 2021. However, due to the re-introduction of COVID-related public health restrictions, the scheme reopened to those who lost their employment between 7 December 2021 and 22 January 2022. From 22 January 2022, the PUP closed to new applicants. As of 8 March 2022, PUP recipients will move to a weekly rate of €208, with final payments being made until 29 March.²⁶ Eligible PUP recipients may transition to standard jobseeker terms and will be able to receive jobseeker payments beginning 5 April.

Figure 31 shows the number of individuals in receipt of the PUP or on the Live Register by week from March 2020 to February 2022. As of 27 February 2022, 53,706 persons were in receipt of the PUP, a decline of 88.6 per cent from the same period in 2021 when over 470,000 persons were in receipt of the PUP.

²⁶ See details here: COVID-19 Pandemic Unemployment Payment (PUP) (citizensinformation.ie).

FIGURE 31 NUMBER OF PEOPLE ON THE PUP AND LIVE REGISTER BY WEEK

Source: Central Statistics Office and Department of Social Protection.

As the PUP benefits come to a close by the end of the first quarter of 2022 and job vacancies continue to increase, it is expected that most recipients will be able to return to work. However, there is a risk that the traditional unemployment rate will witness a slight increase if workers in the most affected sectors are vulnerable to long-term unemployment and shift to jobseekers' benefits once the PUP expires.

Table 3 shows a breakdown of PUP recipients by sector as of 8 February 2022. All sectors have experienced a decline in recipients since 1 February 2022. Just over a quarter of all PUP recipients (14,765) are employed in the Accommodation and food sector, a decline of 14.9 per cent from 1 February 2022.

TABLE 3 BREAKDOWN OF PUP RECIPIENTS BY SECTOR AS OF 8 FEBRUARY 2022

	Number (‘000)	Percentage
Agriculture, forestry and fishing; Mining and quarrying	1.0	1.9
Manufacturing	4.5	8.2
Electricity, gas supply; Water supply, sewerage and waste management	0.3	0.6
Construction	5.8	10.5
Wholesale and retail trade; Repair of motor vehicles and motorcycles	10.7	19.6
Transportation and storage	3.2	5.8
Accommodation and food service activities	14.8	26.9
Information and communication activities	2.0	3.6
Financial and insurance activities	1.9	3.4
Real estate activities	1.0	1.8
Professional, scientific and technical activities	3.1	5.6
Administrative and support service activities	7.3	13.4
Public administration and defence; Compulsory social security	1.1	2.0
Education	1.9	3.5
Human health and social work activities	2.5	4.5
Arts, entertainment and recreation	1.7	3.1
Other sectors e.g. hairdressing and beauty salons	3.4	6.2
Unclassified or unknown	1.4	2.5
Total	67.4	100.0

Source: Detailed PUP Statistics. Published on 8 February 2022 by Department of Social Protection.

Note: Figures refer to those on the PUP on November 28 who received a PUP payment on 8 February 2022.

Wage Inflation – global context

With inflation exceeding targets for most developed economies, a number of central banks have increased interest rates or have provided forward guidance of policy rate rises in the near term. As discussed in the inflation outlook of this *Commentary*, the primary factors contributing to the surge in inflation stem largely from global issues. While there may be limited insulation from these international pressures, it is still critical to monitor domestic factors that may also be contributing to the growth in inflation. In Ireland and across the euro area, the impact of earnings growth on inflation and the potential of wage-price spirals is one such area of concern.

Within the euro area, the ECB has signalled that wage increases around 3 per cent per annum are consistent with an inflation target of 2 per cent.²⁷ Therefore a consistent period of earning increases of 3 per cent or more would likely accelerate pressure for increases in interest rates, all else equal. This relationship has been clear in both the US and the UK, where average total pay in the UK grew by 5.8 per

²⁷ See comments from Philip Lane on 25 January 2022: Interview with Verslo žinios (europa.eu).

cent per annum in 2021²⁸ and wages and salaries increased 4.5 per cent per annum in 2021 in the US.²⁹ In response to these developments, the Bank of England raised the bank rate by 0.15 percentage points in December 2021 and a further 0.25 percentage points in February 2022.³⁰ In the US, the Fed is expected to increase the federal funds rate in March 2022, with two additional hikes expected before the year end.³¹ In contrast, wage growth in the euro area has remained significantly behind the US and the UK. As demonstrated in Table 4, wage growth in the euro area has yet to exceed the 3 per cent target in most sectors.

TABLE 4 WAGE GROWTH 2021* ACROSS THE EURO AREA (Y-O-Y %)

Sector	Growth rate (%)
Industry (except construction)	0.6
Construction	1.5
Wholesale/retail trade	1.4
Transport & storage	-0.2
Accommodation & food service	1.4
Information & communication	3.4
Financial & insurance	1.0
Real estate activities	0.7
Professional, scientific & technical activities	0.3
Administration & support	1.6
Public administration & defence	1.5
Education	1.2
Human health & social work	3.2
Arts, entertainment & recreation	3.6
Other services	2.2

Source: Eurostat; Labour cost index by NACE Rev. 2 activity – nominal value, quarterly data (wages and salary (total)).

Note: * refers to average annual wage growth from Q1 2021 to Q3 2021

Irish wage growth

In Ireland, the pace of growth in recent years has been different to that experienced across the EU. Throughout and prior to the pandemic, Irish economic growth has outstripped GDP growth across the Eurozone and has experienced higher average earnings growth. For Ireland, average earnings growth across all sectors remained above 3 per cent from Q2 2018 to Q3 2021 (Figure 32). In Q4 2021 earnings increased 2.0 per cent relative to Q4 2020. Over the course of the year in 2021, the average earnings growth across all sectors was 4.8 per cent

²⁸ Calculated using average weekly earnings (SA) data from the Office of National Statistics (Average weekly earnings in Great Britain – Office for National Statistics (ons.gov.uk)).

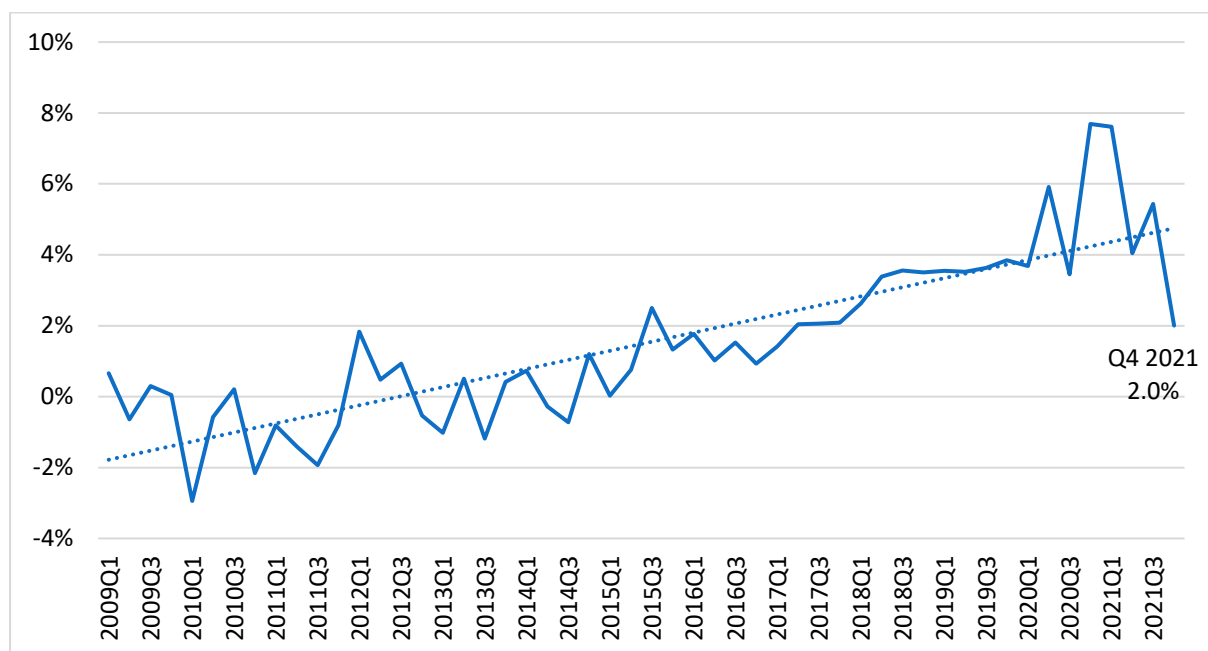
²⁹ Refers to all civilian workers wages and salaries, non-seasonally adjusted (Employment Cost Index Summary – 2021 Q04 Results (bls.gov)).

³⁰ Bank Rate increased to 0.25 per cent – December 2021. Bank of England.

³¹ United States Interest Rate – US Economy Forecast and Outlook (focus-economics.com).

higher than that experienced in 2020. While a growth rate of 4.8 per cent would be a trigger for higher interest rates across the euro area, it is not necessarily in excess of Ireland's historical wage growth. Further, wage growth in 2020 and 2021 must be interpreted with caution. Changes in employment in certain sectors during the pandemic have contributed to increased volatility in the labour market and to earnings growth; the composition of the labour market throughout 2020 and 2021 is therefore very different to its composition prior to 2020.³²

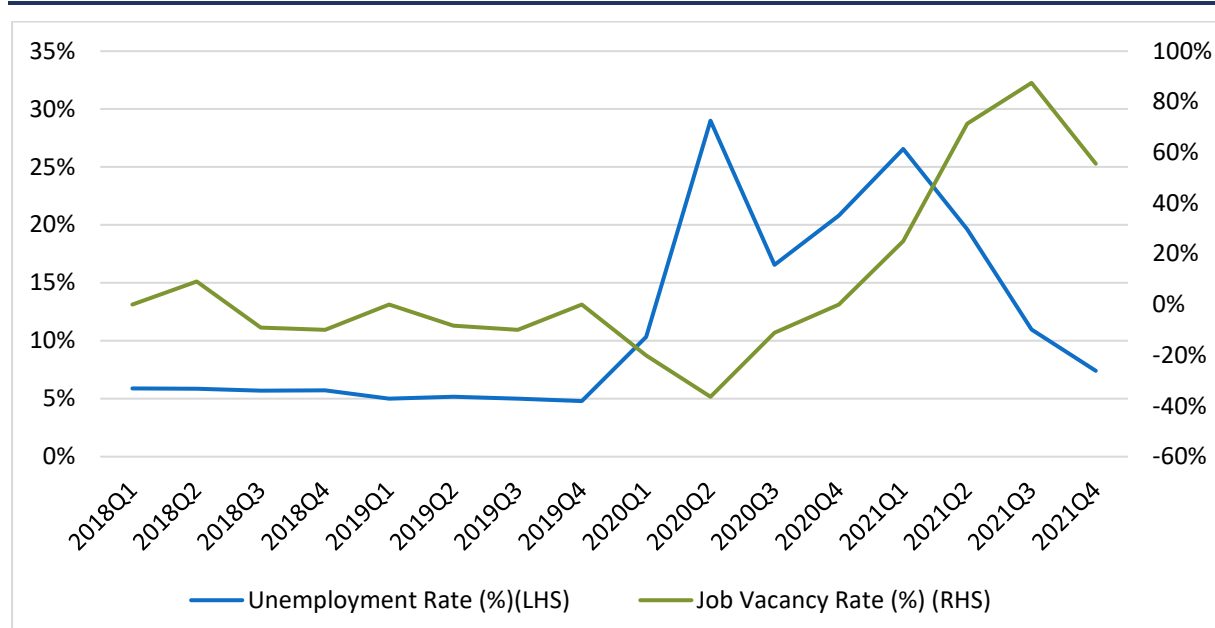
FIGURE 32 AVERAGE WEEKLY EARNINGS GROWTH, ALL SECTORS (NOMINAL, SA, Y-O-Y %)



Source: QEC calculations using data from the Central Statistics Office; Average Weekly Earnings, SA (EHQ03).

As mentioned previously, the unemployment rate in Ireland has declined sharply alongside the lifting of restrictions. By Q4 2021, the COVID-adjusted unemployment rate was 7.4 per cent. As shown in Figure 33, the growth of the job vacancies rate increases as the unemployment rate falls. The increase in the job vacancies rate across all quarters of 2021 in relation to 2020 is indicative of the pace of hiring as the economy recovered from COVID-related restrictions. In Q4 2021, the vacancy rate increased 55.6 per cent across all sectors on an annual basis. The increase in the vacancy rate in 2021 has been highest amongst the sectors most affected by COVID-related restrictions: Construction, Wholesale and retail trade, Accommodation and food services, and Arts, entertainment and other service activities. Each of these sectors experienced an over 100 per cent growth in the job vacancy rate in 2021 relative to 2020.

³² See technical note from the CSO here: <https://www.cso.ie/en/methods/earnings/earningshoursandemploymentcostssurvey/technicalnoteimpactofcovid-19ontheearningsandlabourcostsrelease-updatedquarter42021/>.

FIGURE 33 UNEMPLOYMENT RATE AND JOB VACANCY RATE (Y-O-Y %)

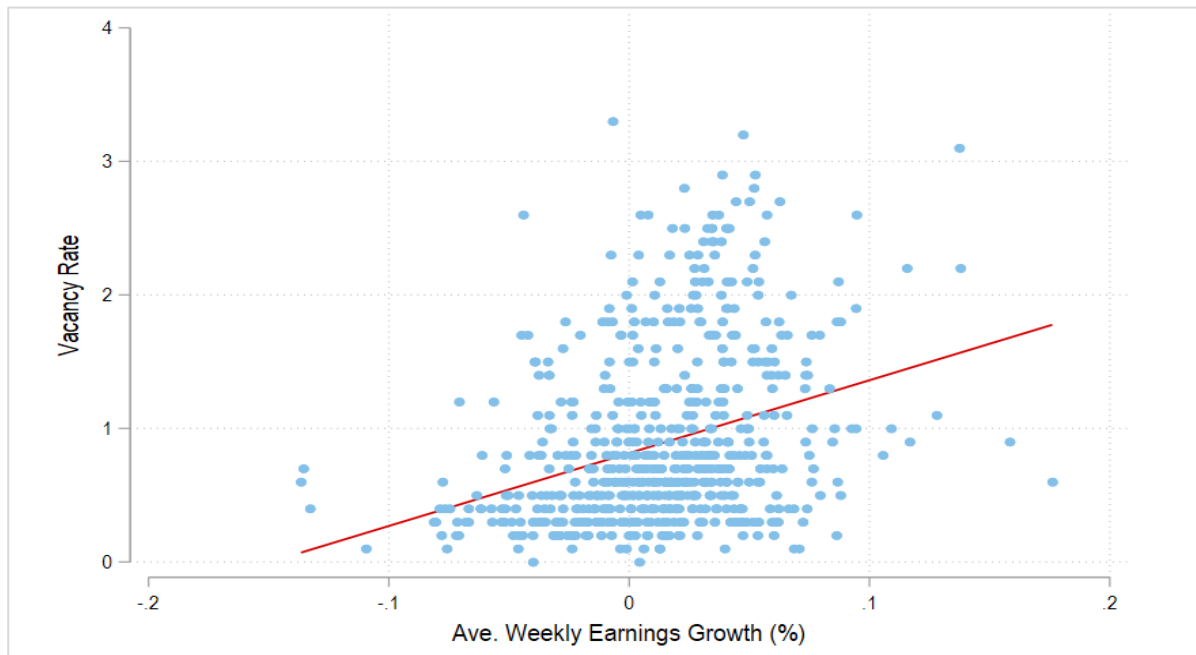
Source: QEC calculations using data from the Central Statistics Office.

Note: Unemployment rate refers to COVID-adjusted unemployment rate.

The increased growth in job vacancies has also resulted in upward pressure on wage growth. This dynamic is displayed in Figure 34, which shows the positive relationship between the growth in weekly earnings and the rate of change in the job vacancy rate from Q1 2008 to Q4 2021. As the unemployment rate falls and job vacancy rates increase, wages are likely to rise as well.

While the relationship between earnings growth and job vacancies is evident in historical data, some evidence suggests that the pandemic may have accelerated increases in wage growth. Crump et al. (2022)³³ find that that workers' reservation wages grew significantly after the pandemic and that these higher wages were not isolated to jobs exposed to higher health risks. Increased wage expectations in the wake of the COVID-19 pandemic will contribute additional upward pressure on the inflation rate in the medium term.

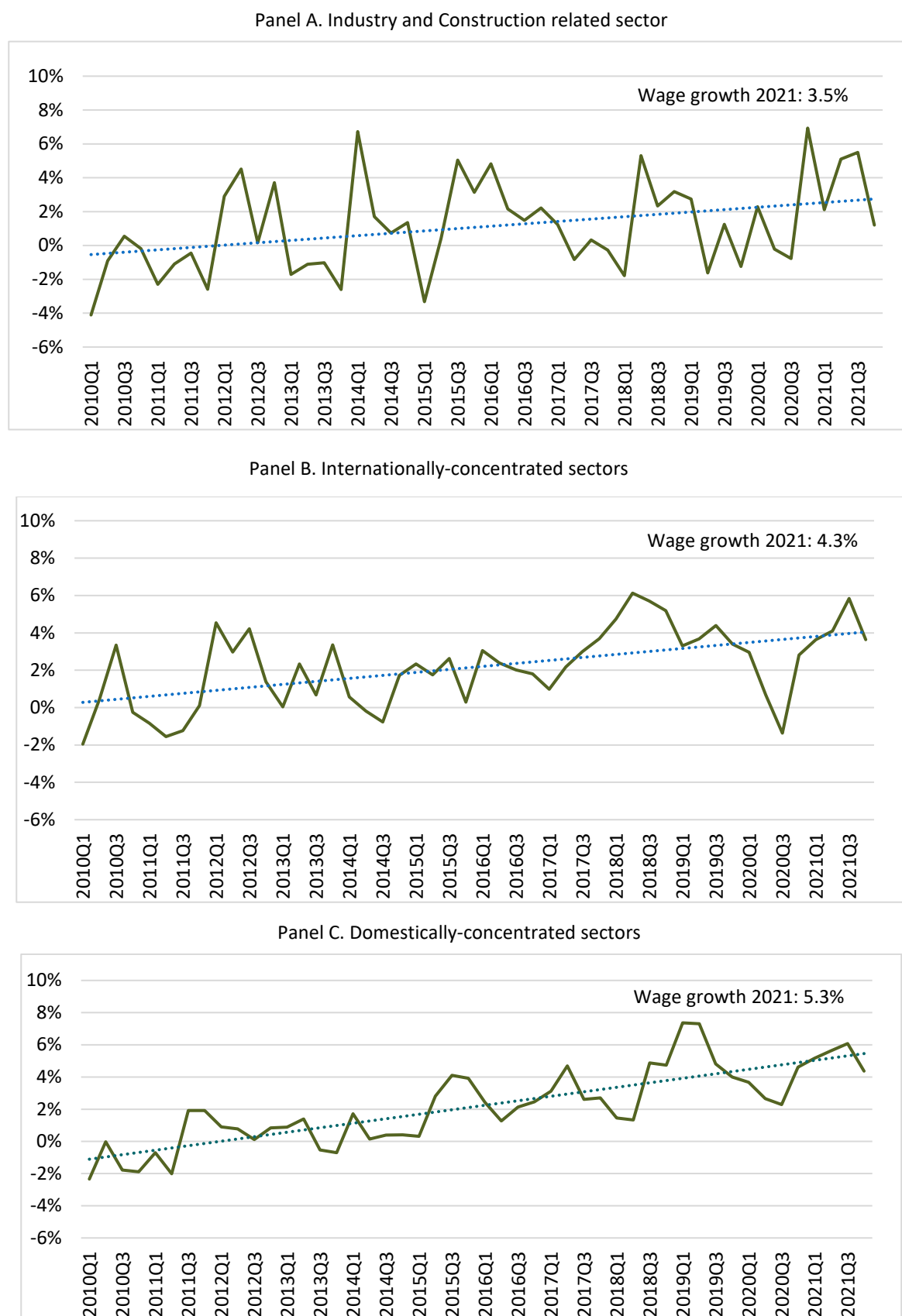
³³ Crump, R., S. Eusepi, M. Giannoni and A. Şahin (2022). *The Unemployment-Inflation Trade-off Revisited: The Phillips Curve in COVID Times* (No. w29785). National Bureau of Economic Research.

FIGURE 34 WAGE GROWTH AND VACANCY RATE (Q1 2008 – Q4 2021)

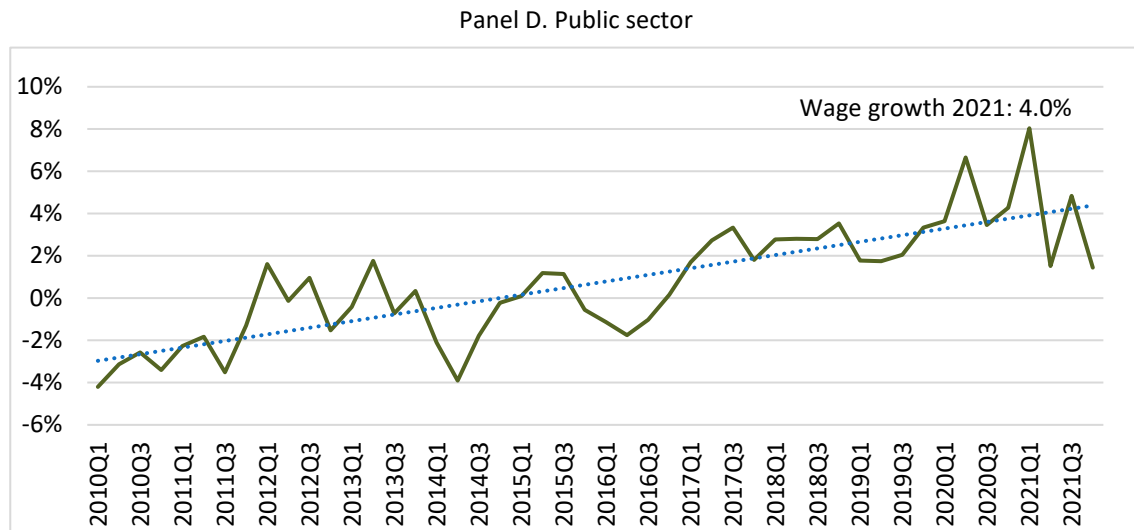
Source: QEC calculations using data from the Central Statistics Office; Average Weekly Earnings (EHQ03) and Vacancy Rate.

Due to the sector-specific impacts of the pandemic, it is useful to view wage growth by the sectors that were impacted similarly during the pandemic. In Figure 35, sectors are grouped into one of four categories: Industry and Construction related activities, Internationally-concentrated activities, Domestically-concentrated activities, and Public sector activities.

Panel A displays the wage growth associated with the Industry and Construction related sector. In 2019, average wage growth across these sectors was just 0.3 per cent per annum. In 2021, wage growth rose to 3.5 per cent relative to 2020. Panel B refers to sectors such as Professional and financial services that are more closely integrated to International services and more easily adapted to working remotely during the pandemic. Overall wage growth in this sector in 2019 was 3.7 per cent. While wages did slow in growth in 2020 (1.3 per cent per annum), they grew 4.3 per cent in 2021 relative to 2020. Sectors that are relatively insulated from the international economy, such as Wholesale and retail trade, Accommodation and food services, and Administrative and support services are depicted in Panel C. Wage growth amongst these sectors has performed strongly since Q3 2018. In 2019, wages in this sector increased 5.9 per cent relative to 2018. Sectors predominantly made up of public sector employees are shown in Panel D. These workers experienced earnings increases of 4.0 per cent in 2021 relative to 2020. In 2019, wages increased just 2.2 per cent in this sector.

FIGURE 35 IRISH WAGE GROWTH BY SECTOR (Y-O-Y %)

Contd.

FIGURE 35 **CONTD.**

Source: QEC calculations using data from the Central Statistics Office; Average Weekly Earnings, SA (EHQ03).

Note: Panel A sectors include – Manufacturing; Construction; Real estate activities; Electricity, water supply and waste management; and Mining and quarrying.
 Panel B sectors include – Transport and storage; Information and communication; Financial and insurance activities; Professional, scientific and technical activities.
 Panel C sectors include – Wholesale and retail trade; Accommodation and food services; Administration and support service activities.
 Panel D Public administration and defence; Education; Human health and social work activities; Arts, entertainment and recreation; Other service activities.

While wage growth in Ireland has outpaced that of the Eurozone in recent years, it is clear from all four panels that earnings growth in 2021 has remained in line with historical trends. Nevertheless, the key takeaway from the above discussion is that the observed increases in earnings, tightness in the labour market and rising inflation, risk leading to a wage-price spiral if inflation expectations begin to be bid into wages demands.

Labour Outlook

We expect the unemployment rate for 2022 and 2023 as a whole to average 6.3 and 4.8 per cent, respectively. However, several factors will influence the Irish labour market in the near term. We do not expect any significant job losses to occur in Q2 2022 as pandemic-related supports come to an end nor do we expect any reversal in the re-opening of the economy. Another issue likely to influence the path of wage inflation is the future of immigration patterns and the integration of Ukrainian refugees into the Irish labour force. Policies to ensure a smooth integration into the labour market will be important.

INFLATION OUTLOOK

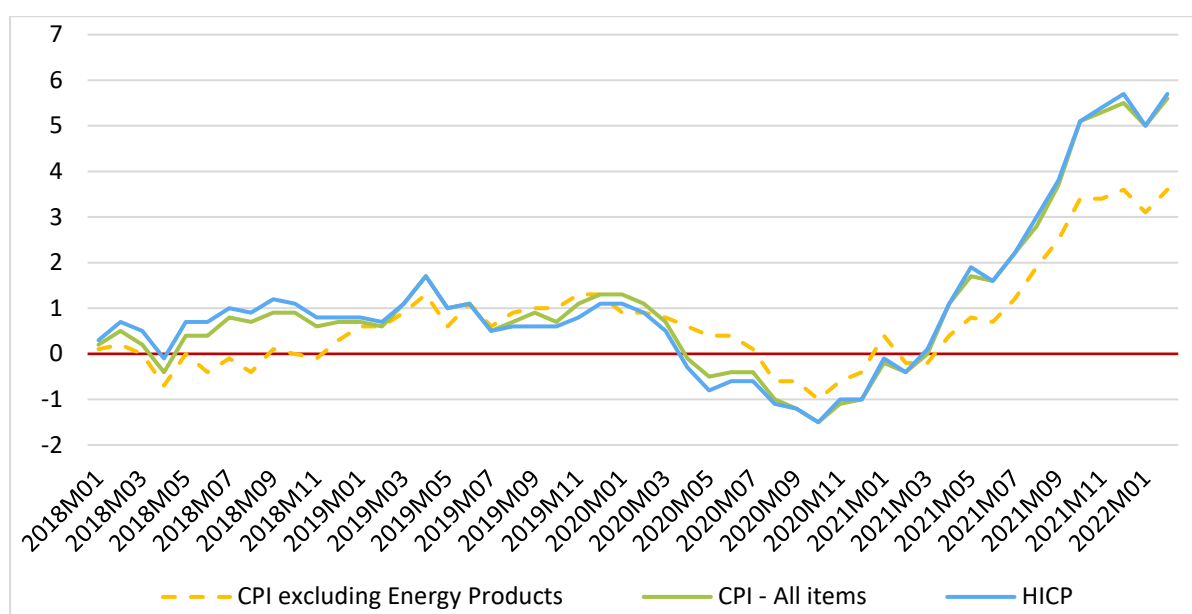
Key Points

- Increased costs in the housing, water, and energy and transport indices are being driven largely by higher fuel costs.
- Energy prices are set to increase further given the ongoing conflict in Ukraine and related sanctions imposed on Russia.
- Average inflation is expected to be 6.7 per cent in 2022.

Factors of Inflation

The manner in which the global economy has emerged from the COVID-19 pandemic at the beginning of 2022 is quite unprecedented. A rebound in demand for goods and services has been met with continued disruptions and bottlenecks in international supply chains. At the same time, ongoing challenges in the global energy market have exacerbated price pressures. These issues have resulted in considerable inflation growth since summer 2021. As of February 2022, the Irish CPI increased 5.6 per cent year-on-year (Figure 36). The impact of energy markets is quite clear; the increase in the CPI excluding energy products was 3.7 per cent for the same period.

FIGURE 36 ANNUAL GROWTH IN INFLATION (%)

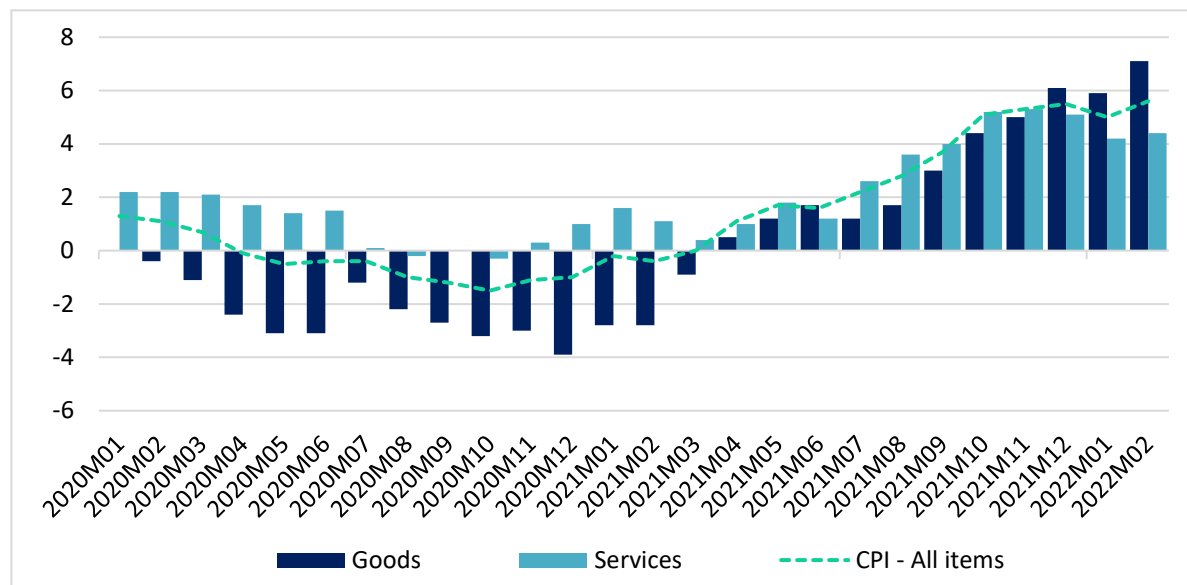


Source: Central Statistics Office.

Given the boost to savings during the pandemic and the recent removal of COVID-related health restrictions, households have been eager to spend on goods and services previously unavailable to them. In February 2022, prices of goods and services were 7.1 and 4.4 per cent higher than the year prior respectively

(Figure 37). The growth in goods stems partially from base effects; in February 2021 prices of goods had declined by 2.8 per cent relative to February 2020.

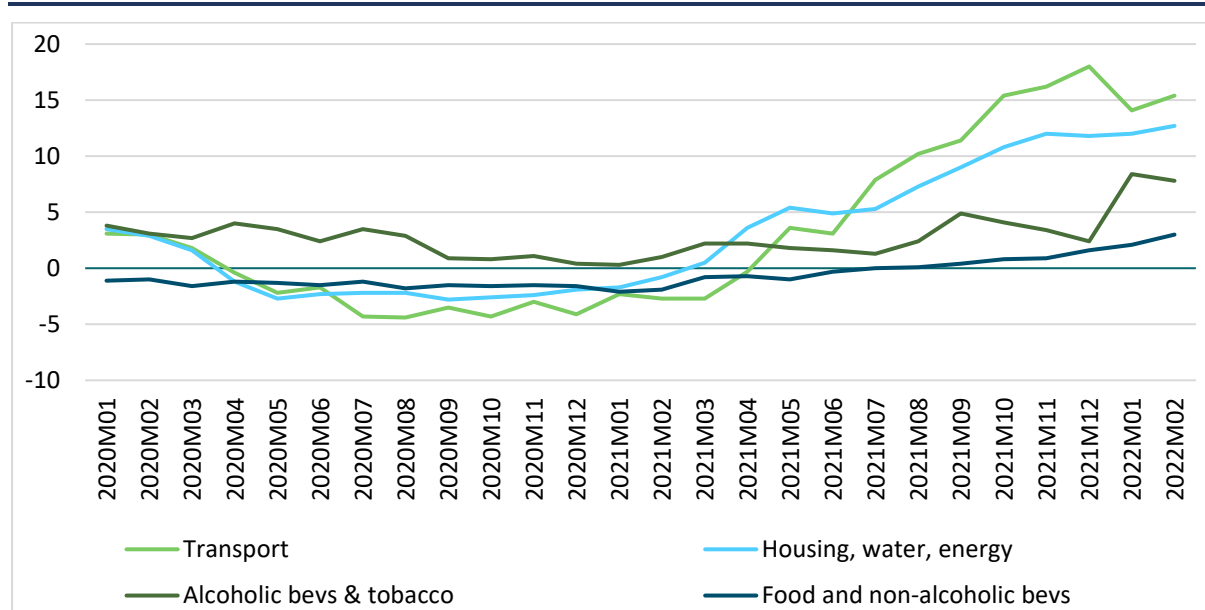
FIGURE 37 **DECOMPOSITION OF ANNUAL CPI GROWTH INTO GOODS AND SERVICES GROWTH (%)**



Source: Central Statistics Office.

Figure 38 shows the four commodity groups experiencing the greatest price increases according to recent data. Transport experienced the most significant increase in prices, 15.4 per cent per annum in February 2022. Base effects, an increase in demand for travel, and the rising prices of energy are all likely affecting the latest increase in transport costs. Housing, water, and energy costs also increased substantially in the same period (12.7 per cent). While the growth in food and non-alcoholic beverage prices is milder than that of housing and transport, prices for these items have not grown by more than one per cent on an annual basis since August 2013. Consumers facing higher prices in food and staple commodities may therefore be more likely to change or limit consumption patterns if prices do not abate throughout the year. The growth in prices of alcoholic beverages is associated with new legislation rather than international pressures or pandemic-related trends. Minimum pricing for alcohol was introduced in January 2022 as a public health measure, requiring a minimum price of 10 cent per gram of alcohol.³⁴ Figure 39 provides detailed insight into the components that are driving the increase in each of these sub-indices.

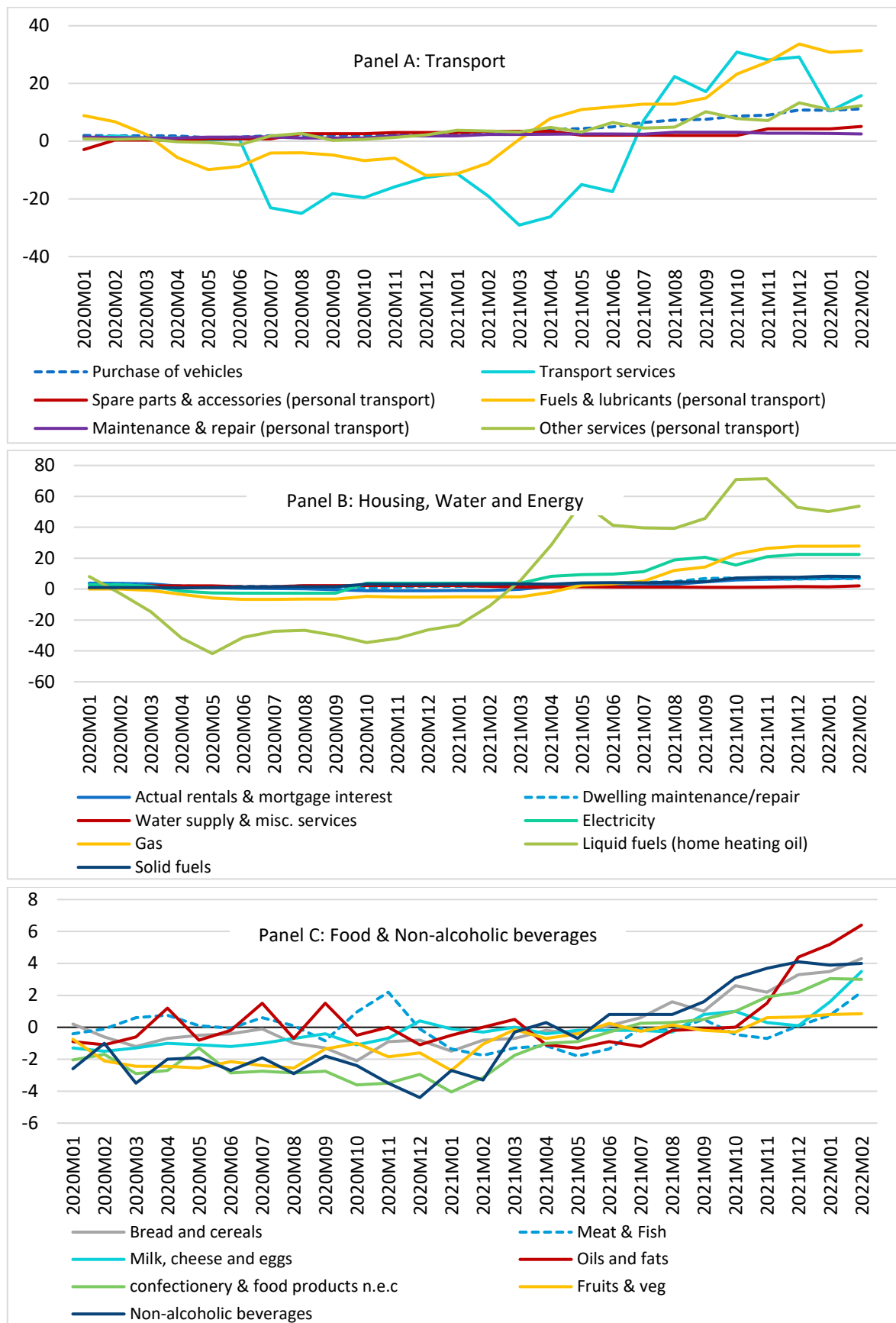
³⁴ <https://www.irishtimes.com/news/politics/minimum-pricing-for-alcohol-to-be-enforced-from-january-2022-1.4555289>.

FIGURE 38 ANNUAL CHANGE IN INFLATION BY SELECTED SUB-INDICES (%)

Source: Central Statistics Office.

Panel A of Figure 39 displays the detailed components of the transport price index. In February 2022, fuels and lubricants for personal transport equipment increased 31.4 per cent on an annual basis. Transport services are also driving price increases in the transport index, with air travel largely driving this growth. In Q4 2021, passenger transport by air had increased 60 per cent relative to the same period in 2020. The surge in demand for travel following the pandemic coupled with the increased price of fuels are driving the high costs in the transport index.

Fuel costs are also largely responsible for the increases seen in the housing, water and energy index (Figure 39, Panel B). Since March 2021 the price of liquid fuels has increased and most recently rose by 53.7 per cent per annum in February 2022. Both gas and electricity increased significantly in the same period, at 27.8 per cent and 22.4 per cent, respectively.

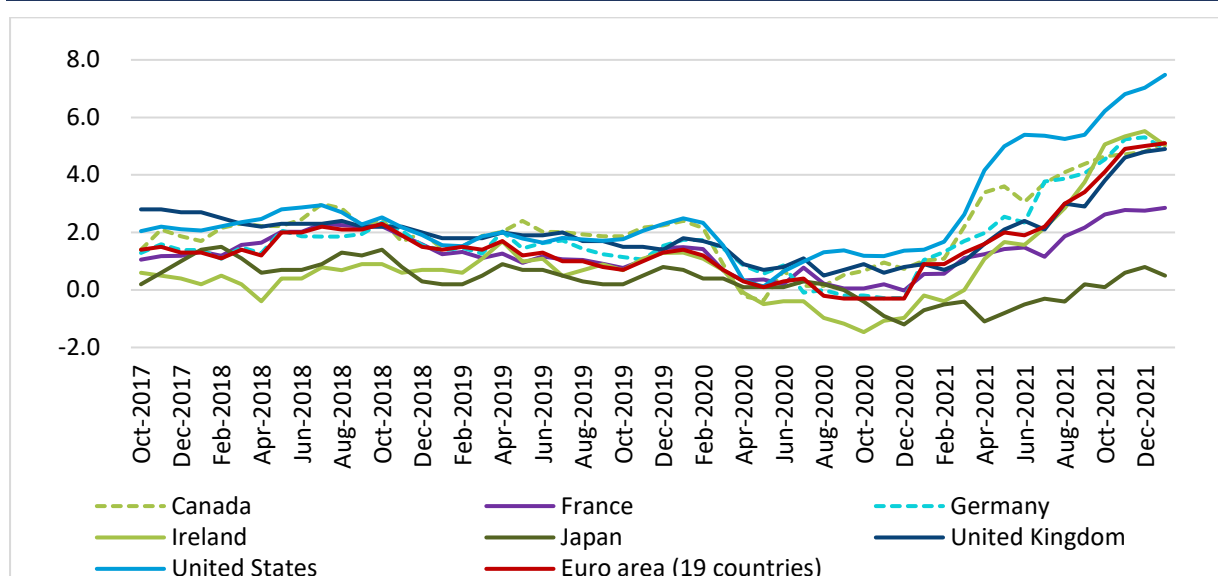
FIGURE 39 ANNUAL CHANGE IN INFLATION BY DETAILED SUB-INDICES (%)

Source: Central Statistics Office.

The detailed breakdown of the CPI by the fastest growing sub-indices makes clear the impact that energy prices are having on the overall CPI. These pressures are set to continue as geopolitical tensions escalate. The ECB recently highlighted the four main channels by which high energy prices are likely to impact inflation dynamics: 1) direct impact on the HICP; 2) potential pass-through to other components of the HICP; 3) second-round effects on wages, as individuals revise their inflation expectations and/or expect wage adjustments to offset rising costs; and 4) effects on production and investment decisions as well as negative wealth effects.³⁵

Higher rates of inflation are not unique to Ireland. As of January 2022, inflation across the euro area and OECD reached 5.1 and 7.2 per cent, respectively. Figure 40 provides a cross-country comparison of inflation growth. The United States is experiencing the highest inflation of most advanced economies (7.5 per cent in January 2022). In the same period, the UK, Canada, Ireland and Germany each experienced year-on-year growth in inflation of approximately 5 per cent.

FIGURE 40 CONSUMER PRICE INDEX, CROSS-COUNTRY COMPARISON (Y-O-Y %)



Source: OECD.

Inflation Outlook

At present, Russian aggression in Ukraine and the subsequent global opposition to such actions has sparked greater uncertainty concerning the path of global inflation. As detailed in Box A of this *Commentary*, Irish energy and agricultural imports as well as metal ore exports are disproportionately dependent on trade with Russia and will likely experience price increases as a result of the conflict.

³⁵ Lane, P. (2022). 'Inflation in the near-term and the medium-term', speech at MNI Market News Webcast, 17 February. Full speech available here: [Inflation in the near-term and the medium-term \(europa.eu\)](https://www.europa.eu).

Given these uncertainties, inflation forecasts have been revised upwards. In the euro area, the ECB projects inflation to average 5.1 per cent in 2022.³⁶ The National Institute of Economic and Social Research (NIESR) has estimated that the impact of the conflict in Ukraine on the global economy will lead to increases in inflation rates being up to 3 percentage points higher in 2022 and 2 percentage points higher in 2023.³⁷ In line with these findings, we expect inflation to be higher than previously anticipated over the next year.³⁸ In Ireland, increased inflation is also indicative of the expanding economy; the domestic economy is exposed to the same inflationary pressures as the rest of the euro area, while also facing upward pressure as a result of the robust economic activity that has been prevalent since 2013. Due to these combined factors, we expect to see an average inflation rate of 6.7 per cent in 2022, with inflation anticipated to peak in mid-summer and decline back towards 6.0 per cent by the end of the year. In 2023, average inflation is forecast to be 5.0 per cent. In 2023, average inflation is forecast to be 5.0 per cent.

In the following Box to the *Commentary*, Doorley, Regan and Roantree assess the distributional impact of recent Government measures aimed at insulating incomes from the increase in inflation.

BOX B THE DISTRIBUTIONAL EFFECTS OF INFLATION AND PROSPECTS FOR INCOME GROWTH

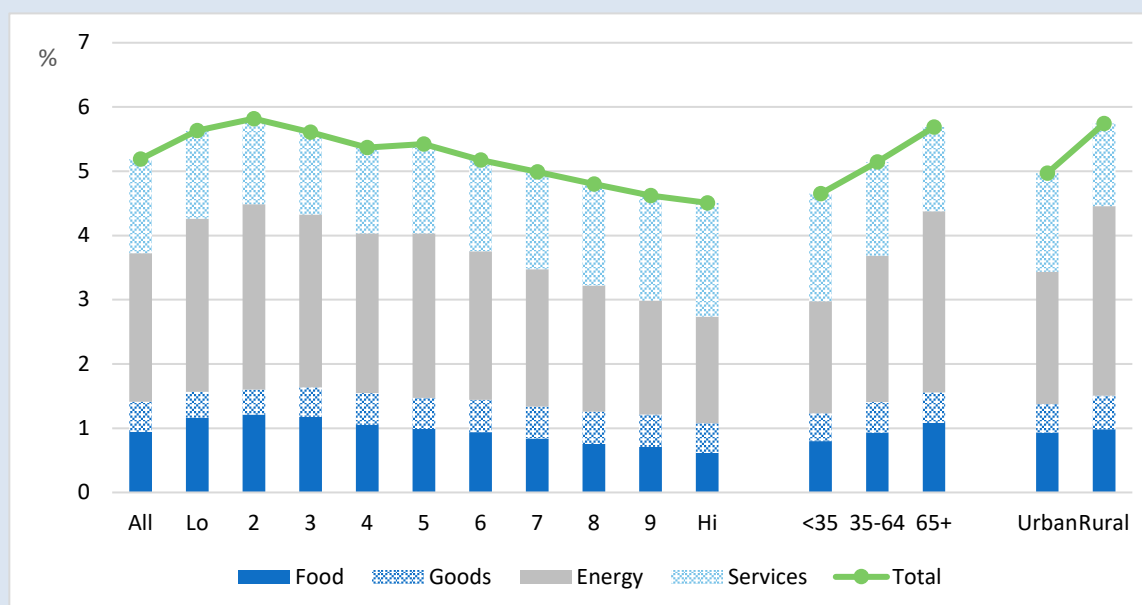
This Box presents analysis on the distributional impact of rising prices and the prospects for income growth in the coming year, stemming from specific policies introduced in response to inflation alongside earnings increases.

We first follow the approach of Lydon (2022) and use expenditure shares calculated using the Household Budget Survey to estimate differential inflation rates by household income level, location and age. Figure B.1 shows that while inflation in the year to January 2022 was on average 5.2 per cent, low income, rural and older households experienced substantially higher levels of inflation on average. Households in the lowest income decile (tenth of the population) experienced a rate of inflation that was 1.1 percentage points (24 per cent) higher than that experienced by households in the highest income decile. Rural households experienced 0.7 percentage point (14 per cent) higher inflation than urban households. There was also a clear age gradient to inflation with older households experiencing 1 percentage point (21 per cent) higher inflation than younger households. The different inflation rates experienced by household type are mainly driven by different consumption patterns of energy and food, with low-income, older and rural households spending a larger share of their income on these expenditure groups.

³⁶ ECB projections available here: <https://www.ecb.europa.eu/pub/projections/html/index.en.html>.

³⁷ Liadze, I., C. Macchiarelli, P. Mortimer-Lee and P. Sanchez Juanino (2022). 'The Economic Costs of the Russia-Ukraine Conflict', NIESR Policy Paper, 32, March.

³⁸ As noted earlier these estimates from NIESR will most likely be subject to future revision.

FIGURE B.1 DISTRIBUTIONAL EFFECT OF INFLATION JAN 2021 – JAN 2022

Source: Authors' calculations using the 2015-2016 Household Budget Survey and CSO 2021 HICP weights.

Note: Deciles are based on equivalised household income, using CSO national equivalence scales. Rural households are defined as those living in rural areas with <1,000 in population while the age categorisation of households is based on the oldest member.

To mitigate the impacts of the rising cost of living, on 10 February 2022 the Minister for Public Expenditure and Reform and the Minister for Finance announced a number of policy measures designed to support household incomes. Overall, the suite of policies announced in this Cost-of-Living (COL) package are estimated to cost €505 million in 2022 (Department of Public Expenditure and Reform, 2022). In addition, on 10 March 2022, a temporary cut to excise duties – of 20c/l for petrol and 15c/l for diesel (including VAT) – took effect, with an estimated cost of €320 million to August.

We forecast the change in household disposable income between 2021 and 2022, including this suite of measures, using SWITCH, the ESRI's tax-benefit microsimulation model, and ITSim – an indirect tax microsimulation model developed jointly by the ESRI and the Department of Finance. SWITCH is run on data from the 2019 Survey of Income and Living Conditions (SILC) and is Nowcasted to reflect the population in October 2021. ITSim estimates the indirect taxes (VAT and excise duties, including carbon taxes) paid by Irish households on the basis of their reported expenditure, collected by the CSO's nationally representative Household Budget Survey (HBS) in 2015-2016.

Following the approach of Bargain and Callan (2010) and Bargain et al. (2017), we decompose the forecast change in disposable income between 2021 and 2022 into the relative contributions of (i) Budget 2022 reforms to direct tax and welfare and indirect tax, (ii) the COL package, (iii) the cut to fuel excise and (iv) earnings growth, which is assumed to be uniform and in line with forecasts from the Department of Finance (2021).³⁹

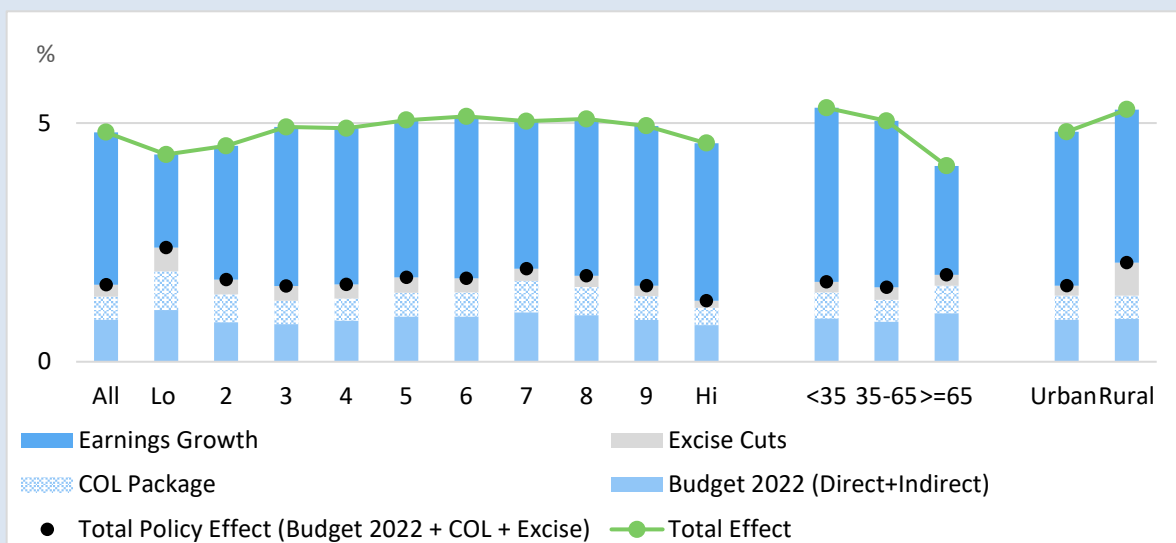
In modelling the COL package, we include the following elements:⁴⁰

- a once-off €200 energy credit per household;

- a lump-sum payment of €125 to those availing of the Fuel Allowance;
- the expansion to income limits for the Working Family Payment being brought forward from 1 June to 1 April;
- a 20 per cent reduction in public transport fees from 1 April through to year-end 2022.

Figure B.2 shows the results of this analysis. The average change in disposable income is estimated to be 4.8 per cent between 2021 and 2022, below current forecasts for inflation. In other words, we expect disposable incomes to – on average – fall in real terms.

FIGURE B.2 DECOMPOSITION OF FORECAST INCOME GROWTH 2021-2022, BY HOUSEHOLD TYPE



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

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

Earnings growth is the largest single contributor to disposable income growth, particularly benefiting high-income and younger households which contain – on average – more paid workers than lower income and older households. Budget 2022 is the next largest contributor to household income growth, resulting in a nominal increase in household income of 0.9 per cent,⁴¹ with larger effects for low-income and elderly households. The COL package results in nominal income gains of 0.5 per cent, with larger effects for households in low-income deciles. Finally, the excise duty cuts result in a disposable

³⁹ Wage growth is estimated at 6 per cent and growth in self-employed income is estimated at 6.5 per cent. All self-employed and employees are simulated to experience the same level of wage growth, so variation in income growth across income deciles reflects differences in labour supply across income deciles.

⁴⁰ Due to data constraints, we are unable to simulate the effect of the reduction in the cap on prescribed medicines per month from €144 to €80 under the Drug Payment Scheme and a reduction in caps for multiple children on school transport for the coming academic year. We are able to model 96 per cent of the COL package. The policies we cannot simulate have an estimated combined fiscal cost of €20 million.

⁴¹ This is higher than the 0.05 per cent reported in Roantree et al. (2021) as the authors compared the effect of Budget 2022 to a distributionally neutral price-indexed baseline rather than a nominally fixed baseline, as we do in this Box.

income gain of 0.25 per cent, benefiting lower-income and rural households most and higher-income and urban households least.⁴²

Lowest income households benefit most from the policy changes when examining percentage changes in income. However, households in the top half of the income distribution account for most of the cost of the recent reforms. This is as higher-income households spend more on motor fuel and public transport in absolute terms, and because many of the measures are not means-tested. Given prospects for sustained high levels of inflation, policymakers may need to consider greater targeting of any future measures to limit the cost of future supports and the risks of fuelling further inflation.

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This Box was prepared by Karina Doorley, Mark Regan and Barra Roantree.

⁴² We assume that the entire excise cut is passed onto consumers.

PUBLIC FINANCES

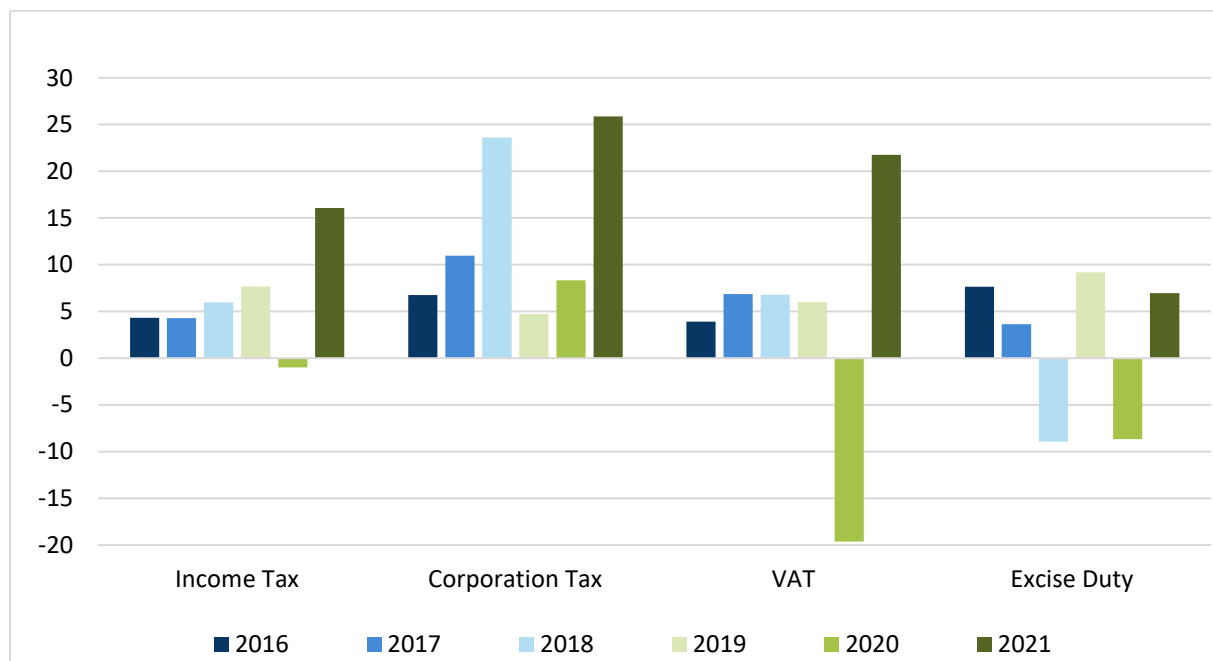
Key Points

- The economic recovery continues as income tax and VAT receipts see significant increases.
- Strong growth in tax revenues coupled with lower-than-targeted spending sees a decrease in the deficit.
- Corporation tax receipts continue to perform strongly.

Taxation receipts for 2021 saw strong growth across almost all tax headings, highlighting the economic recovery throughout the past year. A significant element of the recovery has been the revival of the labour market – this resulted in strong income tax receipts throughout 2021, which cumulatively led to a 17.4 per cent increase in these receipts compared to those collected in 2020. The significant recovery apparent in consumption resulted in VAT receipts increasing by 24.3 per cent in 2021 (Figure 41). VAT receipts have now reached pre-pandemic levels.

Finally, corporation tax receipts continue to exceed forecasted levels with an additional €1.4 billion collected in 2021 compared to the previous year. As well as strong growth being observed across almost all tax headings, it is also significant that total tax receipts in 2021 were the highest ever recorded.

FIGURE 41 GROWTH RATES OF MAIN TAXATION ITEMS

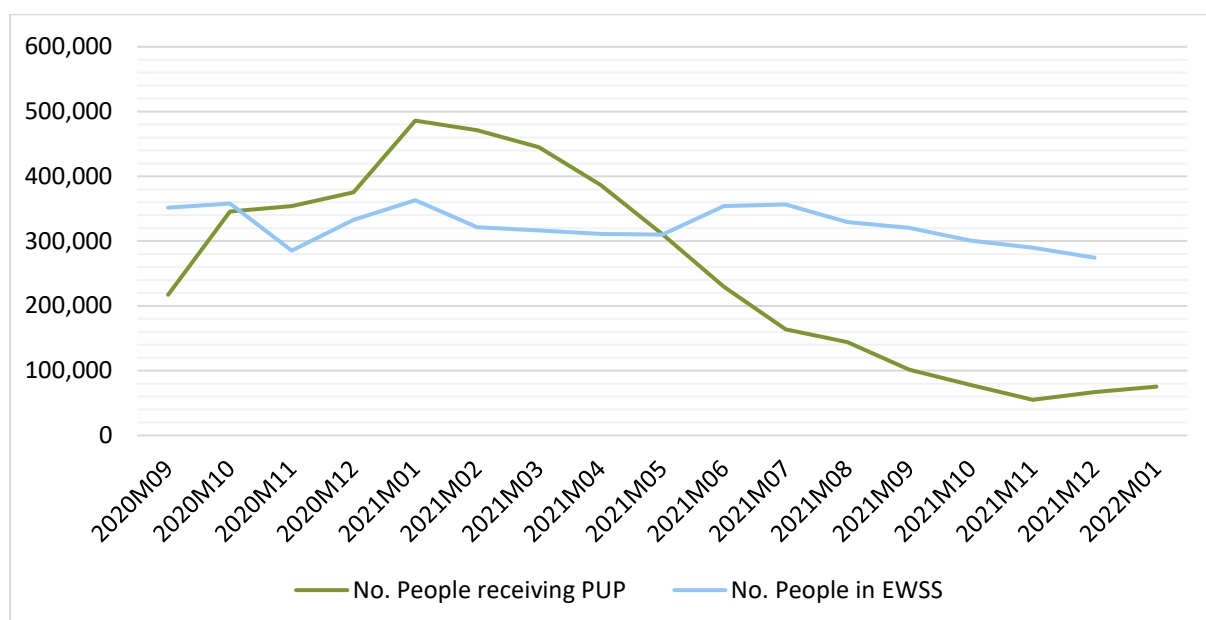


Source: QEC calculations.

Government expenditure was 2.6 per cent greater in 2021 compared to 2020, but it was 1.5 per cent lower than what was allocated in Budget 2021 due to significantly lower than anticipated current spending on health. This lower expenditure can be attributed to a range of factors, the most obvious being the rapid improvement in the epidemiological situation in the last quarter of 2021, where large increases in case numbers did not translate into the level of increased demand for healthcare as previous waves had caused.

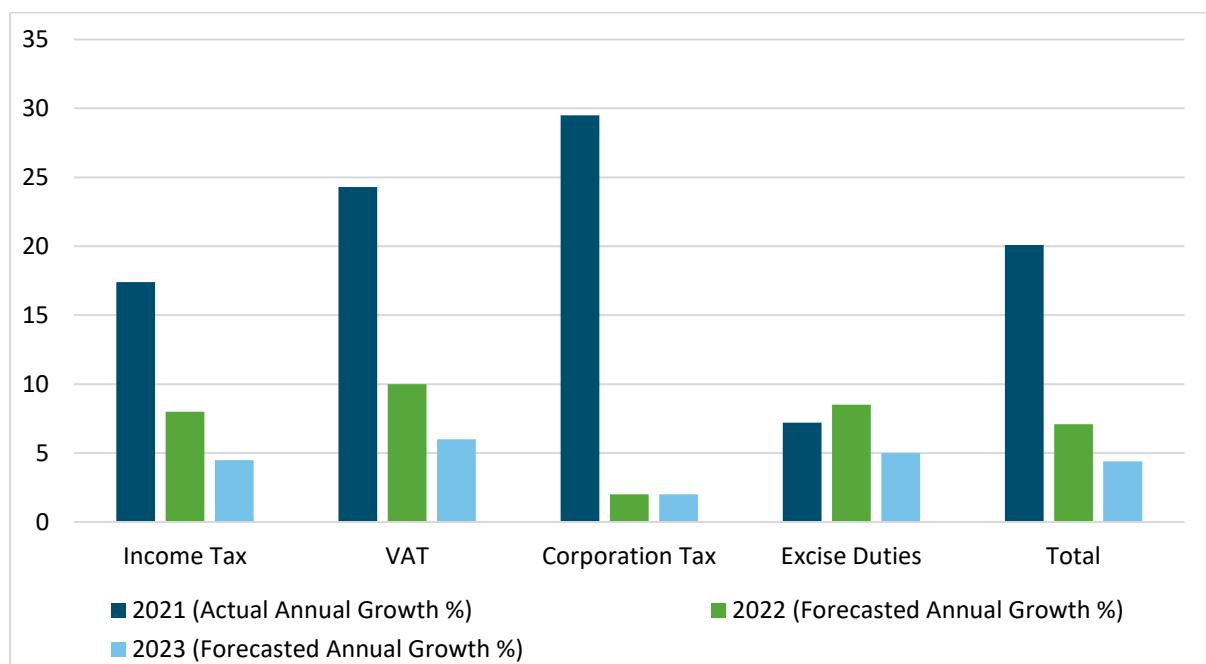
Current spending on social welfare, however, was greater than had been anticipated. This may be due to a slower reduction in those participating in the EWSS than was expected, as well as delays to phasing out supports. Figure 42 shows that there has been a steep decline in the numbers of those on the PUP, with a decrease from over 480,000 people receiving the payment at the start of 2021 to a low of just below 70,000 at the end of 2021. However, the number of those availing of the EWSS has declined at a much slower pace and there remains over 270,000 workers availing of this scheme. However, these schemes will be tapered down in the coming months, which will lower current spending significantly. In 2021 current spending overall was lower than what had been allocated. Capital spending was also below what had been projected – this was due to lower-than-targeted capital spending on transport and, in particular, on housing.

FIGURE 42 DEVELOPMENT OF THE PUP AND EWSS



Source: Central Statistics Office, Gov.ie, QEC calculations.

Our forecasts of the different taxation items for 2022 are shown in Figure 43.

FIGURE 43 FORECAST OF KEY TAXATION AGGREGATES

Source: Department of Finance and QEC calculations.

While there was substantial growth in taxation receipts in 2021, much of this was due to the recovery in the economy in 2021. Consequently, our forecasts for 2022 and 2023 are somewhat lower than the 2021 figures. January-February 2022 saw increases in tax receipts of 17 per cent in income tax, 27 per cent in VAT, and 13 per cent in excise duties compared to the same period in 2021.

The forecast for increases in corporation tax receipts may seem modest given the large increases in recent years, however it reflects concern that some of the recent increases in this taxation item may be somewhat transitory or ‘windfall’ in nature.

Nevertheless, the strong and continuous increase expected in tax revenue will have a positive impact on the public finances. We now expect the General Government Balance (GGB) to be 0.2 per cent in the present year. The improvement in fiscal indicators such as the GGB is mainly due the underlying pace of growth in the economy.

However, while debt ratios and deficits are falling, there are a number of notable risks as far as the public finances are concerned. Although the negative economic effects of the pandemic have abated, there are increasing concerns surrounding inflation. These concerns are largely centred around rising energy costs. With increased interest rates in the US and the UK, and now a geopolitical conflict in

Eastern Europe, international uncertainty has risen sharply. Additionally, the conflict in Ukraine has seen sanctions placed on Russian oil exports by both the US and the UK, which will cause further increases to energy prices.

The issue of increased energy costs initially prompted a policy response in the form of energy credit payments, discussed in Box C to the *Commentary*, and has now seen the reduction of excise duties on fuel. Depending on the extent to which the current crisis worsens, more policy responses may be forthcoming. These may come in the form of further subsidies to support households or perhaps additional reductions in certain taxes on certain energies/fuels. Policies such as these could lead to a lower GGB than forecasted in this *Commentary*, given either the increased spending or decreased tax revenue that would accompany these policies.

The degree to which State intervention will place any burden on the public finances depends on two things. Firstly, the feedback to energy, food, and other prices from the economic disruptions of the war in Ukraine will dictate the level of intervention required by the State and the length of time it is needed. For example, if further sanctions are imposed on Russia, particularly on Russian energy exports, this would have a large impact on international energy prices which would then likely lead to the need for further policy responses.

Finally, both the Irish debt-to-GDP and debt-to-GNI* ratios have been declining in recent years. While there is the possibility of additional fiscal support being provided by the Government in the current year, overall it is forecast that by the end of 2022 the debt-to-GDP ratio will have fallen to 46.6 per cent, while the debt-to-GNI* ratio is forecast to fall to 86.4 per cent. In 2023, it is expected that these ratios will have declined to 43.8 per cent and 82.3 per cent, respectively.

BOX C CLIMATE CHANGE: FOSSIL FUEL SUBSIDIES

The recent crisis in Ukraine has brought the issue of energy use sharply into focus. Despite the global commitment to decarbonisation, governments continue to incentivise fossil fuel use through financial support mechanisms for producers and households. Economic analyses of such Fossil Fuel Subsidies (FFS) remain scarce in the literature and political efforts tend to focus more on carbon taxation and green subsidies, whereas FFS remain in the background. In this Box, we discuss the potential emission, economic and distributional impacts of removing Irish FFS.

Carbon taxation is at the forefront of the discussions regarding emissions reduction policies, where many EU Member States including Ireland have implemented carbon taxation over recent decades to disincentivise the use of fossil fuels not covered by the EU Emission Trading System (ETS) (e.g. those from land transportation and households). The Irish Government introduced a carbon tax in 2009. The current level in Ireland is €42 per tonne of CO₂ and the Government, as announced in the Climate Action Plan 2021, has committed to gradually increase the carbon tax to €100 by 2030. However, carbon taxation efforts can be quite small in comparison to savings which can be achieved through targeting FFS. Where the total budgetary cost of Irish energy FFS was around €2.44 billion in 2014, the government's total carbon tax revenue was €390.9 million in the same year. Hence, the monetary value of FFS was 6.3 times that of carbon tax revenues (in 2018, this ratio was 5.4).⁴³ Ireland is not the exception; an International Monetary Fund (IMF) analysis, Parry et al. (2021), states that 191 countries have FFS schemes with a global monetary value equivalent to 6.3 per cent of global GDP. In comparison, global carbon pricing revenues amounted to a mere 0.03 per cent of global GDP (World Bank, 2020). OECD shows that almost all major economies subsidise fossil fuels up to 0.6 per cent of their GDPs.

Despite the many global declarations of commitment to phasing out FFS which have been made in the past, e.g. the G20 commitment in 2009⁴⁴ to phase out FFS in the medium term or the G7 commitment in 2016⁴⁵ to phase out FFS by 2025, FFS have not significantly decreased in the last decade. There seems, however, to be a shift in the international policy landscape of late, where the European Commission (EC) now monitors Member States' progress towards phasing out FFS as required by the Regulation on the Governance of the Energy Union and Climate Action (European Union, 2018). This is reported annually, where the first annual report (European Commission, 2021b), was published as an annex to the 2020 State of the Energy Union Report (European Commission, 2021a). Furthermore, the Eighth Environment Action Programme to 2030 (8EAP)⁴⁶ agreed last December commits to the phasing out of FFS within ten years. More importantly, the EC has made decisive steps towards eliminating FFS through its proposal to amend the Energy Tax Directive to include the taxation of kerosene, now being discussed in European Parliament.

⁴³ <https://data.cso.ie/table/FSS01>.

⁴⁴ <http://www.g20.utoronto.ca/2009/2009communique0925.html>.

⁴⁵ <https://www.mofa.go.jp/files/000160266.pdf>.

⁴⁶ https://ec.europa.eu/environment/strategy/environment-action-programme-2030_en.

Though FFS have not been developed with the intention of subsidising fossil fuels, effectively this is exactly what they do. Irish sectoral production subsidies (such as those for peat, electricity, air transportation and land transportation) intend to lower the cost of production, which lowers domestic prices and increases national firms' profits and competitiveness in international markets. Irish commodity-related subsidies (such as those for diesel, fuel oil and kerosene) decrease the retail prices of energy commodities by lowering the excise tax burden, which lowers both production and households' costs. Household Energy Allowances support poorer households in lowering their home heating costs.

Work applying the Ireland Environment-Energy-Economy (I3E) model highlights the important role FFS play in Irish emissions by examining the impacts of removing Irish FFS. Results from de Bruin et al. (2019) and de Bruin and Yakut (forthcoming) show that removing all energy FFS in Ireland would result in a 16 per cent reduction in CO₂ emissions by 2030 compared to keeping them in place. de Bruin and Yakut (forthcoming) compare removing FFS to the current Irish carbon tax trajectory and find that in terms of emission reduction, the FFS removal will have similar impacts to the carbon tax trajectory. These two policies are, however, very distinct in their economic and distributional impacts.

In macroeconomic terms, these policies will have similar impacts (carbon taxation performs slightly better), where real GDP will be approximately 1.4 per cent lower by 2030 compared to no policy change (de Bruin et al., 2019 and de Bruin and Yakut, forthcoming). However, when additional revenues (from carbon taxation or reduced subsidies) are earmarked to reduce other distortionary taxes in the economy, the economic impacts from the removal of FFS outperform those of carbon taxation. This is not surprising as the increased revenue from the removal of FFS is significantly larger than carbon taxation revenues.

The main concern of removing FFS is the resulting distributional impact. The impacts of carbon taxation are more evenly spread across sectors and households than those of FFS removal. Under subsidy removal, the impacts for specific sectors (mainly transportation, mining, and electricity generation) and households (particularly the rural poor) can be extremely high, making their removal problematic. However, excluding the removal of household energy allowances alleviates this issue for households without significantly impacting emissions reduction (as household energy allowances are not linked to energy use but provided on a welfare basis).

Overall, FFS have positive impacts on those who receive them, but keep fossil fuel prices below the efficient levels which are determined by supply costs, revenue considerations and climate goals. Removing FFS would have a particularly adverse impact on particular industries but would be an efficient way of reducing emissions. Policies concerning the removal of FFS would need to address this by supporting these industries in other ways.

FFS removal needs to be addressed in order to ensure an efficient and effective Irish climate policy. Furthermore, Ireland may face external pressure over the coming years to reduce FFS in an EU policy context.

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This Box was prepared by Kelly de Bruin and Aykut Mert Yakut.

General Assessment

The fallout from the horrifying conflict in Ukraine presents a number of significant difficulties for the international and domestic economy. In general, a major conflict such as that now ongoing in Ukraine leads to a substantial increase in global uncertainty levels. Typically, increasing uncertainty can lead to lower levels of investment and consumption as households and firms are unsure about future activity levels. This inevitably results in a slowdown in global economic growth, which has a particularly pressing impact on the Irish domestic economy, given its small and open nature.

The most significant impact of the recent invasion of Ukraine by Russia is on international energy prices; within days of the crisis, international prices of both oil and gas increased substantially with knock-on impacts on the rate of inflation. These price rises come on the back of already elevated price pressures in the energy markets which had begun in mid-2021. The recent decision by the US, UK and Canada to ban Russian energy imports is likely to add to these price pressures through the coming months. Many continental European economies are also likely to sharply reduce their use of Russian fossil fuels, and this will pose a significant challenge to these economies in the short and medium term. Recent analysis by McWilliams et al. (2022)⁴⁷ highlights the scale of such a transformation in European energy usage.

Furthermore, international grain prices are also set to increase substantially with both Russia and Ukraine being amongst the largest producers of wheat globally. This will inevitably feed into higher food prices resulting in further cost of living pressures. Russia in particular is also a major producer of food production inputs such as fertiliser, thus any disruptions to supplies of these goods, or rapid inflation in their prices, is also likely to disrupt food markets.

The imposition of sanctions on financial and other activities by Western governments, while required from a humanitarian perspective, will pose a number of further economic challenges. Financial market volatility is likely to rise as default risk related to Russian and Ukrainian government and corporate debt increases. The direct financial sanctions, and exchange rate depreciation, are likely to cause a substantial mark down in foreign-held Russian asset prices. While Irish banks, firms and households do not face direct large exposures, some other European

⁴⁷ McWilliams B., G. Sgaravatti, S. Tagliapietra and G. Zachmann (2022). 'Preparing for the first winter without Russian gas', Bruegel blog, available online at: <https://www.bruegel.org/2022/02/preparing-for-the-first-winter-without-russian-gas/>.

countries do. This may lead to an elevation in financial stability risks more generally.

The withdrawal of corporate investments, business closures and general trade disruptions related to the sanctions are also likely to impact trading conditions globally and exacerbate the supply chain disruptions which became a feature of the COVID-19 crisis.

Box A to the *Commentary* summarises the potential impact of the Ukraine crisis for the Irish economy. We had believed that the current period of high inflation would peak in March of this year before returning to lower rates by the end of 2022. However, in light of recent developments in Ukraine, the period of elevated inflation is now set to last longer than had originally been expected. Inflation in the current year is set to average 6.7 per cent while falling to 5.0 per cent in 2023. However, it is clear that depending on the duration and scale of the hostilities the inflation rate could be greater than this.

From a distributional perspective, it is evident that higher rates of inflation disproportionately impact lower income families. Notwithstanding the presence of robust domestic economic growth, many Irish households will face increasing pressures to make ends meet over the next 12 to 18 months. Consequently, it is important that Government policy is as targeted as possible in assisting such households. Indeed, in Box B to the *Commentary*, analysis by Doorley, Regan and Roantree is undertaken on the distributional impact of recent Government measures aimed at reducing the impact of inflation on household expenses. The research shows that, while lower income households benefit disproportionately, most of the cost of the measures is accrued to higher income households as it is not means tested. Consequently, any further measures introduced should be targeted at lower income households in order to achieve a less pro-cyclical fiscal outcome.

Data from the Central Statistics Office confirm that GDP grew by 13.5 per cent in 2021, with modified domestic demand (MDD) increasing by 6.5 per cent. Despite the impact of the conflict in Ukraine, for the present year, the economy is still expected to grow quite robustly with MDD expected to increase by 5 per cent. Indeed, the economy is encountering the countervailing forces of the improvement in the epidemiological and immunological situation and the uncertainties and price escalations from the geopolitical tensions. In 2023 we believe the economy will grow further, with MDD and GDP set to increase by 4.5 per cent and 4.3 per cent, respectively. However, these forecasts are somewhat less than those in the previous *Commentary* and reflect the likely impact of the Ukrainian crisis on the Irish economy.

The labour market continues to see an improvement in its fortunes; unemployment which peaked in February 2021 at 27 per cent has fallen to 7.0 per cent by February 2022. By the end of the year, we expect the unemployment rate to fall to 5.5 per cent. In 2023 the unemployment rate is set to fall below its long-run rate. This has important consequences in terms of the potential for overheating in the domestic economy. Typically, inflationary pressures in the domestic economy tend to pick up once the unemployment rate falls below this threshold.

The relative strength of the overall economic performance is reflected in the improvement in the public finances. 2022 is likely to see the first positive General Government Balance (GGB) since 2019; this reflects both greater than expected increases in Exchequer receipts and lower than expected expenditure given the significant fall-off in unemployment. This improvement in the public finances does provide the Government with some fiscal capacity to deal with the emerging crisis in Ukraine. For example, our forecasts include the recent measures introduced by the Government dealing with the inflationary pressures as well as the reduction in excise rates. However, it is also clear that there are significant downside risks to the public finance if the geopolitical and humanitarian situation deteriorates further.

While the major determinants of the higher inflation rates are exogenous to the Irish economy, more generally, the prospect for elevated rates of inflation or overheating in the domestic economy are increasing. Despite the presence of the pandemic, the Irish economy has been growing on a persistent basis since 2013 with underlying rates of growth at least twice the European average over the period. Unemployment, which had been at 4.8 per cent in February 2020, is set to decline to 5.5 per cent by the end of 2022. Historically, when the Irish unemployment rate falls below 5 per cent, then inflationary pressures begin to accumulate. Therefore, any pick-up in inflation due to higher energy costs could well be compounded by developments in the domestic economy.

One area where domestically generated rates of inflation are clearly apparent is the housing market where both price levels and rents have been increasing at a greater rate in the aftermath of the pandemic. These heightened rates of price and rental inflation come at a time when both prices and rents have been growing consistently over the past number of years giving rise to concerns about affordability in the Irish market (see Corrigan et al., 2019).⁴⁸ Given the adverse impact the pandemic-related public health measures had on the supply side of the

⁴⁸ Corrigan E., D. Foley, K. McQuinn, C. O'Toole and R. Slaymaker (2019). 'Exploring affordability in the Irish housing market', *The Economic and Social Review*, Vol. 50, pp. 119-157, No 1, Spring, 2019.

housing market, it seems likely that housing costs both in terms of prices and rents are set to continue to increase for the rest of 2022 and into 2023.

Furthermore, the general increase in commodity prices in the fallout from the invasion of Ukraine is likely to feed through into higher building costs, which will impact any future increases in housing supply. Despite these factors, and the general risk of overheating pressures, there still remains a clear rationale for increased investment in the housing market as called for in McQuinn (2021).⁴⁹ While it is imperative that a reduction of costs in the construction sector should also be targeted, significant Government intervention is required if supply levels are to be increased in the short to medium term. Ultimately, the housing issue will only be solved when there has been a considerable increase in the number of housing units supplied.

From a macroeconomic perspective, given the potential for overheating in the domestic economy, greater capital investment by the State does mean that significant discipline will have to be exercised in terms of increases in current Government expenditure. It also means that the potential for reduction in taxation rates over the coming years is very limited. Given the uncertainty around the current geopolitical and economic environment, the forecasts in the *Commentary* do come with considerable downside risks. Further escalation of the hostilities in Ukraine could lead to a lower growth outlook, further increases in domestic inflation and a significant additional burden on the public finances.

⁴⁹ McQuinn K. (2021). 'With 'g' greater than 'r', should we be borrowing to increase Irish housing supply', Special Article, *Quarterly Economic Commentary*, Summer. Dublin: The Economic and Social Research Institute.

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