Sector Developments & Insights

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Bank of Ireland

Classification: Green

Contents

Foreword – Jillian Clarkin: Head of Customer Journeys and SME Markets: Bank of Ireland Business Banking

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Introduction

Welcome to the latest edition of our Sectors Insights and Outlook update. As Irish businesses navigate a trading environment impacted by inflation, rising costs and fluctuating consumer sentiment, our Sectors team continue to proactively engage with our customers and their advisors nationwide. In Bank of Ireland we have supported the investment plans of Irish SMEs across a range of sectors and regions in 2022 to date reflecting our strong partnership with this key element of the Irish economy.

Headline Insights

In this comprehensive overview of the Irish business landscape, our sector specialists outline the latest developments, challenges and opportunities across seven key Irish SME Sectors; Agriculture, Food & Drink, Hospitality, Motor, Manufacturing, Retail Convenience and Technology. A number of central themes stand out across these sectors:

- Energy and commodity costs linked to the Ukrainian war, pandemic related supply issues and increased levels of activity/demand as economies re-open - continue to fuel an increasing inflationary cycle,
- The acceleration of technology and automation is driving ongoing investment projects across all industries. Businesses are particularly keen to invest in automation and solutions that can mitigate the impact of labour shortages and support the retention of key staff,
- A renewed focus on the green/sustainability agenda, which is driving investment in environmental improvements and integrating solutions that are focused on energy saving/ efficiency is emerging strongly as a business priority.

Open for Business

As two prominent banks exit the Irish market – Bank of Ireland have commenced a proactive consumer awareness campaign to support both personal and business account holders moving banks. The campaign directs account movers to a range of useful supports including step-by-step guides, a dedicated phone line and an online hub to help them with the move.

Our new dedicated online hub **"The Big Move"** includes a step by step guide for customers on how to close their existing current account, open a new account, make changes to regular payments, and apply for credit products such as overdrafts. Templates for letters to SEPA Direct Debit originators, payroll change instruction letters to employers, and credit payment redirection forms have also been developed to help consumers navigate the process. All of this information can be accessed at the following link: **Big Move - Current Account - Bank of Ireland**

If you would like further information or to engage directly with one of our Sectors team, please feel free to contact me at **Jillian.Clarkin@boi.com** The contact details for all of the sector specialists are also outlined within the individual sector updates contained herein.

Wishing you and your business every success for the remainder of 2022 and into the future.

Agriculture H1 2022 Insights / H2 Outlook 2022

Summary: Despite the uncertainty created by the war in Ukraine, the agri sector performed strongly in the first half of 2022. Farmers came into the year in a strong state. Elevated agri commodity prices supported rising input costs across feed, fertiliser and fuel. However these elevated levels are beginning to impact demand, putting pressure on further price rises. It is likely that performance in the second half of the year will be driven by increased price volatility due to the uncertainty around supply and demand of key agri commodities.

Agriculture: H1 2022 Review

Price Developments – June 2022 v June 2021

Food price index (FAO): up **23%** in 12 months

Milk price (CSO): up **37%** to **€0.52/l**

Pig Price (DG Agri): up **28%** to **€2.00/kg**

Feed prices (CSO): up **33%** to c. **€400/t**

Grain Price (IFJ): up **33%** to **€190/t** (Green Barley)

Beef Price (DG Agri): up **17%** to **€4.90/kg**

Fertiliser (CAN) price (CSO): up **164%** to c. **€900/t**

Key Sector Trends in H1 2022

- **Farmers enter 2022 in a strong position:** There was an overall increase in average farm profitability levels in 2021 (Teagasc). The average family farm income rose by 26% in Ireland in 2021 to just over €34,300. Average dairy farm incomes rose 23% to €97,000. Average tillage farm incomes rose 77% to €59,000. Average Cattle rearing incomes rose 30% to €10,900. (Teagasc)
- **War driving uncertainty:** The war in Ukraine is having a major impact on global agriculture through oil, fertiliser, and grain markets. Russia and Ukraine are an integral part of the global agricultural and food commodity trade and combined account for 30% of global grain supply. There is a real fear of a food crisis with more people exposed to food insecurity where the price of key commodities are becoming unaffordable for many poorer countries. While this may impact demand in the medium term, it looks like the market will be driven by supply in the short term.
- **Agri Commodity Bull Run continues:** Agri commodity prices, which had been rising since January 2021 surged to record levels when Russia invaded Ukraine in February 2022. While the FAO Food Price Index has fallen 3% in June from peaks seen in March 2022, it remains 23% higher than June 2021(FAO). This has translated into increased output prices on Irish farms. Overall the agricultural output price index is up 28% in the 12 months from May 2021 (CSO). In the 12 months to May 2022, milk prices are up 37%, cattle prices are up 17%, grain prices are up 33% while pig prices are up 28%.
- **Input costs soar across farms:** As a result of soaring energy prices and global grain prices, agricultural input prices increased 42% in the 12 months from May 2021 (CSO). Fertiliser prices are up 164%, energy prices are up 51% and feed prices are up 33% in the 12 months to end of May 2022.
- **Debt levels on Irish Farms continues to fall:** On average, Irish farms are lowly borrowed with only 37% of farms having debt and the average borrowing is €69,000 (Teagasc). Debt levels on Irish farms continue to decline as Irish farmers pay down debt at a faster rate than taking out new borrowings. At the end of December 2021, outstanding debt on Irish farms was at its lowest level in over a decade at €2.8bn (Central Bank). In the 12 months to the end of March, Irish farmers reduced outstanding debt by €207m (-7%) (Central Bank). At the same time, new lending to Irish farms fell by €70m (-34%) (Central Bank) in the first three months of 2022 compared to the same period in 2021 reflecting the strong farm output prices, cashflows and profitability, on average across farms.
- **Positive sentiment but cautious outlook:** While sentiment and mood remains strong amongst farmers as a result of high farm gate prices, soaring costs and inflation are beginning to impact sentiment. Despite, overdraft utilisation rates being at their lowest level in 5 years, many farmers are concerned about increasing input costs and the impact on farm cashflows.
- **Limited supply driving land prices:** Agricultural land prices rose 16% to €11,906 per acre in 2021 (Farmers Journal Land Report). While the price increase may be attributed to improved farm economics, it is more likely to be driven by lower supply. The number of farms put up for sale fell by 15% compared to 2020 while the number of acres on offer was down 11% compared to 2020.
- **Slowdown in farm development:** While there was an initial resurgence in farm development investment as the economy opened up post Covid, this activity is beginning to show signs of slowdown driven by uncertainty around building costs, availability of building contractors, and uncertainty around increased environmental regulations and the evolution of the Common Agricultural Policy.

Agriculture H1 2022 Insights / H2 Outlook 2022

Key Sector Developments in 2022

- **€91m in additional supports to farmers to deal with impact of war:** In March, following the invasion of Ukraine, the Minister for Agriculture, Food and the Marine tasked Teagasc with heading up a National Fodder and Food Security Committee to explore all options to minimise the impact on farms and plan in the short to medium term. A number of support measures for farmers were subsequently put in place to deal with the impact of the war in Ukraine. A €12m Tillage Incentive Scheme was launched to encourage the growing of tillage crops. Two separate supports packages worth €20m in total for the pig sector were put in place while the horticulture and veg sector received a targeted package worth almost €3m. A €56 million Fodder Support Scheme was also announced to assist growing fodder to ensure adequate stocks for the winter ahead. Recognising the challenging environment facing farmers in 2022, Bank of Ireland launched a €100m Agri Assist loan fund, to support farmers dealing with the rapidly increasing cost of farm inputs. The fund which is open until the end of November 2022, provides additional working capital to farmers at competitive rates with extended repayment terms of up to 3 years.
- **25% target cut in agriculture emissions by 2030:** The agriculture sector will be required to cut its emissions by 25% by 2030, compared to 2018 levels. This target reflects a challenging but achievable ambition for the sector. Agriculture was responsible for 37% of national greenhouse gas (GHG) emissions in 2020. Ag Climatise, the roadmap developed by the Department of Agriculture, Food and the Marine (DAFM) outlines the key actions the sector must take to address climate change. Bank of Ireland is ready to support farmers to embrace these changes in the knowledge that much of what is being asked of them, will in the first instance, enhance the environmental sustainability of the farm but can also contribute to improving overall farm profitability. Bank of Ireland is confident about the future of the sector and is committed to supporting farmer's transition to a greener footprint. Banks have a unique role in helping to bridge the gap between finance and sustainability. We expect there will be a requirement for continued investment in infrastructure that improves the overall environmental sustainability of farms, and we will continue to work with farmers to support their future business requirements.
- **New Common Agricultural Policy (CAP) agreed:** The details of Ireland's CAP strategic plan are now in the final stages with the new CAP to come into effect on 1st of January 2023. Eco-payments, convergence, and limiting the maximum level of payments will impact every farm- where some farmers will gain, while others will lose out as the EU aims for a fairer distribution of funds.

Summary: While markets remain uncertain as to the evolution of the war in Ukraine and the likelihood of a global recession, price volatility, driven by supply and demand dynamics looks set to become a key feature of agri commodity markets over the next 12-18 months.

Key Sector Developments in 2022

25%	Target cut in sector emissions by 2030.
37%	Agriculture's share of national GHG emissions in 2020.
1%	Forecast decrease in domestic milk supply in 2022.
3%	Forecast increase in Irish beef production in 2022.
20%	Forecast decrease in Irish fertiliser market in 2022.

Key Sector Developments in 2022

- **Heightened volatility and Agflation:** Global commodity prices for dairy, meat and grain have risen to record highs since the start of the year and look set to remain at elevated levels for the remainder of 2022. The war in Ukraine has been a key driver of grain prices which is supporting meat and dairy prices. However we are now in a period of Agflation (where food prices rise more rapidly than the prices of other goods and services) and this looks set to impact demand across meat, dairy and grain products.
- **Continued input price inflation:** Input costs (such as feed, fuel and fertiliser) look set to remain high for the remainder of 2022, driven by higher energy costs and availability, increased freight costs and the war in Ukraine. Pigs and poultry are significantly impacted by the increased cost of grain where feed traditionally accounts for 65-80% of production costs.

Agriculture H1 2022 Insights / H2 Outlook 2022

- **Higher energy cost environment in Europe could reduce output:** EU gas prices are 8 times higher today than 12 months ago. Given that 80% of fertiliser production cost is gas, key European Nitrogen producers could curtail production this season. As fertiliser is a key input to Irish farms, any energy restrictions in the EU over winter, will determine fertiliser supply and hence prices. However if prices become excessive, demand will fall as we have seen in 2022. It is expected that the Irish fertiliser market will decrease by 20% in 2022 as a result of high prices.
- **Stable average farm incomes despite rise in costs:** In 2022, some farmers will require additional working capital to manage the increased costs. It is expected that average family farm incomes will remain ahead of 2019 and 2020 figures but could be marginally lower than 2021. However that will depend on farm system.

Key sector outlooks

Dairy: Higher costs limiting supply

European milk supply is back 1% for the first half of the year with declines (1.5-2%) seen across the three largest European producers, Germany, France and the Netherlands compared to the same period 2021. Irish milk production is forecast to decline by 1% in 2022- the first time supply volumes have declined since the removal of milk quotas. For the first 6 months milk supply was down 0.6% compared to the same period last year. Despite higher cow numbers, higher costs (feed and fertilisers) and poorer weather have limited supply at farm level. The drop in supply has seen dairy processors that had imposed restrictions now lift supply curbs. The outlook for milk prices over the remainder of the year looks set to remain strong with limited supply growth but will depend on global economic situation. The FAO Dairy Price Index is up 25% in the 12 months to June 2022 driven by reduced supply and strong demand. The outlook for 2022 is that base milk prices will average €0.51/l for the full year- an increase of €0.14/l on 2021. Two of the largest costs (feed and fertilisers) on dairy farms have increased 6-8cpl in total.

Tillage: Grain markets and fertiliser prices move in opposite directions

The FAO Cereal Price Index reached a near-record level in May and despite declining marginally in June, is still 48.5% higher than the same time last year. The recent declines are driven by new harvest availability, exports from Ukraine, improved crop conditions in some major producers, higher production prospects in Russia, and slower global import demand. Concerns over demand prospects amidst signs of an economic slowdown are currently adding to the downward pressure. Green harvest prices remain unset, however indications are that they will be in the region of €285-300/t. This would place them at almost €100 higher than harvest prices last year. Fertiliser prices have risen significantly and are up €50-70 per tonne of grain this year. That should mean the additional costs deriving from fertiliser and other crops inputs will be absorbed by the increased farm gate prices. Crop yields are variable due to the exceptionally dry early summer. For many tillage farmers, while the 2022 harvest is nearing completion, the focus now turns to the 2023 crop. And with soaring fertiliser prices and weaker outlook for grain markets, 2023 could prove a more challenging year than 2022.

Beef: record meat prices boost beef prices

European beef prices have risen 27% to €4.85/kg in the 12 months to end of June 2022. Prices are now stabilising and remain much higher than historical levels. EU beef supply is expected to be 0.5% lower in 2022 mainly due to reduction in the size of the cow herd. Beef prices are also boosted by higher prices for other proteins. World prices across all meat types have increased, with poultry prices rising sharply, reaching an all-time high, underpinned by the continued tight global supply conditions impacted by the war in Ukraine along with the Avian Influenza outbreaks in the Northern Hemisphere. The FAO Meat Price Index is at record highs and has risen 13% in the 12 months to June 2022.

Irish cattle slaughterings are up 11% in the first 6 months of the year compared to the same period in 2021. For 2022 as a whole, Irish beef production is forecast to increase by 3% compared to 2021 (Teagasc).

Pigs: Stability and profitability returning:

Following a challenging 8 months, where pig farmers were hit with rising feed prices coupled to low pig prices there appears to be some positivity coming to the sector. Feed price rises have started to stabilise and pig prices have increased 25% from the lows in Q1. The current pig price of c. €2/kg is 22% higher than last year and 19% higher than the five year historic average. Feed prices have stabilised at a high level and continue to put pressure on margin. It is expected that feed costs will remain high over the next 12 months. While the remainder of 2022 will be challenging for the average pig farmer in terms of profitability and cashflows, limited supply across Europe, coupled with strong demand should support prices for the remainder of the year and into 2023. This should see the sector return to profitability by the end of 2022.

Agriculture H1 2022 Insights / H2 Outlook 2022

Bank of Ireland

- In Bank of Ireland we recognise that we have a unique opportunity to support our customers and to enable Irish farmers and rural communities to thrive.
- Our proven financial capabilities and appetite, combined with comprehensive agricultural expertise, provide us with a strong platform to meet the funding requirements of Irish farmers and agri-businesses.
- We understand the farming cycle, agri commodity price volatility and the regular need to invest to maintain growth and profitability in this dynamic sector. We have a strong appetite to support progressive, innovative and efficient farmers.

Sources: Teagasc, CSO, Department of Agriculture (DAFM), Bord Bia, Euromonitor, European Commission, IBEQ, MATIF, LIFFE, IMF, World Bank, FAO.

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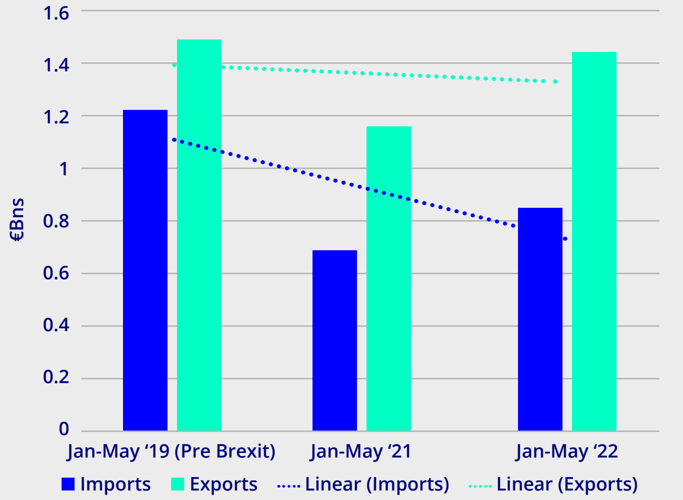
Eoin joined Bank of Ireland in 2020 as Head of Agri, from the Irish Farmers Journal, where he served as Agribusiness Editor upon joining the paper in 2014 and served as Deputy Editor from 2017 until his departure. He also has extensive experience in Irish and international Agri business, including 5 years as Managing Director of Target Fertilisers. Eoin holds a Masters in Agricultural Science from UCD along with MBA from Smurfit School of Business.

Food and Drink Review and Outlook

Summary

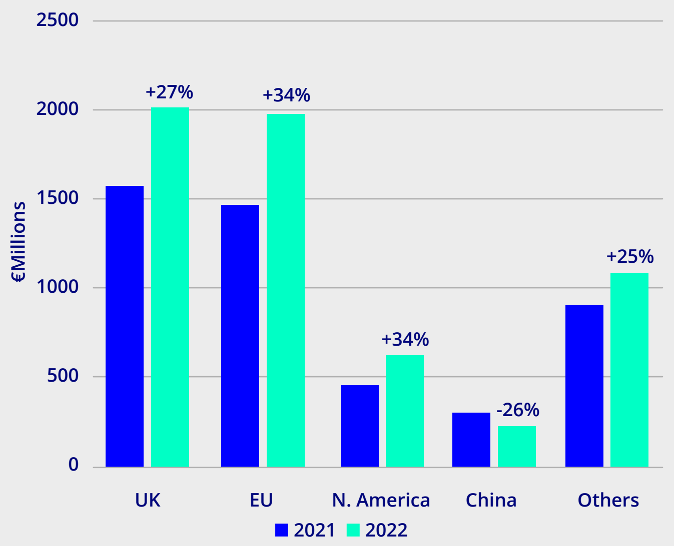
Despite the challenges of inflation, sentiment remains positive in the sector[1]. Volumes in the processing sector continue to grow[2] on the back of a strong export performance and Brexit related import substitution. Input increases from 2021 have been substantially recovered, which has resulted in food inflation hitting 6.7%[3] in June 2022 compared to the previous year. Businesses continue to focus on cost recovery, with further price increases likely to be implemented towards the end of this year, as the impact of commodity and energy price increases, resulting from the war in Ukraine, make their way to bills of materials. From a transaction perspective, businesses are looking to increase capacity – both in terms of production and storage – in order to meet growing opportunities.

Figure 1: Trade Balance between Ireland and Great Britain has shifted post Brexit Ireland to GB Food Exports and Imports Pre and Post Brexit (January to May)



Source: CSO

Figure 2: Food and Drink Exports 2022 vs 2021 (January to May)

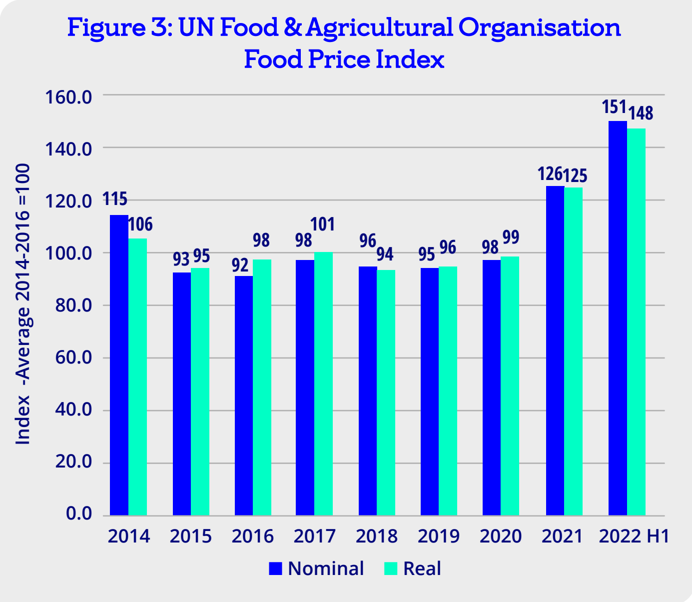


Source: CSO

Irish Food & Drink Export Sales by Sector

Jan – May	2022 €Ms	Diff to 2021 (€Ms)	% Ch	% of total
Beef & offal	1,085	259	31%	17%
Sheep & offal	191	43	29%	3%
Pig Meat	214	-17	-7%	3%
Poultry & egg	62	22	53%	1%
Other Meats	2	0	33%	0%
Total Meat (excludes value added)	**1,554**	**307**	**25%**	**25%**
Dairy	2,353	622	36%	38%
Drinks (alcoholic)	746	163	28%	12%
Horticulture & Cereals	101	-16	-14%	2%
Seafood	253	-1	-1%	4%
Prepared consumer foods	1,198	199	20%	19%
Total	**6,206**	**1,273**	**26%**	**100%**

[1] 85% of those surveyed in Love Irish Food industry survey in May 2022 were optimistic for their firms prospects.
[2] CSO Volume of production for Industrial Sectors - March-May 2022 Food.
[3] Source CSO.



Key Sector Trends H1 2022

Export Growth: Irish Food and Drink exports have rebounded strongly in 2022 with January to May figures showing growth of 26%[4] compared to the same period in '21. Growth in exports to the EU has been one of the strongest drivers of overall performance, some of which may be due to Brexit related substitution on the continent. North American exports performed well – largely driven by the continued growth of Irish Whiskey – but also by a significant increase in infant formula exports, caused by supply issues with domestic producers. Exports to China continued to fall, impacted primarily by the reduction in demand for Pigmeat as local production ramped up in the aftermath of the swine flu outbreak. From an overall sector basis, dairy continues to be the main driver of growth.

Brexit Related Import Substitution: The balance of trade of food and drink between Ireland and Britain has changed significantly. Pre Brexit, in 2019, over Jan to May, food and drink imports from Great Britain were at a level that was approximately 82% of exports, however post Brexit in both 2021 and 2022 it had dropped to under 60% - see Figure 1. The pre Brexit figures represented reflected the immense variety of food and drink products that arrived on Irish shores from consolidated warehouses in Great Britain, reflecting the ways in which large multinationals tended to treat the UK and Ireland as one entity for distribution purposes. Ireland was and continues to be the largest export destination for UK food and drink[5]. While imports from Great Britain have increased from the low point of 2020, when British companies struggled to adjust to the new customs formalities, the balance of trade has changed significantly and appears now to be embedded. This has created new opportunities for local producers to substitute products previously coming from Great Britain.

Inflation Management: Input cost inflation was already significant in 2021, before the invasion of Ukraine. In 2021, the Food and Agricultural Organisation (FAO) basket of commodities was 28% ahead of the previous year and there were also significant input increases related to energy, both in terms of direct energy supply and indirect effects on packaging. Producers struggled to recoup all of the input cost with some price increases delayed to early 2022 and this had a knock on effect on consumer food inflation in 2022. CSO Food and Non-Alcoholic Beverages showed an inflation level of 6.7% in June 2022. We are yet to see consumer price inflation reflect the substantial input costs that are anticipated in 2022. Looking to the FAO price index as a benchmark, while showing some fall back since April, the basket of commodity prices tracked remains 18% ahead of 2021 in real terms and energy increases also have to be taken into account. In the UK, the Institute for Grocery Distribution forecast UK food price inflation of up to 15% before the end of 2022[6].

The ongoing negotiation on prices between suppliers and retailers continues to be challenging. In the UK, the most recent report by the Groceries Code Adjudicator (GCA) highlighted the strain on supplier retailer relations[7]. A quarter (26%) of suppliers said they had experienced a refusal by a retailer to consider a request for a cost price increase (CPI) or an unreasonable delay from the retailer in concluding the request. It is the most raised issue in the GCA's surveys over the last five years.

The focus on cost management resulted in some delays in new product development and innovation as suppliers concentrated on key sellers and increased efficiencies. Danone[8] recently highlighted that it was looking at consolidating its range of products as a cost cutting response.

Supply Chain Shortages and Delays: Global food supply chains continue to be challenged, particularly as a result of the war in Ukraine and to a lesser extent COVID-19 lockdowns in China. Supply chain volatility has been reflected in higher stock holdings amongst operators as they seek to insulate themselves from delays. This has absorbed additional working capital. From an Irish perspective, pricing and delays, rather than availability have been the primary issues, the exception being sunflower oil, which is increasingly being substituted as an ingredient.

Return to Out of Home Eating: In line with the relaxation of Covid restrictions, Bord Bia project that Food and Drink sales in Foodservice will grow by 58% in 2022, albeit that a significant element of growth will be inflation driven. As consumers return to out of home eating, there has been a reflected drop in retail sales. Kantar suggests that retail sales in grocery have fallen by 6.5% in the 12 weeks to May '22, however given the previously mentioned impact of inflation the volume drop is likely to be in double digit figures. For suppliers, anticipating these changes has been challenging, particularly given the current commodity volatility and supply chain delays.

Climate Change Impacts and Response: The agrifood industry continues to be at the forefront of both climate related impacts and responses. The impact of climate change on commodity volatility continued. For example, increased wheat plantation in India, was hoped to alleviate some of the shortages caused by the war in Ukraine, however the heatwave in May 2022 resulted in decreases in yield of between 10% to 35% in key wheat growing areas[9]. From a global marine perspective, as seas warm, salmon farming production in some areas has been challenged[10]. In Italy up to one third of agricultural production - including olive oil and tomatoes – is at risk due to the recent drought[11]. As we look ahead, regardless of the outcome of the war in Ukraine, it is clear that climate change is going to result in increased commodity volatility and supply chain challenges.

Food producers, have also been at the forefront of response to the challenge. According to the Love Irish Food PWC SME Barometer over 70% of respondents have or are working towards a net zero commitment. Key sustainability investments reported are in the areas of energy consumption (78%), packaging and plastics reduction (68%) and water usage (50%).

[4] Source: Bord Bia Performance and Trade Prospects
[5] Exports Q1 2022 | The Food & Drink Federation (fdf.org.uk)
[6] Food inflation likely to reach 15% this summer (igd.com)
[7] Inflationary pressures strain relationships between retailers and suppliers - GOV.UK (www.gov.uk)
[8] French food company Danone reduces product range to cut costs (irishexaminer.com)
[9] Heatwave takes a toll on north India's wheat yield (mongabay.com)
[10] NZ King Salmon to close farms due to rising sea temperatures | RNZ News
[11] Italian Drought Puts One-Third Of National Agriculture Production – Like Tomatoes And Olive Oil – At Risk (forbes.com)

Key Sector Activity H1 2022[12]

Appetite for investment in the industry was strong in 2022.

CapEx driven development drove investment as operators increased capacity to take advantage of Brexit related import substitution and expanding global markets. Due to the tightness of the labour market, automation was a key feature of developments. The need to retain and attract workers was also reflected in the growing trend of operators becoming "accidental landlords" in a bid to provide accommodation for key workers. There was also an increased use of stocking loans as operators sought to build resilience in their supply chains and sought to manage the volatility of commodity prices.

Private equity and venture capital funds continued to be active in the sector in the first half of 2022. Domestically, the Redesdale fund, focused on early stage food and drink companies, closed two investments, in Soothing Solutions and Thanks Plants[13]. Melior Equity Partners, also announced investment in the long established Irish SME Rose Confectionery.

On an international level, Kerry continued a very targeted acquisition run focused on precision fermentation and functional ingredients with the purchase of Enmex and c-Lecta.

2022 H2 Outlook

Ongoing Inflation: We are likely to see further price increases relating to the war in Ukraine pass through to consumer baskets towards the back end of the year. Futures prices of key commodities, remain elevated, albeit at a lower level than peaks earlier in the year. Energy prices continue to rise and the rise in gas prices, in particular, will affect the costs of food production. The effect of inflation on consumer behaviour in food purchase and consumption is still evolving. In foodservice, menus are already being reworked to address price rises[14]. In UK grocery, consumers are moving towards cheaper protein sources[15]. In Ireland, there are some indications of a move towards private label in grocery[16].

Energy Uncertainty: Industry across Europe has been asked to make contingency plans for energy shortages. In the event of any limitation in supply, food and drink production would be prioritised, however, the likelihood of increased energy costs in this scenario would put further strain on operators and result in additional price increases to consumers. Recent news that the government is exploring a state aid scheme for companies with high energy usage will be particularly welcomed by the sector[17]. While renewable energy investments have been primarily focused on the corporate sector to date, particularly those enterprises subject to the EU Carbon Trading scheme, increasingly SMEs are looking to improve their energy costs through the use of renewables.

Climate Change Response: As the government looks to finalise carbon budgets, it is becoming more likely that producers of dairy and meat in Ireland, will be asked to do more with flat volumes, as the era of primary production growth ceases. Operators in these sectors will be increasingly focused on waste recovery, automation, energy efficiency and added value production as they look to maximise profit with a static or reducing supply of raw material. However, new opportunities in plant-based eating are being unlocked in areas from vertical farming, to mushrooms and alternative proteins. Increased focus by the government on food and packaging waste reuse will also create opportunities in the circular economy.

Bank of Ireland

Bank of Ireland is committed to its role as a key partner for Ireland's largest indigenous industry. This is amply demonstrated by our ongoing support of the Blas Na hEireann food quality awards and our deep sectoral knowledge. COVID-19 has highlighted the necessity for companies to have an in market, long term, stable, finance partner that can offer timely support, dedicated relationship managers and an understanding of the cyclical nature of the various sub-sectors.

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Roisin joined Bank of Ireland in 2019 as Head of the Food & Drink Sector, in order to support the Bank's business in this strong, indigenous industry. She brings an in depth understanding of the Food & Drink sector to the role due to her wealth of experience in both Ireland and the UK, across a number of companies and product categories. She has held senior commercial positions in both indigenous and multinational consumer goods companies including PepsiCo, Valeo Foods, Carbery, Boyne Valley and Robert Roberts Ltd. Her knowledge base spans end to end product development, from procurement and new product development, to branding, marketing and sales achievement. Roisin holds an undergraduate Law Degree from UCC, an MBA from Warwick Business School and Post Graduate qualifications in Digital Business and Digital Marketing.

[12] Kerry Group expands its biotechnology capabilities (rte.ie)
[13] www.Redesdalefoodfund.ie
[14] Why crab claws and fillet steaks are coming off the menu in Irish restaurants - Independent.ie
[15] https://www.thegrocer.co.uk/meat/shoppers-swapping-other-meat-and-fish-for-chicken-as-cost-of-living-bites/669434.article
[16] https://www.kantar.com/uki/inspiration/fmcg/2022-wp-irish-shoppers-face-potential-increase-of-453-euros-to-annual-grocery-bills
[17] Heavy energy users in line for State support this winter – The Irish Times

Hotels 2022 H1 Insights and 2022 Outlook

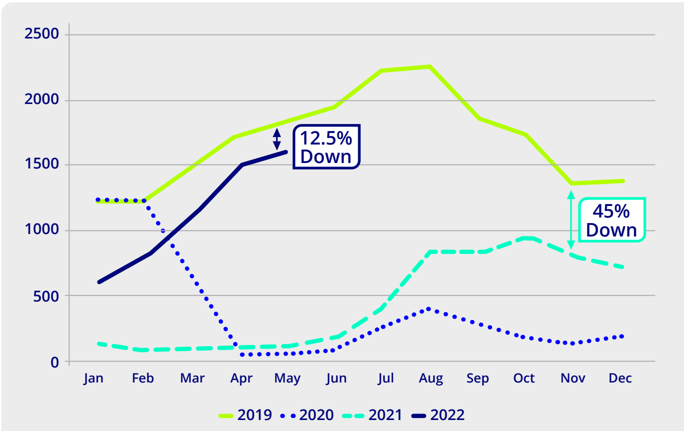
2022 H1 Insights

The Irish hotel sector and wider accommodation services (aparthotels, self-catering, guest houses, etc.), delivered a much stronger than anticipated performance during the first half of 2022. Domestic demand continues to play a key role in the recovery of Irish hotels, while international visitor numbers continue to grow; Ireland welcomed 1.6 million passengers during the month of May 2022, compared with 1.8 million arrivals pre-pandemic (May 2019)[1]. On average, hotel properties both in Dublin and the regions are reporting sharp demand, combined with record average room rates. Food and drink sales trends are also encouraging, but lack the buoyancy of room sales, perhaps because of the inflationary price adjustments reported by the majority of operators. Staff shortages remain an issue of concern for many operators particularly during peak summer trade of July and August. Overall, the strong performance to date has supported positive business sentiment despite prevailing socio-political uncertainty.

Hotel sector key activity and trends H1 2022

- **Staffing.** Prevailing staff shortages continue to impact hotel operations. The heightened summer demand, combined with recurring COVID-19 cases, will continue to present operational challenges to hotels, bars and restaurants in the short to medium term.
- **Airlines disruption.** Recent air travel disruption reported in In Ireland and across the globe could impact the recovery of air capacity/ air travel. So far this year, British Airways has cut down 13% of its summer schedule (30k flights)[2]
- **Domestic demand.** The sustained decline in unemployment levels in Ireland continues to fuel and support discretionary spend by the domestic market. The seasonally adjusted unemployment rate for June 2022 was 4.8%, up from a rate of 4.7% in May 2022 and down from 6.3% in June 2021.
- **Overseas travel showing encouraging recovery.** May 2022 arrivals were up by 8% vs. April 2022. Year to date arrival figures (January-May 2022) rose to 5.5 million compared with 7.4 million for the same period in 2019, down 25%. Visitors from Great Britain (GB) accounted for 36% of arrivals (2m) in the five months to the end of May 2022 *(Table 1)*
- **Strong average room rates reported by Irish hotels.** Over the last couple of months Irish hotels have been accused of price-gouging by numerous stakeholders who believe rates charged to customers are excessive. However, it is important to understand there are a number of factors driving the average room rate increase that has taken place between 2019 and 2022, including:
  - Increase of 17K beds in the 4 and 5 star segment / Decrease of 6.5k beds in the 1, 2 and 3 star beds. *(Table 2)*
  - Hospitality VAT Rate decreasing from 13.5% in 2019 to 9% in place for 2022
  - Shorter lead in times (fewer people booking holidays well ahead of time)
  - Capacity constraints. A sizeable amount of bedroom stock is out of circulation (Direct provision, refurbishments, staff housing, etc.)
- **Inflation.** Increases in the cost of linen, food, drink and other essentials to the sector as well a rising energy prices are keeping profit margins at bay for the hotel and wider food and drink sectors.

Table 1. Overseas visitor numbers 2019 to 2022 trend



Source: SCO Stats

Table 2. ROI, Registered Hotel accommodation supply – recent changes

	2019			2022			Variance 2022 vs 2019		
	Hotels	Rooms	Beds	Hotels	Rooms	Beds	Hotels	Rooms	Beds
5 Star	37	4,360	9,907	37	4,548	10,256	0%	4%	4%
4 Star	331	33,689	82,059	361	37,767	92,504	9%	12%	13%
3 Star	325	19,413	49,635	289	16,424	41,485	-11%	-15%	-16%
2 Star	90	1,899	4,350	79	1,721	3,905	-12%	-9%	-10%
1 Star	40	791	1,932	65	2,368	5,475	63%	199%	183%
Total	823	60,152	147,883	831	62,828	153,625	1%	4%	4%

Source: Fáilte Ireland

[1] CSO, Air and Sea Travel statistics May 2022
[2] BA to cut another 10,300 flights escalating airline disruption | Financial Times (ft.com)

Hotel sector key performance metrics H1 2022

- **Galway city.** January to June 2022 (H1) RevPAR of €88 is 19% ahead of the comparable period in 2019. Occupancy only marginally behind for the period while average rate was up 23%
- **Limerick city.** Stellar performance with occupancy at 90% and an equally strong rate of €114 reported for June 2022. Year to date 2022 (Jan to June) figures show a RevPAR of €74 compared to €58 delivered for the comparable period in 2019 (28% higher)
- **Cork city.** The Cork capital reported a €40 average rate increase for the month of June 2022 compared to 2019. Jan to June 2022 (H1) RevPAR of over €90 is well ahead of 2019 figure for the same period.
- **Dublin.** Strong performance to date for the Dublin region although city centre is still marginally behind 2019 figures with occupancy to date still 14% behind same period in 2019.

Transaction activity & new hotel openings

- Hotel property transaction activity was strong in the first half of this year. Properties that exchanged hands included Ballymascanlon House Hotel in Louth[3] sold for €15m, Killashee Hotel in Kildare[4] for €25m, Hendrick Hotel in Dublin[5] for €35m, The Bush Hotel in Leitrim (undisclosed sum) and Dunboy Castle in Cork (undisclosed sum).
- H1 2022 Hotel openings:
  - JMK Hotels – Hampton by Hilton, 3 star 249 bedroom hotel in Chancery Street Dublin 7.
  - Dalata hotels – The Samuel, 4 star 204 bedroom hotel in Dublin 1.
- Irish group Staycity recently opened its sixth property in France (216 studio and one bed apartments in Paris, La Defénse) The group operates 30 properties across 14 European destinations, with recent openings in Manchester, Frankfurt and Dublin[6].

The majority of schemes and grants implemented to support businesses during the pandemic have now been removed. However, a number of schemes, grants and supports remain in place from a number of government bodies (not all COVID-19 related):

- Irish businesses that availed of tax warehousing from Revenue have a further period of grace before the accumulated liabilities start to be repaid (Q1 2023).
- The Minister for Finance announced the extension of the 9% Value Added Tax (VAT) rate for the tourism and hospitality industry. The lower rate of Hospitality VAT will remain for these sectors until 28 February 2023[7].
- Failte Ireland
  - Gala Dinner Venues Capital Investment Scheme 2022
  - Destination Supports for International Business Events
- Strategic Banking Corporation of Ireland (SBCI).
  - Energy Efficiency Loan Scheme; A low-cost scheme designed to support eligible SMEs, investing in the energy efficiency of their enterprises.
  - COVID-19 Loan Scheme; A medium-term, lower cost scheme to fund working capital and investments for businesses, impacted by COVID-19.
- Sustainable Energy Authority of Ireland
  - Excellence in Energy Efficiency Design (EXEED) grant, Energy Efficiency Obligation Scheme, Accelerated Capital Allowance, Support Scheme for Renewable Heat, Energy Audits & Contracting.

Bank of Ireland lending activity

Heightened funding activity in the hospitality sector derived from refinances, equity releases to take out investors and acquisitions. Cash deposit balances, which continued to grow in the first half of 2022, continue to impact on the hotel sector demand for working capital facilities. Uncertainty about interest rates over the last quarter has led to a decisive increase in customers seeking to fix their interest rates.

Government Supports & Schemes

Table 3. Accommodation sales KPIS

Accommodation KPIs 2019-2021	YTD Jun 2022												YTD RevPAR Variance 2022 vs	
	Occupancy %				Average Rate €				RevPAR €					
Location	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021	2022	2019	2021
Dublin All (STR)	81	40	20	72	137	111	87	158	112	45	17	114	2%	553%
Dublin city centre (STR)	82	39	13	68	162	132	107	183	133	52	13	125	-6%	827%
Galway (Trending)	71	38	35	69	104	86	102	128	74	33	36	88	19%	147%
Cork (Trending)	76	53	31	66	102	96	109	137	78	50	34	91	17%	165%
Cork (STR)	75	37	29	66	108	97	101	144	81	36	29	94	16%	228%
Limerick (Trending)	69	45	19	72	84	76	74	103	58	34	14	74	28%	413%
Kilkenny (STR)			21	62			131	158			27	98		258%
Regional (Trending)	73	49	32	69	95	79	90	119	69	38	29	83	19%	183%

(Source: STR & Trending.ie)

[3] Irish Times
[4] Irish Independent
[5] The Times UK
[6] Business Traveller
[7] Gov.ie

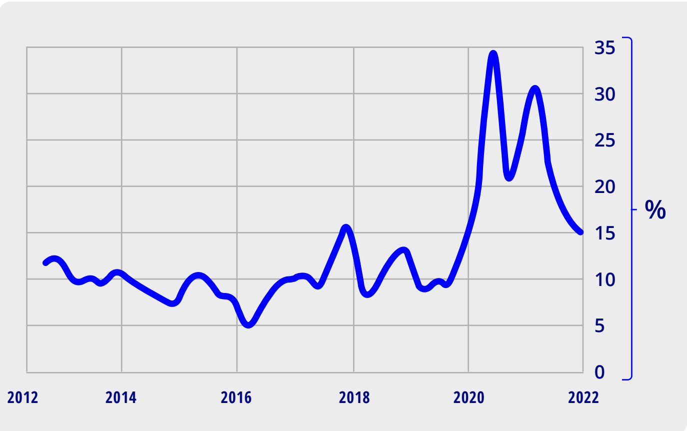
2022 H2 Outlook

Notwithstanding strong trade reported by the hotel sector for H1, there is a degree of uncertainty about the second half of the year. The aggregate impact of the war in Ukraine, inflation, and the threat of recession is somewhat dampening optimism. The positive employment trends give some level of confidence as to the sustainability of discretionary spend, which to date has been bolstered by pandemic savings *(table 4)*[8]. As we look to the future, hotel properties are seeking to maintain the gains made in average room rates over the last year; these increases will be essential to counteract the impact of inflation and the impending higher rate of VAT. An increasing number of hoteliers are planning investment/upgrades to their premises to improve on energy efficiency and enhance their green credentials; soaring utility prices have considerably shortened the payback period of some of the more investment-heavy solutions like Photo Voltaic (PV).

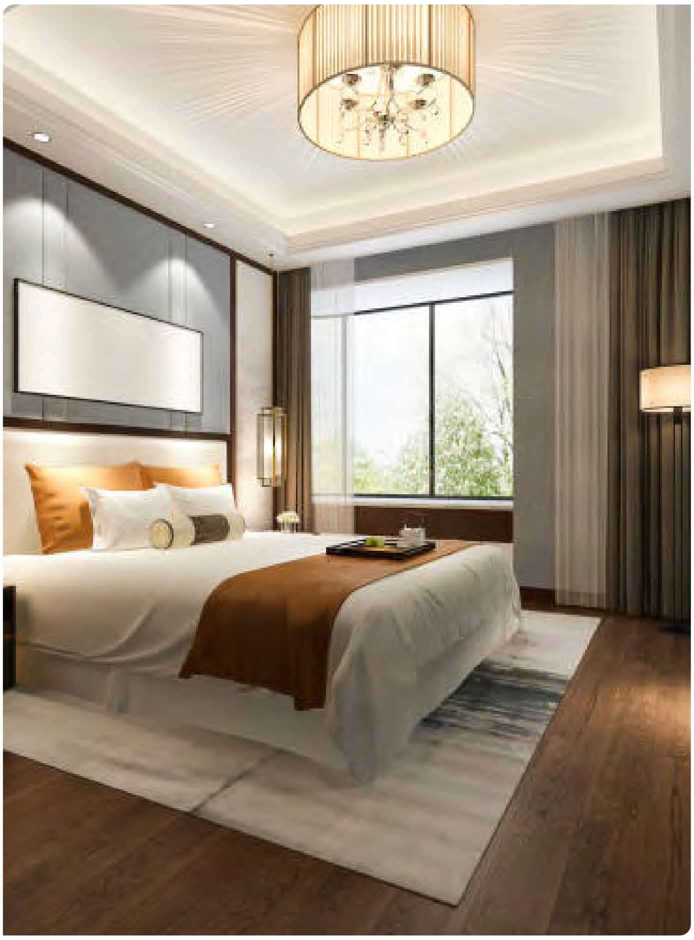
Trends

- Hotels, bars and restaurants located in through traffic areas that might have benefited from commuter trade are still experiencing soft demand for food and beverage services. A large number of companies have already announced plans to bring staff back into the office but numbers remain comparatively low.
- Consumer post-pandemic optimism eroded by inflation-driven caution. Recent Bank of Ireland debit and credit card data spend (June 2022) showed a decline/slowdown in spending across all sectors[9].
- Some businesses have expressed concern about meeting demand expectations during peak summer trade due to ongoing staff shortages combined with a surge of COVID-19 infections.
- The hotel sector has so far been able to pass on cost increases to customers, however softening consumer confidence could hinder further price increases in the near future.
- Escalating numbers of tour/groups business and the gradual increase in booking lead-in times are likely to erode some of the strong average room rates reported to date.
- A number of businesses that availed of the warehousing of tax obligations during the pandemic are already negotiating the repayment of their obligations and incorporating this into their 2023 cash flows.

Table 4. Irish household saving as a percentage of gross disposable income



Source: Trading economics, CSO.ie



Hotel development

The encouraging pickup in demand for hotel accommodation in Ireland this year, has highlighted capacity issues primarily in the Dublin region. A sizeable amount of hotel bedroom inventory is currently out of circulation, mainly because of alternative uses such as direct provision; the reduced supply has sparked the debate about the need for additional accommodation. However, the recovery of average hotel rates and occupancy that ensued, could ultimately fast track the development plans of a number of projects that make up the current 17k hotel bedroom development pipeline for Dublin city.

[8] Trending economics
[9] Business Post

Consumer Confidence

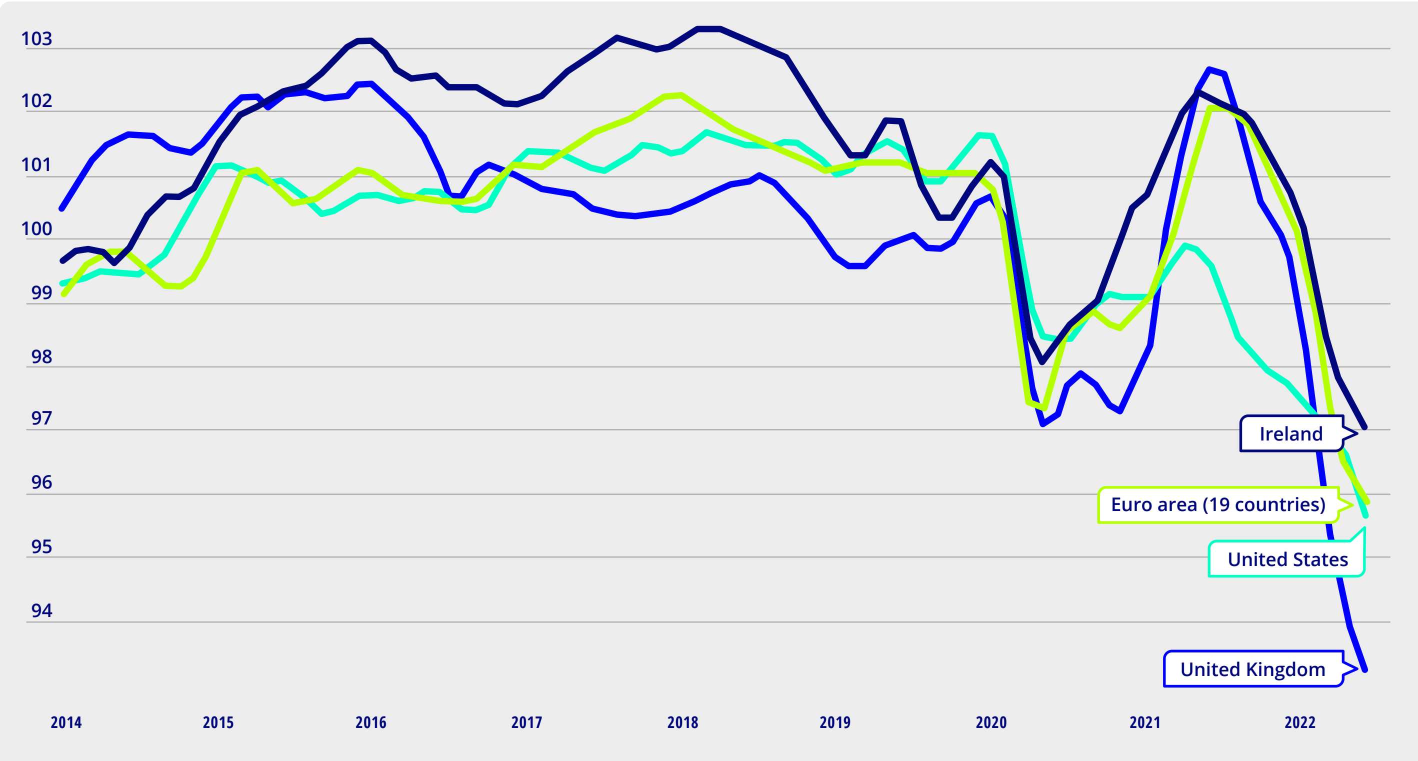
As we move away from the pandemic, the varying government approaches are having an impact on consumer confidence and this could have repercussions on the speed of recovery for each individual market. The consumer confidence index from the Organisation of Economic Co-operation and Development (OECD) shows our top three markets are behind Ireland when it comes to consumer confidence, and thus their return could follow slightly different paths (*Table 5*).

The Ukraine war is also impacting on travel plans; a recent US travel survey 62% of respondents cited concerns about the war in Ukraine spreading to nearby countries as a factor impacting plans to travel to Europe this year[10].

Bank of Ireland

Bank of Ireland is a keen supporter of the Irish Hotel Industry as a pillar of the economy. Our proven appetite, combined with our comprehensive sectoral expertise provides us with a strong platform to meet the funding requirements of both hotel operators and Investors.

Table 5. Consumer confidence Index June 2022



Source: OECD

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[10] Forbes

Manufacturing 2022 H1 Insights and 2022 Outlook

2022 – H1 Lookback – An optimistic start turns to unpredictable volatility as the clouds of an economic slowdown darken.

Irish Manufacturing enjoyed a boom 2021 despite all the headwinds induced by Covid-19, Brexit, Supply Chain Pain, Transport disruptions and labour shortages. GDP for 2021 came in at 13.5% driven by export growth and all the signs were that we could look forward to bright 2022. As 2022 started, we had good reasons to be cheerful with:

- Strong order books
- Supply chain constraints starting to ease.
- Covid cases starting to recede
- Container prices were dropping,
- Inflation forecasts were (as it turns out incorrectly) forecasted to be "transitory" and less than 5%
- Business confidence surveys (PWC) predicted a stronger economy in 2022 with only 15% forecasting weaker
- More bandwidth to focus on Digital and ESG agendas.

Then two shocks up ended all of the above "temporary stability".

Russia invaded Ukraine and triggered a brutal and unconscionable conflict with enormous humanitarian consequences. Secondly, large cities across China went into lockdown and essentially closed down businesses to the rest of the world.

Optimism has turned to the new norm of unpredictable volatility with new era of:

- High Inflation
- Supply chain impacted by commodity shortages from Russia and Ukraine
- Rising interest rates
- Reduced and more expensive transport routes as Russia and Ukraine are no fly zones
- The risks exposed of doing business with autocracies
- Fuel inflation, shortages and fear of rationing
- First signs of drop in demand for manufacturing as consumers shift to service spend, risk adversity increases, and business confidence drops against the prospects of a deeper economic downturn
- Purchase Managers' Index (PMI) data is trending downwards for Ireland, EU, UK and US.

Notwithstanding the gloomy narrative above, Ireland will deliver +6% GDP this year, driven by manufacturing exports. Employment and opportunities remain strong in the sector. Furthermore with Covid somewhat in the rear view mirror, I have had the privilege of visiting many of our clients as well as attending in person two manufacturing events. Despite the headwinds, the mood music is upbeat, Irish Manufacturing is resourceful and in my view many SMEs will benefit from MNCs continuing to de-risk and reconfigure their supply chains to something more resilient.

Summary of Key Trends

- **COVID-19 Pandemic:** While COVID-19 has gone to the rear view mirror. Manufacturing will continue to double down on employee safety and wellbeing. Mindful of new variants and current rise in cases, antigen testing, workplace cleanliness will continue to minimise absenteeism and protect operations. Hybrid working models will become a permanent feature for non-shop floor employees.
- **Brexit:** Depending on the level of UK exposure, businesses have been impacted to different degrees. There is of late little negativity from Irish Manufacturing specifically in connection with Brexit. Many have benefited from new EU customers, technology transfers and unexpected higher sales volumes with the UK. The latter stems from former EU suppliers' unwillingness to endure the paperwork burden and so Irish SMEs have been the beneficiaries. CSO data continues to underline the increase in cross border trade with Northern Ireland (NI) and shows trade up YOY (Exports + 29%) with the UK. Logistics and transportation have irreversibly changed. Direct routes to EU are up from 30 to 77. Manufacturers have simply prioritised these direct and secure routes to and from EU over pre Brexit lower cost and faster land bridge alternatives.
- **Russia Ukraine Conflict:** Russia/Ukraine conflict has highlighted risks of:
  - Key commodity bottlenecks – concentration risk
  - Risk of trading with autocracies – 109K EU firms have tier 3 suppliers in Russia/Ukraine.
  - Accelerated the need for Strategic Autonomy e.g. chip manufacturing expansion plans in US and EU
- **Factory Operations:** With the headwinds of Covid and labour shortages, Manufacturing has proven time and time again to be agile and creative in its response. There has been an acceleration of the digital agenda and higher levels of automation.
- **Unpredictable volatility** has become the new normal
- **Supply Chain Resilience** is top priority for manufacturing to maintain business continuity and protect reputation. Russia/Ukraine conflict has exacerbated this headwind
- **Irish Manufacturing have shown remarkable resourcefulness and responded with:**
  - Flexibility, Just in Case, Agility now trumps efficiency and Just in Time models
  - Stock building as insurance policy and bearing the costs of higher working capital
  - Technology transfer and greater vertical integration
  - Reconfigure supply chain footprint with dual and alternative supply sources
  - Data Mapping supply tiers 2&3 using "digital twins" to model supply risk scenarios.
  - Irish SMEs benefitting from MNC supply chain de-risking strategies
  - Increased online presence as fulfilment channel
- **Supply Chain Disruption Costs are high.** €135m or 1.7% of revenue for 300 IE/UK companies according to a 1500 Global sample surveyed. (Source Interos)
- **Inflation will remain elevated.**
  - SMEs are passing on costs but not without pushback
  - Given longer lead times, higher price tags, lower spending capacity, consumers are delaying purchases or switching to service offerings e.g. holidays and leisure.

- **2022 Irish GDP** of which Manufacturing contributes 35% remains upbeat at forecast of >+6%.
  - Enterprise Ireland companies exports up 12% in 2021
  - IDA investments are 9% up YOY H1 2022. Job approvals 2022 up YOY 44%
- **PMI data** latest June trends indicates slowdown in orders and production output as risk adversity, tighter spending, interest rates hikes and lower business confidence all serve to amplify fears of an economic downturn
- **Labour market shortages.** Addressed with increased levels of automation and in-house employee networks.
- **ESG and Digital agendas are gaining more traction.** Driven by a combination of digital transformation, supply chain reconfiguration, ESG metrics, regulatory compliance and higher fuel costs improving payback periods for electrification and renewable sources.

Key Metrics for Irish Manufacturing Sector

Both PMI and Pulse data show a similar pattern of slower expansion activity for manufacturing in H1 2022. A strong start in January was followed by downward trend with the Russia/Ukraine invasion and a strict lockdown regime in China. As per Table 2 below all major economies hit PMI lows in June 2022 not seen for nearly 2 years, with the EU as a whole going into output contraction mode at 49.3 just below the 50 threshold.

Table 1. Manufacturing Activity

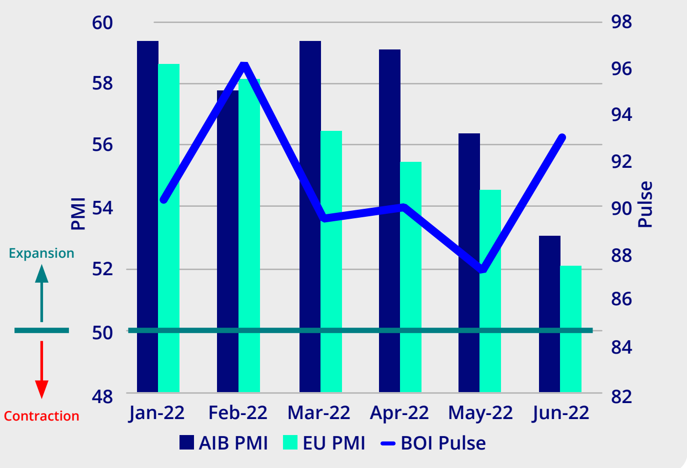


Table 2. Countries Ranked by PMI June 2022

EU	52.1	**22 Mth. Low & Output Index at 49.3**
NL	55.9	19 Mth. Low
IE	53.1	16 Mth. Low
ES	90	17 Mth. Low
DE	52	23 Mth. Low
FR	51.4	18 Mth. Low
US	52.7	24 Mth. Low
UK	52.8	24 Mth. Low

Source : PMI.SPGlobal

Bank of Ireland Economic Pulse

BOI Industry Pulse, a survey of 300 companies measured a strong 93 in June 2022 in contrast to a more pessimistic PMI outlook. This possibly reflects the profile of companies surveyed but nonetheless 60% confirmed a challenging and uncertain outlook.

Irish Manufacturing Purchase Managers' Index PMI

PMI is a survey of 250 manufacturing companies and a result greater than 50 represents expansion. Irelands PMI has declined from 59.4 in January 2022 to a 16 month low of 53.1 in June. This low is attributed to the first decline in orders and output since early 2021. In particular a steep fall in export orders was noted which mirrors the sharp decline in EU and our peer countries manufacturing activity. Surging inflation and in particular for energy shows no signs of decline in the medium term with clouds of energy security rising as we face into the heating season. On a positive side, employment remains strong and sentiment relatively upbeat.

Industrial Output, Turnover and Imports and Exports

As per Table 3 Industry output and turnover shows a mixed picture. Turnover YOY growth is 14.4% reflecting strong output value. However production output is down YOY by 14.3% reflecting supply chain bottlenecks.

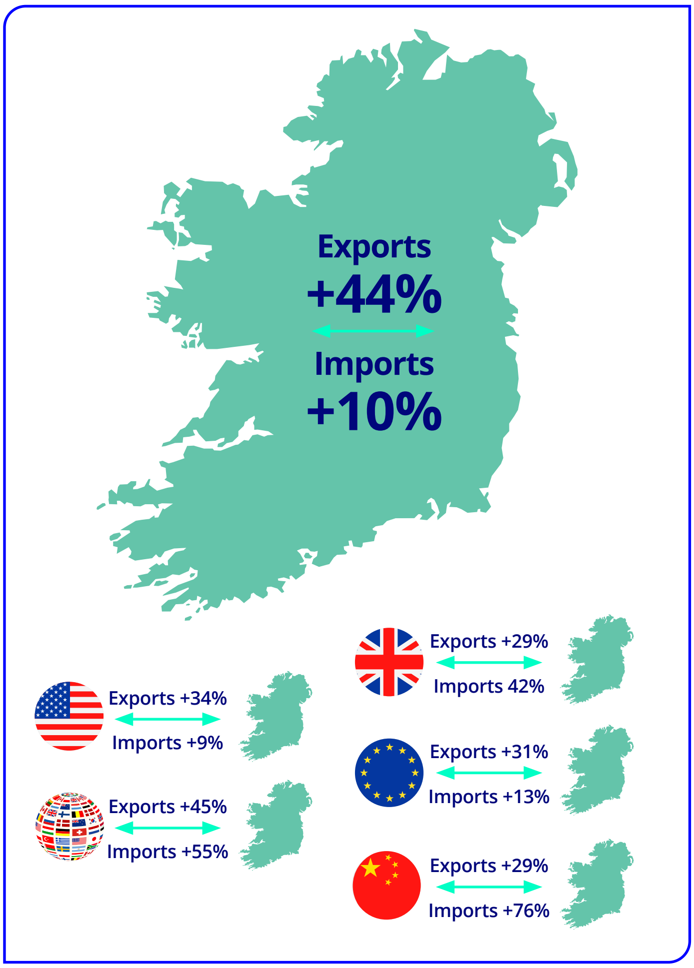
Table 3

	Mar-May 2022
Manufacturing, Production & Turnover	**Annual % change**
Production	-14.3%
Modern	-17.9%
Traditional	11.5%
Turnover	14.4%

Source: CSO

Imports and exports performance are summarised in graphic (Table 4) for period Jan – May 2022. In totality imports were up YOY by 26% while exports are up by 34%. Manufacturing trade imports and exports were significantly up across all trading geographies including UK suggesting business adaption to the burden of Brexit. The comparison period and improvement also reflects the Covid journey from restrictions to business able to open up from start of 2022. Inflation will also have impacted with higher prices driving higher revenues. The export figures underline the strong GDP forecasts and it will be interesting to see how the slowdown in H2 will impact the full year result. At current export run rates the full year exports will be significantly in excess of €148BN recorded in 2021.

Table 4



Source: CSO

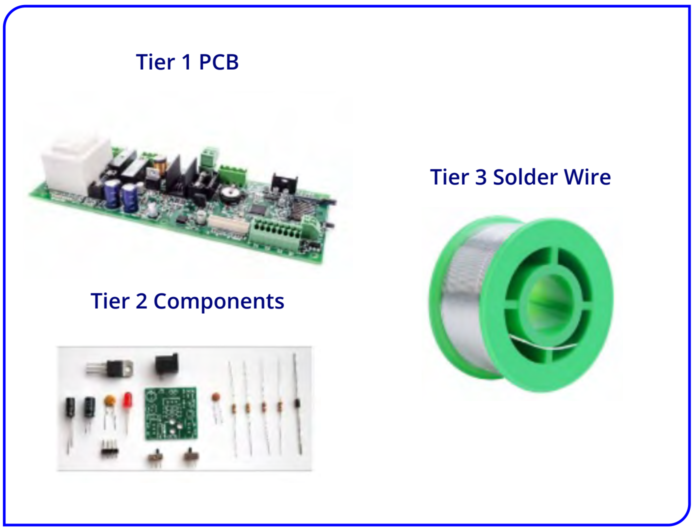
Headwinds of Supply Chain Shortages and Input Price Inflation with spikes in Energy

Supply Chain

Manufacturing continues to be heavily impacted by supply chain shortages. It is the reality of doing business and managing supply chain resilience remains a top priority and strategic imperative. The Russia/Ukraine conflict has brought into sharp focus the necessity to go beyond tier one suppliers and dive into the deeper supply chain. Table 5 right illustrates how one commodity deeper in the supply chain can wreak havoc and disrupt deliveries.

- Multiple and continuous shocks (COVID, Lockdowns, Demand peaks, Transport Disruptions, Geopolitics) means it is no longer enough to just manage tier 1 supply chains
- A deeper dive and analysis of lower tiers is necessary to profile and mitigate risks.
- It's not just about the
  - **Printed Circuit Board** but also its individual components
  - **Silicon Chips** but the neon gas needed for etching
  - **Packaging** but also the paper required
- 8200 EU firms have tier 2 suppliers in Ukraine
- 190000 EU firms have tier 3 suppliers in Russia or Ukraine

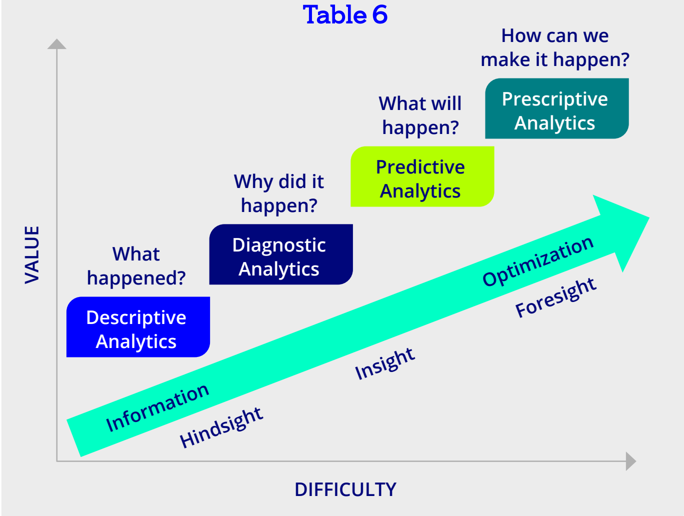
Table 5: PCB Assembly



The "Best in Class" solution is lies in data and digitalisation. Creating A **Digital Supply Chain Twin** which is a detailed simulation of an actual supply chain in a virtual environment using real-time data to forecast a supply chains behaviours, address risks and take appropriate actions.

The more sophisticated this model becomes, and it takes time and many iterations, the better enterprises can predict, manage and mitigate risks as per Table 6. As the data quality improves, data analytic tools allow model creation scenarios from a **Hindsight** perspective to a **Foresight** one.

Table 6



Source: Gartner

Manufacturing Input Price Inflation

Surging inflation and cost of living crisis are the major headwinds of 2022. Many commentators forecasted a "transient" nature which would correct itself as supply and demand reached equilibrium. While energy spikes caused by the conflict make up about half of the overall rate of June inflation figure of 9.1%, many of the other inputs remain elevated. Table 7 below summarises the YOY changes for some key inputs. How is this playing out in manufacturing? Well consumers are switching to services rather than making big purchases. There is also a pent up demand for leisure and holidays after Covid lockdowns and this has manifested itself in busy airports and accompanying chaos. The medium term impact is higher risk adversity as business and consumers will delay spending to see how inflation drivers in particular energy play out.

Table 7

Input/Commodity	YOY Increase (7/7/2022	Comment
Oil	36%	Drop from $120 but elevated at $98
Gas (TTF) EU Index	438%	6x higher than 2021
Steel	-15%	Dropping but +20% per Covid
Aluminium	-2%	Drop but +60% pre Covid
Lithium	+434%	EVs and battery demand
Titanium	+93%	China & Ukraine Medical Devices
Shipping Costs (Balti)	-37%	-25% from peak but 5x pre Covid

Source: Tradingeconomics

Funding Activity in the Sector

- Bank of Ireland Business Banking H1 2022 drawdowns are up YOY reflecting positive activity.
- Activity was strong across both traditional sectors (Metal fabrication, timber) and modern sectors (Pharma, Medical Devices, ICT).
- Funding supported increased working capital needs, M&A and MBO activity and capex requirements to accelerate growth on back of robust market demand.
- Working capital requirements were seen in stocking loans to allow higher component stocking and act as an insurance policy against supply shortages and inflation.
- Deposits are high on back of buoyant activity and this dampens appetite for borrowing.
- Noteworthy deals were completed across Pharma, ICT, Precision Engineering, Circular Economy, Plastics.

Survey Update – Business is more tuned into the importance of risk management

PWCs recent survey of 3584 businesses. Key findings are:

- 81% of Irish respondents predict revenue growth in next 12 months.
- 78% of Irish respondents (65% global) are increasing their spend on risk management with data analytics and process automation being the top spend areas.
- 66% of Irish respondents (75% global) struggle with the speed of digital transformations

In summary the overriding takeaway is that risk management viewed through a panoramic lens must be an integral part of business strategy in this new age where uncertainty is the new normal.

Industrial Property Demand

CBRE in its latest research, reported that Q1 2022 was the strongest first quarter ever recorded in the Dublin industrial & logistics market with more than 96,500m2 of transactions signed in the three-month period and demand having risen quarter-on-quarter to more than 197,350m2. The uncertain inflationary environment is exacerbating the supply demand imbalance. Notwithstanding same new developments have been announced along M50 and elsewhere with buildings with strong ESG credentials in high demand.

Manufacturing H2 2022 Outlook
– Risk adversity, Unpredictability but Continued Growth

Despite the headwinds and clouds of uncertainty around geopolitics and inflation, the outlook for H2 2022 continues to be positive and one of continued moderate growth. Supply chain disruption and the never ending journey to optimise resilience is a strategic imperative. Recent study conducted by the Economist summarised the pillars of supply chain resilience around the opportunities of digital and ESG as follows:

- Regionalize your supply chain
- Switch procurement goals from cost cutting to containing inflation
- Mitigate supply chain financial and operational risk
- Engage suppliers to track and slash scope 3 emissions
- Implement low/no code software with real-time analytics to forecast disruptions

The good news is that Irish Manufacturing SMEs many of whom are key to the success of our MNCs, are active in all of above. There are multiple supports available for both digital transformation (SIRI – Smart Industry Readiness Index survey from Irish Manufacturing research) and Green Initiatives (SBCI Energy efficiency loan scheme)

Tailwinds 2022

- Strong healthy order books and solid output levels all support, albeit lower than 2021, continued growth across manufacturing.
- 2022 GDP outlook ranges from 6% to 8% with EU forecast at 2.7%.
- Irish Manufacturing momentum buoyed by strong EI exports H12022 and IDA FDI up 9% in 2021.
- Irish Manufacturing SMEs should also benefit from MNCs continued de-risking and diversifying of their supply chains.
- The shocks of fuel inflation and shortages will accelerate conversion to greener alternatives.
- Some inflation impacts are being successfully negotiated with customers
- Digitalisation transformation gathers pace as enterprises recognise more and more the value of data to build more resilience into their supply chains.
- Wide range of financial supports available for both digital and green transformation.
- Record spending on research projects with 66% with Irish SMEs with a total of 143 spin out companies employing 1218 people since 2017.

Headwinds 2022

- Latest June PMI data points to a slowdown in growth. EU PMI recorded first contraction in production output in June.
- June trends indicates slowdown in orders and production output as risk adversity, tighter spending, interest rates hikes (expected at 0.5% from ECB on 21.7.22) and lower business confidence all serve to amplify fears of an economic downturn.
- An increasingly toxic mix of surging inflation, unprecedented fuel costs, ongoing supply chain disruptions and interest rate hikes, are all eroding consumer spending power and dampening consumer demand. The term “demand destruction” is replacing very recent high demand in many sectors.
- Bank of America’s latest fund manager’s survey, record that 86% of global investor respondents expect Europe to slump into recession in the next 12 months. This is up sharply from 54% recorded in previous month.
- There is also shift to services spend as consumers are prioritising spends on hospitality and leisure after the COVID lockdowns.
- Supply chain pain is likely to continue through H2 2022 and any easing will be driven by a drop in demand.
- Inflation of manufacturing inputs, Materials, Freight, Energy will continue elevated.
- Labour inflation and competition for talent will continue in H2 2022 as the immediate priority will be customer orders fulfilment. Solutions such as automation and remote working talent will continue to evolve.
- Cyber-attacks are growing in frequency and sophistication and must be integral to risk strategy
- Manufacturing SMEs will remain busy in H2 2022 with priorities around cost control and increased engagement with the imperatives of green and digital agendas.

Conor Magee

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Conor joined Bank of Ireland in 2021. He is an accomplished senior executive and brings with him significant business and manufacturing experience gained both In Ireland and internationally. He has a strong track record of business plan delivery, scaling and turnaround and is an expert practitioner in Lean thinking, supply chain best practice and cost management in the Manufacturing sector.

Conor held various senior positions in Cargotec, a global manufacturer of Industrial Equipment for Cargo handling and transport having worked in Ireland, China and Finland.

Prior to Cargotec, Conor worked in the automotive sector with Iralco Automotive and Magna Donnelly in Ireland and Opel AG in Germany. He holds an MBA from Michael Smurfit School of Business, a Mechanical Engineering Degree from UCD, and a Diploma in Business Coaching from Smurfit Executive Development.

Sources: CSO, Gov.ie, IBEC, Bank of Ireland, The Economist, IHS Markit, AIB, Guardian, Irish Times, Financial Times, Interos, PWC, CBRE, Gartner, tradingeconomics, ECB, Enterprise Ireland, IDA, Irish Manufacturing Research

Retail Convenience H1-2022 Insights /Outlook H2-2022

Grocery & Convenience sector continues to perform strongly with progressive operators proactively investing for the future. Grocery inflation on an upward trajectory.

Retail Convenience: H1 2022 Review

Summary

- **Robust performance:** Robust performance delivered by the sector in H1 2022. Shopping behaviour and frequency patterns returned to more normalised trends with sales continuing to surpass pre-pandemic levels.
- **Investment:** Store purchase and revamp/refurbishment activity has been strong in H1 2022 and this trend is expected to continue with a particular focus on energy efficiency measures. Bank of Ireland continues to actively engage and support grocery retailers with their investment plans.
- **Consolidation:** Increased consolidation has become a feature of the market with larger grocery/fuel operators expanding their store network and diversifying their sales mix.

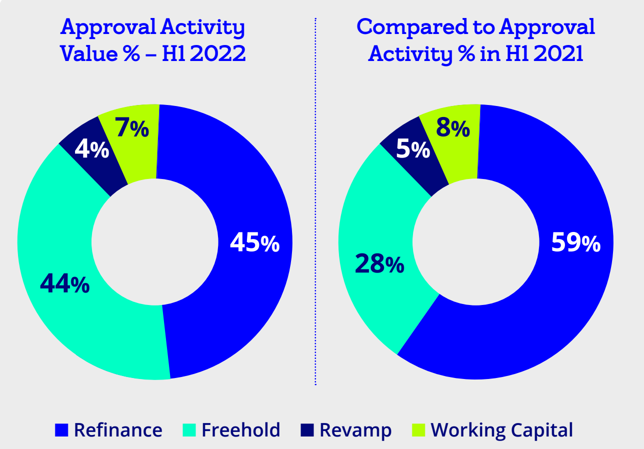
H1 2022 Key Trends

- Strong growth in take-home grocery sales continued. Growth of 7%+ delivered in H1 2022 v pre-pandemic performance in 2019 per Kantar Grocery market share.[1]
- Dunnes continued to hold the number 1 position in respect of grocery market share for the majority of H1 2022 driven by a particularly strong performance in the wider Dublin region. Supervalu and Tesco have maintained strong market share with Tesco benefiting from increased frequency of consumer engagement – not just being used for the "big shop" in 2022. Aldi and Lidl continue to solidify their strong foothold in the Irish market.
- Grocery inflation in Ireland hit 7.7% in July 2022 reflecting the supply-chain issues and uncertain geo-political landscape – this represented the highest level of inflation since August 2008.[2] The large supermarket operators have been proactive in addressing cost of living concerns with targeted ad campaigns and voucher offers being strongly promoted in recent weeks. Given the prevailing inflation position across Europe, it is expected that we have not reached peak inflation and further increases are being forecast across the sector in the immediate future.
- Margin growth and preservation have become an imperative for retailers linked to an increased cost framework driven by personnel, insurance and energy overheads.

Key Activity in the Sector in H1 2022

- Whilst shopping patterns reverted to more normalised frequency trends in H1 2022 – the impact of increased grocery inflation (and associated cost of living) on consumer behaviour will be monitored closely in H2 2022.
- Retailers are continuing to implement pragmatic succession planning structures to ensure that appropriate long-term value is delivered from their business. COVID-19 has been a catalyst for some retailers to investigate future options in respect of both ownership and operational models.
- A strong pipeline of store purchase and associated revamp activity has been generated in H1 2022. Progressive retailers continue to recognise that in-store investment is necessary to maintain customer engagement and loyalty.

Approval Activity Value %



Bank of Ireland business banking data

Sector Developments – Key Numbers

€25m Investment from Musgrave in sustainable stores strategy.[3]

9 Number of Joyce group stores that will re-brand to Tesco.[4]

30 New Spar outlets opened by BWG Ireland in period October 2021-May 2022.[5]

€117m Investment from Applegreen in a further development of their US operation.[6]

[1] Kantar Grocery market share – July 2022
[2] CSO Retail Index June 2022
[3] Musgrave Group press release – June 2022
[4] Tesco press release – June 2022
[5] BWG press release – May 2022
[6] Applegreen press release – May 2022

Sector Developments: Investment and Consolidation

- Supervalu, Lidl, Aldi, Tesco and Dunnes all outlined plans for new store openings/significant store revamps in H1 2022 across all regions with a noteworthy focus on satellite towns of Dublin, Cork and Galway.
- The increased cost and regulatory burden presented by the proposed living wage structure, pension auto-enrolment, spiraling energy overheads and insurance in a competitive environment has led to an up weighted focus on margin development/preservation from retailers, wholesalers and their advisors
- Tesco Ireland have appointed Natasha Adams as CEO – the purchase of the Joyce Group and recent store opening in Spencer Dock demonstrating their commitment to the Irish market.
- Consolidation remains a feature of the wider grocery/convenience/forecourt market. In the UK – Morrisons secured the future of 1,600 jobs by purchasing the McColl's convenience group from Administrators. In Ireland/Northern Ireland, further consolidation is projected in 2022 linked to succession planning, prevailing economic conditions and the growth strategies of leading operators within the sector.

Market activity focused on store investment and consolidation within the sector. Margin preservation and environmentally friendly practices key linked to changes in consumer behaviour and rising cost base.

Retail Convenience H2 2022 Outlook

H2 2022 Key Numbers

€20m Investment from Maxol Group across strategic forecourt locations in Ireland in 2022.[7]

€18m Funding secured by Buymie to expand its online grocery platform.[8]

€41.6m The value of in-store contactless payments recorded per day representing a 60% increase v 2021 as consumers move away from cash based transactions.[9]

€320m Aldi's projected investment in Ireland in 2022-2024 as it earmarks the opening of 30 new stores nationwide.[10]

H2-2022 Retail Convenience Outlook

- **Robust Outlook:** Overall a resilient sector to economic shocks; Strong sales performance to continue but increased focus on margin preservation and cost management required linked to a continuing inflationary environment.
- **Funding Activity:** Strong active pipeline of store purchase and associated revamp proposals– retailers recognise that customer experience/excellent standards will be key to attract customers and retain market share.
- **Investment/Consolidation:** Increased investment in partnership agreements and further consolidation of the market (especially forecourt/wholesaler sub-sectors) expected in H2 2022.

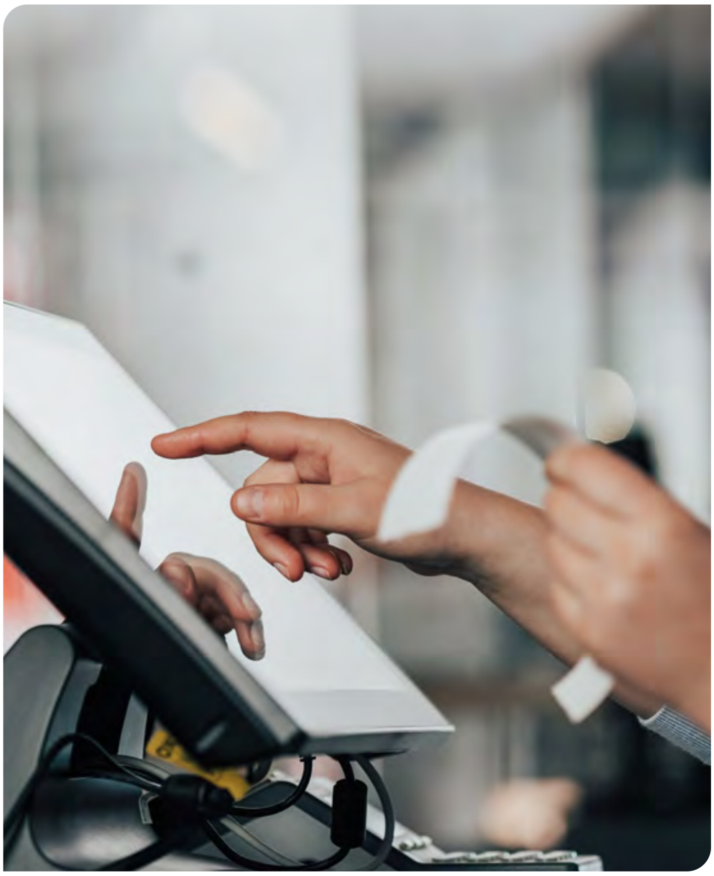
Market

- In a competitive labour market – sourcing and retaining the best people is vital to sustain a retail business. A structured employee development plan that incorporates role variety, up-skill opportunities and competitive remuneration needs to be embedded within the culture of the business. The smart use of digital/automation tools can deliver efficiencies within the business which will support this employee focused model.
- Rising energy costs need to be addressed proactively by the wider sector; collective affinity schemes negotiated, investment in energy efficient equipment/processes and sector lobbying for Government support all expected/required in H2 2022.
- Significant revamp programme will continue to be rolled out in H2 2022 nationwide by leading grocery operators as the ever more discerning consumer seeks excellence in store standards. However, the volume/scale of activity expected to be depressed linked to current building materials cost profile.
- Detailed analysis pre and post revamp will be an imperative to ensure that a maximum return on investment is delivered via sales mix improvement, margin growth and cost saving. The "localisation" trend will continue with store revamps taking a more bespoke, community focused approach.
- City centre stores will need to proactively assess all aspects of their business plan: target customer demographic, margin development, shrinkage, cost base, property costs etc. They will need to focus more on city centre dwellers as opposed to city centre employees – partner with foodservice/restaurants and provide effective delivery options etc to engage a new recurring customer base.
- Corporate social responsibility linked to sustainable and environmentally friendly in-store activities will be a key area of focus for all retailers – energy efficient equipment, elimination of single-use plastic, improved recycling facilities and reduction of food waste. This will enable an improved cost base whilst meeting consumer expectations in respect of ethical trading. The proposed roll-out of the deposit return scheme and "latte levy" in H2 2022 will be monitored with interest.
- As consumers seek cheaper alternatives across some product lines, all leading operators recognise that a strong own-brand offering will be critical to maintain customer engagement as the inflationary cycle continues.

[7] Maxol Group – press release November 2021
[8] Buymie press release May 2022
[9] Banking & Payments Federation of Ireland – June 2022
[10] Aldi Ireland press release – November 2021

Funding Activity

- Store purchase strategies will continue to develop in H2-2022. COVID-19 has been the catalyst for increased levels of succession planning/retirement which is driving this activity.
- Revamp funding to continue with a particular focus on energy efficient equipment and processes.
- Robust refinance activity projected linked to exiting banks and loan book purchasers seeking to deleverage.



Bank of Ireland

- In Bank of Ireland we recognise that we have a unique opportunity to support our customers and to enable Irish businesses and the communities we jointly serve to thrive.
- Our proven financial capabilities and appetite, combined with comprehensive sector expertise, provide us with a strong platform to meet the funding requirements of Irish retailers.
- We understand the investment cycle, including the need for regular expenditure to maintain growth and profitability in this dynamic sector, and we have a strong appetite to support progressive, innovative retailers in the further development of their businesses in 2022.

Owen Clifford

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Owen Clifford is Head of Retail Convenience within Bank of Ireland since 2015. Owen is responsible for the continuing development of the Bank's strategy in this key area and has actively supported leading retailers and stakeholders in the sector nationwide to grow and develop their business in a progressive manner.

Owen brings extensive industry knowledge and experience to this role, having worked in the retail sector with Musgrave Retail Partners Ireland where his role involved supporting independent retailers to maximise their profitability and to develop long-term, sustainable business models.

Owen holds a first class honours degree in Law and Accounting from the University of Limerick and is a Fellow of the Institute of Chartered Accountants Ireland and an Associate of the Irish Taxation Institute.

Technology, Media and Telecoms (TMT) 2022 H1 Review/ H2 Outlook

The pandemic has not gone away, but lessons learned during this period are shaping how we live and work today and into the future. The physical work environment is being replaced by digital infrastructure, enabling businesses to become more productive, while working asynchronously.

TMT 2022 H1 Review:

Summary

Technology: Over the course of the first half of the year there has been a marked uplift in activity as digitalisation continues. Businesses from every sector look to their IT services provider to deliver appropriate technology applications and solutions to help them continue on their transformation journey to meet the ever-changing needs of customers in a post-pandemic environment.

Media: Ireland's screen/creative sector continues to go from strength to strength. During H1, Screen Ireland published its annual report for 2021 that posted record-breaking, screen industry production activity figures of €500 million spent in the Irish economy. There was increased production growth in local feature film, TV drama and local animation. According to Screen Ireland, the level of spend on jobs, local goods and services was the highest ever achieved.

Telecoms: We are seeing a repeat of the trend of recent years where there is further consolidation in the sector. Telecom's providers are continuing to vertically integrate and acquire technology service providers to provide a 'one-stop-shop', delivering both connectivity and layering on other services to their customers, such as data storage and management, cyber protection and cloud services. In this way the service providers are becoming more embedded with their customers, increasing revenue while reducing customer acquisition costs.

H1 2022 Key Trends:

Climate action: As the sustainability movement gains momentum and becomes a focus for everyone, citizens and businesses alike are looking for ways to reduce their carbon footprint. Technology is now seen as having a critical role to play in addressing climate action goals. There is increasing use of robotics, seen as a necessity for many industries struggling with labour shortages, which is more pronounced in some sectors than others. One of the benefits of cloud technology too, is that it reduces the need for companies to host their data on site, removing the cost of cooling large in-house hardware. Remote working is also supported through internet connectivity, which is also reducing the amount of people on the roads. These are just some examples and over time, as smart homes become more commonplace, citizens will have more power to manage domestic energy consumption, reinforcing the growing evidence of the role technology solutions will play in helping the environment.

Buy and build: Continuing the trend of recent years, we are seeing more businesses in the sector adopting a 'buy and build' strategy, targeting in some cases, 'lifestyle' businesses (where it is supporting the founder's personal income, rather than maximising revenue); to help grow both revenue and customers locally and internationally. Many companies that have chosen this approach see it as an opportunity to augment their current technology suite with additional capabilities and skills or expertise or acquire a similar business in a different location and leverage synergies and seek to cross-sell and upsell.

Customer experience: Consumer behaviour is constantly changing and anytime, anywhere, any device is now expected, if not demanded, by customers. The simplicity of being able to swipe to conclude a purchase, is filtering down into people's everyday expectations of what the customer experience should be. Competition is driving innovation. This doesn't always mean having to build a technology platform from the ground up, rather customers now expect to see their service provider utilising devices or applications to enhance the experience. For example, when consumers are purchasing furniture or large household items, it is now expected the retailer uses modern technology to present what the item will look like in their home using augmented reality. These and other similar solutions are widely available in an application format. They can add value for businesses across all sectors that may not have the capacity to implement an entire omni-channel solution.

H1 2022 Key Activity in the Sector

Forecast is for more cloud: There is continued migration to cloud computing as more and more businesses are seeing the value in the scalability, agility, flexibility and accessibility the technology offers. According to Gartner, global investment in cloud services is forecast to grow 20.4% in 2022 to a total of $494.7billion[2] and expected to reach $600 billion in 2023. According to a recent survey carried out on C-level executives in Ireland, 81%[3] said it reduced costs, improved business resilience and quality of services, while on the other hand 78% of businesses stated that executive support and a lack of skills or resources are some of the barriers to adoption. Surprisingly, based on those results it could suggest that cloud service providers need to help businesses better understand the benefits and mitigate the risk that exists in relation to the adoption and integration of cloud computing technology, influencing the opinions of senior business leaders.

Need for continued vigilance against cyber-threats: Cyber threats are continuing to impact individuals, businesses and organisations everywhere. 39%[4] of Irish companies suffered a cyber-attack in the past 12 months. Alarmingly 70% of those companies were targeted more than once. Phishing emails continues to be the main access point for fraudsters with smaller companies being the most likely victims. Ransomware is also very common; of those attacked, 75% paid the ransom. These findings, while shocking, should ensure there is an enhanced state of awareness across organisations everywhere and that no business should be complacent enough to think they will never be a victim. Despite the perception that these fraudsters are very sophisticated in how they perpetrate attacks, in reality they gain access to an organisation's network and systems simply by someone unwittingly clicking on a link. The advice for all businesses is to always be vigilant.

Hollywood comes to Mullingar: Ireland's reputation as a global location for the screen industry continues to rise and is now one of the foremost centres of excellence in animation and live action production globally. The boom in live action production and the worldwide demand for content is providing the incentive for investors to support the creation of more live studios. The latest of which was the announcement that a new studio has received planning approval in Mullingar. Hammerlake Studios[5] looks set to create Ireland's largest film studio, with a purpose-built film, television and content production campus constructed on a 25-acre site in Mullingar, Co Westmeath. This latest announcement comes on the back of expansions in studio space at Ardmore Studios (Wicklow), Troy Studios (Limerick City) and Ashford Studios (Wicklow) and the creation of new studios at Ashbourne and Greystones.

Lending Activity

Our customers continue to reap the benefits brought about by the acceleration of digital over the last several years. Many technology providers that we have spoken to have told us that their relationship with their customers and clients has changed somewhat as a result, moving from a transactional to more of a partnership. Customers are in many cases still continuing to try and figure out what technology solutions can enable them to work smarter and more sustainably with their employees, suppliers and clients. This is where the partnership approach is helping solve these problems and solidifying the relationship, which is having in many cases a positive impact in growing revenues.

While we have seen an increase in the availability of capital from non-bank lenders over recent years, we are now also seeing an increase in demand from businesses seeking to refinance that funding over the first half of the year.

Sector Developments

New Seed and Early-Stage Fund launched: In April, there was good news for seed and early-stage technology companies with the announcement that Dublin-based Delta Partners had launched its new venture capital fund which will invest into seed and early-stage technology businesses in Ireland. The fund aims to invest in 30+ start-ups over the next three to four years at both seed stage and Series A. Bank of Ireland and Enterprise Ireland are cornerstone investors in this new fund along with Fexco and several family offices. Delta Partners also plan to attract other investors over the remainder of the year to reach target funding of €70million[6]. It has been well documented over recent years that there was a dearth of funding for early-stage companies and this new fund will hopefully go some way to plugging the gap. One of the first recipients of funding is Cork-based VisionR which received €1.5m in backing (from Delta Partners and Movidius co-founder Seán Mitchell). Their solutions aim to help bricks and mortar retailers personalise the customer journey and provide the retailer with the same level of insights their store would get if it was online.

Viatel continues its acquisition journey: Interesting to see Viatel continue on their acquisition journey across the first half of this year. Fresh from completing several transactions in 2021, they have continued on the same track with the completion of the acquisition of ActionPoint based in Limerick in January and followed it up with their most recent acquisition of SupportIT based in Dublin. This is the seventh acquisition for Viatel[7] in two years and has expanded the breadth of their solutions from being a telco provider to now being a broad-based digital services group providing solutions for customers in connectivity, managed services, cloud and software development. This further demonstrates how the lines are continuing to blur across traditional sector boundaries where a telco now becomes a technology company and vice versa.

Grow Digital Fund Launched: The government recently announced a new €85 million[8] fund to help businesses to go digital. This fund is open to any business from any sector and at any stage of their lifecycle. The first tranche of funding of €10million is available in 2022 and will be administered through Enterprise Ireland. The objective of the fund is to get businesses to use digital tools, incorporating emerging technologies into their businesses with a view to assisting those businesses to embrace the potential of exporting their goods and services if they don't already do so. This fund is welcomed and will help those businesses that may not know where to start on their digital journey, to take the first step, access support funding and begin.

Micro credentials helping meet the digital skills shortage: Micro credentials are small, or sometimes referred to as 'bite-size', accredited courses created to meet the demands of individuals, organisations and enterprise. They are becoming more commonplace now among Ireland's learning institutions as they grapple to meet the actual learning needs of students, so they can quickly assimilate into evolving job roles and enhance employability of candidates.

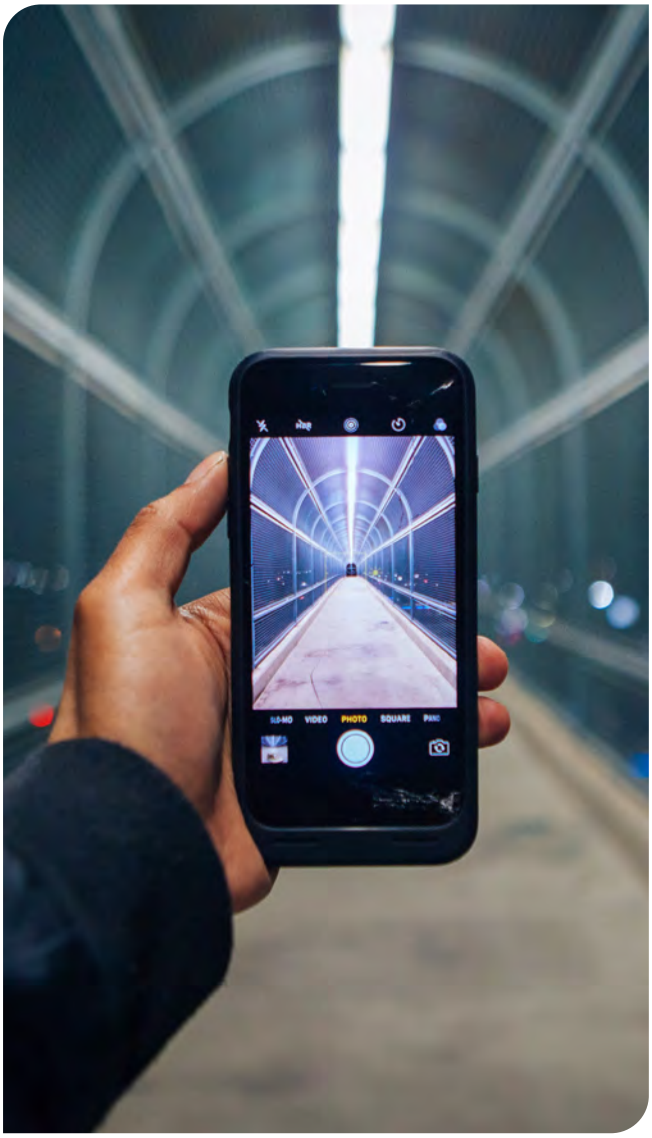
These types of courses are accredited/certified, flexible and typically delivered online. The big advantage of these courses is that they have the potential to offer education to those that may not otherwise be able to access these courses or those that cannot attend mainstream education, such as vulnerable or disadvantaged groups. The Technology Ireland ICT Skillnet (ictskillnet.ie) have a broad spectrum of these types of courses, all certified and in many cases are subsidised by government. Talent shortages are being reported across all sectors, these courses provide opportunities for candidates to enrol and assess their applicability to find a new job or change career. They may also appeal to those seeking to re-join the workforce to take up employment that might have been outside their radar in the past.

M&A: In a recent report by William Fry, the TMT sector continues to be a dominant sector in terms of deal making in the first half of 2022, with 29%[9] of the total M&A deal value and six of the 20 largest transactions. That said, total deal value was down 57% on the same period in 2021.

Some of the biggest deals included Partners Group acquisition of Version 1 and JP Morgan's acquisition of Global Shares. Some other notable deals during the first half of the year include Ergo's[10] acquisition of Asystec, and DigitalWell[11] (formerly Welltel) continuing on its acquisition journey adding IT firm ANS to expand into high-growth markets, Eleven and Wren Data, broadening the breadth and scope operationally and geographically.

Some Key Numbers

20	Number of jobs created by Corporate Governance Institute to fuel expansion.[12]
$1.6bn	Wayflyer's valuation having raised $150m adding to Ireland's growing list of unicorns.[13]
$1.3bn	record level of venture capital investment into Irish tech start-ups and SMEs reached in 2021 according to IVCA.[14]
€12m	Amount of growth funding received by Phorest, the salon software provider.[15]
15,000	the number of homes and businesses now connected to the National Broadband Ireland network.[16]



TMT H2 Outlook:

Technology: We expect to see a strong second half of the year as sustainability measures come into sharp focus. We anticipate that businesses across the sector are likely to see further growth and revenue opportunities. Building on initial technology transformation initiatives implemented over recent years, we will see deployment of more applications and solutions to assist in various environmental screening and energy saving initiatives. That said, vigilance will also be maintained on inflationary pressures that may have a downside impact on demand for new technologies. Suppliers will need to demonstrate the benefits of cost savings to avoid digital investments being put on hold.

Media: Global entertainment & media revenue rose by 10.4% in 2021 to US$2.34trn[17]. For many the screen industry is seen as 'recession proof'. People will generally sacrifice socialising and discretionary costs in a recession or a downturn in the economy and will choose to stay home and watch TV or, in more recent years, stream content from various on-demand providers. The global streaming video on demand (SVoD) market is estimated to show an annual growth rate of 11.48%[18], resulting in a projected market volume of US$139.20bn from 2022 through 2027, with user numbers expected to grow to 1,636.0m by 2027. Screen Ireland are already recording unprecedented growth in Ireland's screen industry and expecting it to grow further in the current year. Many of Ireland's animation and TV production companies refer to the 'global insatiable demand for content' and based on the growth projections for SVoD, it appears that Ireland looks set to benefit from this growth for the foreseeable future. Ireland may also benefit from the EU mandate that on-demand services providers must include at least 30% of the content in their catalogue that is made in Europe. The potential for the wider economy to also benefit should not be underestimated in terms of the spin-off effect for hotels and the wider hospitality and accommodation sector along with various trades and retail providers. If one reflects on the making of a major Disney blockbuster in the summer of 2021, the village of Enniskerry was transformed, where a set was built and literally hundreds of hotel rooms were filled with cast and crew over many weeks. Productions are not limited to the Dublin metropolitan area either, we can all remember Star Wars in Kerry and The Last Duel in Cahir. Every corner of Ireland has the potential to share in this growth story over the coming years.

Telecoms: The world of work has changed, possibly forever, from what we knew before the pandemic. Remote, hybrid or teleworking, is largely dependent on good quality, stable broadband to enable people to work efficiently. National Broadband Ireland (NBI) projects that by year end 128,000 premises will be in a position to pre-order/order for broadband service with one of the providers registered on their network. Capital investment over the last five years by telecoms operators was in the region of €3.3 billion[19] for mobile and fixed line services. This investment has greatly improved voice and data services and there is a commitment from telecoms operators to continue investment over the coming years which is estimated to be in the region of €700m.

Market

Talent shortages: The war for talent continues to be one of the major challenges right across Ireland's TMT sectors. Remote working, depending on the business model and sector can be a blessing and a curse. There is no doubt that it has opened up opportunities to hire experienced and skilled candidates from anywhere. It has also driven up the costs of hiring for some as new candidates demand higher starting salaries than would have been the norm only a few short years ago. That said, many employers have taken a longer-term view and have chosen to pay higher salaries for skilled candidates in order to fill vacancies.

From a hiring perspective the financial costs associated with hiring may have reduced by offsetting costs of travel for interviews or ultimately relocation costs once candidates are hired. Nonetheless, as the labour market continues to get tighter, there is no silver bullet to solving the shortage of talent problem.

Big tech job losses: We have seen lots of commentary and announcements of layoffs coming out of the United States in recent months. Many are speculating this is a sign of 'big tech' preparing for a US recession. Tesla are cutting 10% of salaried workers or 3.5%[20] of their total headcount, Meta have reduced hiring of engineers by 30%[21], Alphabet are reducing their hiring plans with new hires concentrated in engineering and other technical roles. Amazon have stated that they may have overbuilt warehouse space, expecting higher customer demand that instead waned and had hired too many warehouse workers.

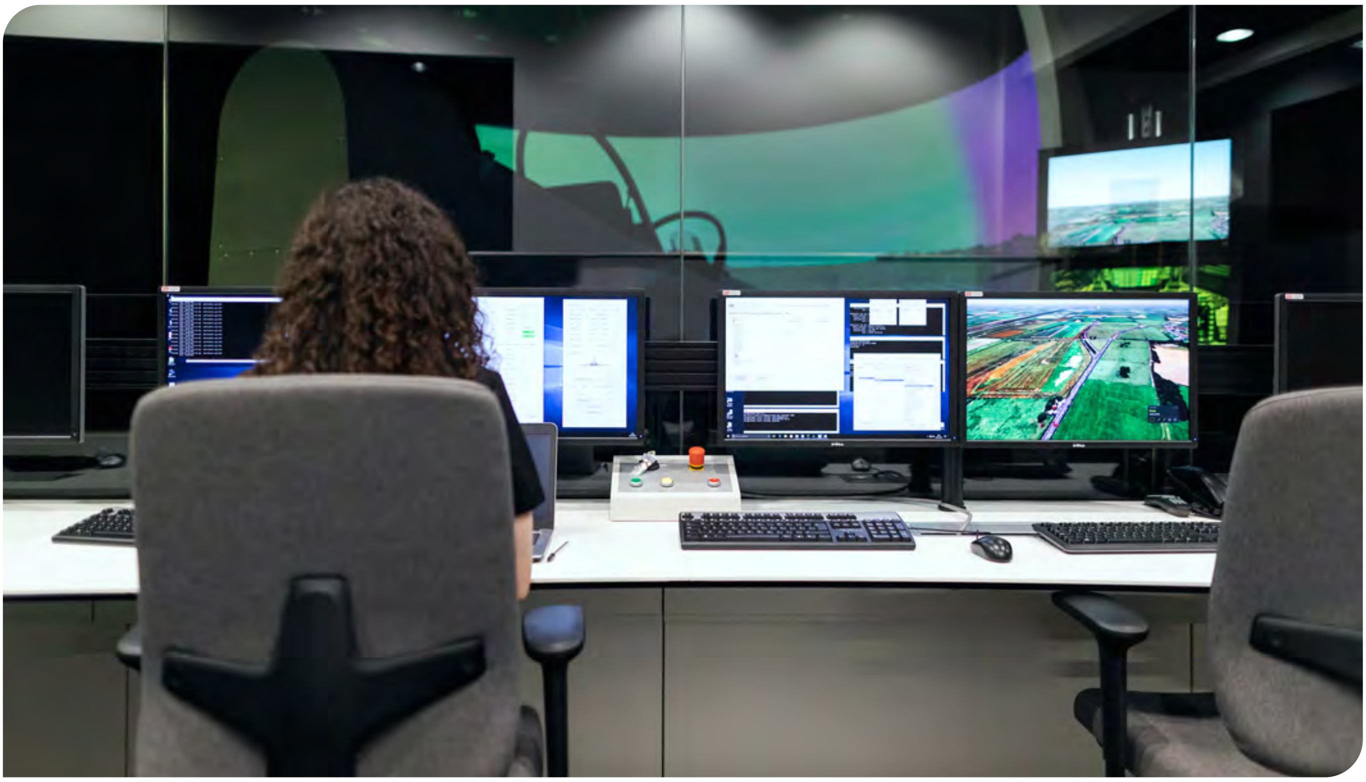
Given the breadth and scale of these companies, one may wonder why they are making these decisions and if they really know more about what's coming down the line in relation to the global economy. Inflation, supply chain challenges, increase in interest rates and reversal of pandemic trends have all been mooted as potential causes. However, it is also important to note that these businesses have been on massive recruitment campaigns over the last decade and this may well be a correction in their growth journeys and making provision for the impact a recession may have, rather than a decline in demand for their products and services. Time will tell.

Consolidation across the sector: We are going to see more consolidation across the TMT sector. Technology service providers are expected to continue the same patterns of recent years, making acquisitions to broaden their geographic footprint and expand customer numbers to leverage upselling and cross selling opportunities and squeeze more revenue from their clients.

Across Media we are also likely to see further investment coming into Ireland to develop new studios or acquire those already in place. Demand for live action studio space is outstripping supply so there is a ready market if the space is available. Similarly, across the telecoms sector, many of the traditional operators have sold off some of CapEx-heavy parts of their businesses, preferring to rent the real estate and infrastructure back on an operating expense basis and this may will be common trend in the time ahead.

Crypto, where is it headed? The fall in value of both Bitcoin and Ethereum from their all-time highs in late 2021 has not been good for the crypto market. Bitcoin's price has dropped 70% in value, having reached $68,000 last November, losing more than $2 trillion[22]. Volatility is something that seems to go hand in hand with cryptocurrencies and those that are interested in buying into it need to be aware of this. While the value of Bitcoin has been between $22,000 and $25,000 recently, there is a lot of commentary that suggests the value will recover and may reach $100,000 at some point.

Perhaps much of the mystique or attraction that still exists around the crypto market is the thrill of the chase that one could make a very hefty profit or lose it all, which feels a bit like a trip on a rollercoaster. Only with a rollercoaster, one knows where it begins and ends and when you'll be turned upside down. We have seen over recent months a clamp down on crypto by China and President Biden signing a new executive order directing federal agencies to hone regulation on digital assets. Thus, it is probably safe to say there is yet more volatility to come.



Funding activity

Similar to recent years, digital transformation across every sector will continue to provide growth expansion opportunities for our technology customers servicing those markets. We look forward to supporting these established businesses as they look to consolidate, grow scale and their market position.

Over the last year there has been a marked increase in activity, businesses that have matured in recent years are now seeking to refinance or support MBOs/MBIs and we look forward to working with other similar businesses over the remainder of the year.

Likewise, we have supported both existing and new customers investing in their businesses to adequately resource their operations to capitalise on new opportunities and grow new markets.

Bank of Ireland

As one of Ireland's pillar business banks, we recognise that we have a unique opportunity to support our customers and help to enable Irish businesses and the communities we jointly serve to thrive.

Our understanding and comprehensive sector expertise provide us with a strong platform to meet the funding requirements of Irish Technology, Media, and Telecoms companies. We have an appreciation of the different types of business, revenue and growth models.

We are delighted to continue to provide various facilities to some of Ireland's best-known TMT brands. By having a designated Technology team, we can deliver on our ambition to support Ireland's Indigenous Technology Sector, with the experience, the knowledge and most of all an understanding, of your business.

Talk to our Technology Team today, to see how we can help you grow your business.
Email: TechnologyMediaTelecoms@boi.com

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Paul joined Bank of Ireland in 2019 as Head of Technology. He has a background in technology transfer having previously worked at the ADAPT Centre at Trinity College, Dublin, and the Walton Institute at Southeast Technology University where he led commercialisation activities, while also mentoring and supporting new venture creation and spinouts. He managed the Consumer Technology portfolio for IDA Ireland across New England and Eastern Canada. He also led corporate business development activity for Eishtec (an Irish start-up acquired by Infosys) across the North American market. He holds a Master of Business in International Management from Southeast Technology University.

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Motor Sector
Insights and Outlook

2021: Brief lookback

Lest we forget, L5 COVID restrictions were in place for the first 4.5 months of 2021. Motor dealers continued to open for vehicle aftersales, an essential service, and consumers could visit dealers to have maintenance carried out. For vehicle sales, dealers engaged with customers remotely and operated a "click and deliver" service. By the end of H1 2021, combined sales of new cars and vans were ahead 27% compared to H1 2020 and 16% behind H1 2019. International travel resumed in July 2021 and rental car companies began to increase their fleets again. The hire drive channel accounted for just under 8% of new car registrations in 2021 (v. 3% in 2020).

New vehicle supply issues, caused by global supply chain challenges, started to bite in the second half of 2021. By year end, new passenger car registrations increased almost 19% year on year to 105k units. Compared to pre-pandemic levels, new car sales were circa 10% lower than the 117k units sold in 2019. Light commercial vehicle registrations (LCV) increased by circa 32% year on year to just under 29k units. There were more new vans sold in 2021 than in the peak year of 2016 and highlights strong demand for commercial vehicles throughout the pandemic.

2022: The supply story

Pent up demand carried over into 2022, however, supply shortages have impacted the true market potential this year. This is due to continued global supply chain challenges and microchip shortages in the sector, impacting manufacturing output.

New car sales in Ireland increased 2% in H1 2022 but compares favourably to a decline of 11.9% in the UK and a decline of 14.0% overall in the EU. European sales in June 2022 were the lowest recorded in June since 1996. Back to Ireland, where new van sales declined 23% resulting in an overall market decline here of 3% in H1 2022.

Car rental companies are experiencing a material improvement in both revenue and income in 2022 following a torrid couple of years. They are struggling, however, to replace short term rental fleets. With new vehicles in short supply, motor franchises are concentrating supply into the retail sales channel which, generally speaking, is more profitable. The hire drive channel accounted for circa 4% of new car registrations in H1 2022 (v. 15% historic average). The supply shortage has led to increased car rental prices in Ireland, and across Europe, a trend widely covered in the media.

Used Vehicles

Used cars are also in short supply due to lower new car sales in 2020 and 2021, increased vehicle registration tax (VRT) – which impacts affordability and demand – and reduced volumes of used imports due to Brexit. Residual values strengthened again in the first half of 2022 however, anecdotally, motor dealers report values have levelled off.

95% of used imported cars were sourced from the UK pre-Brexit. Dealers continue to import used vehicles where value is present, however rising residual values in the UK and tighter supply there have significantly impacted volumes imported to Ireland. Post Brexit, used car imports declined almost 21% in 2021 and were 44% lower than the peak in 2019. This reflects the impact of Brexit, changes to VRT for used imports and tightened supply in the UK.

In H1 2022, used car imports declined by circa 33% year on year compounding a shortage of used cars in the market. The volume of used cars imported from the UK declined 63% (-78% from peak year) now representing just 45% of overall used imports. Dealers sought alternative sources to maintain supply and imports from Japan have increased notably. Japanese used imports have almost tripled by volume year on year and their share has increased to circa 40% of used car imports in the first half of 2022.

Table: Vehicle Sales 2022

	H1 2022	H1 2021	H1 '22 v. H1 '21	H1 2019	H1 '22 v. H1 '19
New Cars	**65,176**	63,853	+2.1%	**80,758**	**-19.3%**
New Vans	**13,062**	17,023	-23.3%	**15,319**	**-14.7%**
Combined Sales[1]	**78,238**	80,876	-3.3%	**96,077**	**-18.6%**
[1]thereof, Hire Drive	***2,727***	*3,637*	*-25.0%*	***14,412***	***-81.1%***
Used Imports	**24,112**	35,753	-32.6%	**53,126**	**-54.6%**

Table: Used Imports by Origin

	H1 2022	H1 2021	H1 '22 v. H1 '21	H1 2019	H1'22 v. H1'19
UK	10,919	29,753	-63.3%	50,387	-78.3%
Japan	9,336	3,294	183.4%	2,442	282.3%
Other	3,856	2,706	42.5%	297	1198.3%
Total	***24,111***	***35,753***	***-32.6%***	***53,126***	***-54.6%***

Ukraine

War in Ukraine has impacted automotive manufacturers in the form of disruption to supply chains resulting in reduced production capacity. Parts supply sourced by vehicle manufacturers from Ukraine was disrupted immediately following the outbreak of war and was particularly acute with regard to wiring harnesses. Some transport routes and financial transactions with Russia are impacted. Where possible automotive manufacturers have sourced parts from alternative suppliers, however this takes time to ramp up and delays compound vehicle inventories already at all-time lows.

Wiring systems supplier Leoni, operating in 28 countries employing circa 100k staff globally, is reported to have retained 90% of its 7,000 workforce in Ukraine and has returned Ukraine production to near pre-war levels. There are two plants based in Kolomyia (close to Romanian border) and Nezhukhiv (close to Lviv/Polish border) both in Western Ukraine. Following the outbreak of war, Leoni initially sent all staff home and offered them alternative employment in its factories in Romania. Its staff, however, largely wanted to remain in Ukraine. Astonishingly, operations continue amid repeated air raids alerts when staff need to take cover in bomb shelters….

Ukraine is a global supplier of Neon gas, used in the production of microchips. Several large chip producers, however, have reported diversification of supply chains post the annexation of Crimea, thus reducing their supply risk. Nonetheless the war exacerbates a pre-existing shortage and, although the outlook is for improved chip supply from H2 2022, microchip shortages will continue in the near term. A slowdown in demand for consumer electronics may free up much needed supply to the automotive sector.

Commodity prices and the cost of energy are heavily impacted. Input costs for manufacturers have risen substantially including general metals, aluminium, palladium (used in catalytic converters) and nickel ore (used in lithium-ion batteries).

The war is also having a profound impact on the motor sector in Russia. New vehicle sales plunged 84% in May, following a 78% slump in April. Car prices there increased by about 50% this year, eroding demand, while sanctions have cut supply. 18 of 20 motor manufacturing plants have closed highlighting Russia's dependence on Western brands. Just two plants remain open, one is local the other Chinese.

From an Irish perspective, disruption in automotive vehicle production had led to longer lead times for consumers here. Vehicle prices may rise in the near term as input costs continue to be elevated for vehicle manufacturers. Tesla has publicly commented higher input costs have led to increased Tesla prices this year.

Budget 2023

The last two government Budgets brought about sweeping vehicle registration tax (VRT) changes, ultimately leading to price increases for Irish consumers.

Encouragingly, VRT relief for battery electric vehicles (BEV) was extended in Budget 2022 for an additional two years to the end of December 2023. The SEAI purchase grant for BEV's also continues. The SEAI purchase grant for plug-in hybrid vehicles (PHEV) was discontinued on 31/12/2021 and no further reliefs are available for these models. The Irish government is not unique in this approach. More governments across Europe are discontinuing PHEV incentives and are focusing incentives on BEV's. So, what will happen in Budget 2023?

This remains to be seen. VRT increases brought about by the Minister over the last two years provides an insight into government direction and future policy changes. The motor sector was vocal in expressing its disappointment and frustration with recent VRT changes arguing strongly that increased retail prices will hamper growth in new car sales and the goal to remove older more polluting cars from our roads.

I can think of no other sector that experienced tax increases of this manner in the last two years, as the sector attempts to recover from the impact of the pandemic, shortages of supply and now war in Europe. In the face of unprecedented inflation, one would hope the sector is due a reprieve in Budget 2023.

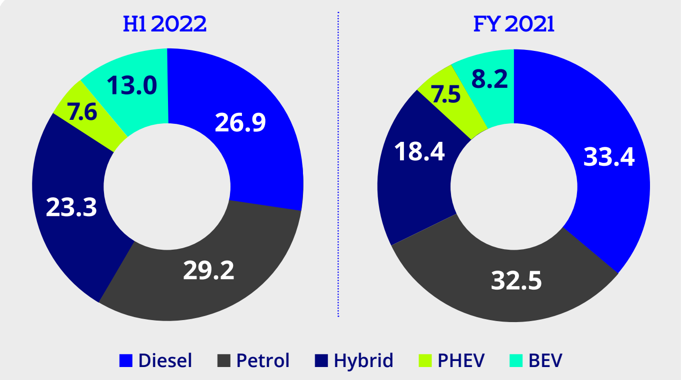
BEV Demand Accelerating

Consumers are adopting new technologies at a faster pace each year as manufacturers design and roll out new low and zero emission vehicles. As recently as 2015, the combined share of electric vehicles and hybrids was less than 2% of new car sales in Ireland. By 2021, this share had increased to 34%.

The take up of electric vehicles further accelerated this year with the combined share of electrically chargeable vehicles (ECV = BEV + PHEV i.e. those with a plug attached) representing 20.6% of new car sales in H1 2022.

Combined sales of ECV's and Hybrids (non-plugged versions) now account for almost 44% of new cars registered this year. The share of diesel cars has fallen each year since 2015, however its popularity remains strong in Ireland with almost 27% buying diesel this year (well down from 70%+ peak). In the UK, for example, new diesel sales account for just under 6% of sales in H1 2022. Sales of ECV's also ticked up across the EU in the first half of 2022.

Chart: H1 ROI Fuel Trends



BEV: Battery Electric Vehicle. PHEV: Plug-in Hybrid Electric. Petrol includesLPG

Table: Q1 European Fuel Trends

	H1 2022			H1 2021		
	Ireland	UK	EU	Ireland	UK	EU
BEV (battery only)	13.0%	14.4%	9.9%	6.1%	8.1%	6.6%
PHEV (plug-in chargeable hybrid)	7.6%	6.4%	8.7%	6.5%	6.4%	8.3%
Total ECV (total electrically chargeable)	20.6%	20.8%	18.6%	12.6%	14.5%	14.9%

Market Growth Needed

The Irish government published the Climate Bill and refreshed the Climate Action Plan (CAP) in Q4 2021. In the latest CAP, the 2030 target for electric cars was increased to 845,000. An additional target of 95,000 has been set for electric vans. There are c. 50,000 electric vehicles on our roads today from a total of 2.2m passenger cars – we have quite a way to travel yet. For more detail on EV targets, reducing emissions and vehicle charging infrastructure, have a read of our last publication **here**.

In order to achieve electric vehicle targets set out in the latest CAP, the new car market simply needs to grow. The state can support the transition by continuing grants and incentives to accelerate BEV sales. This helps bridge the price gap until prices of BEV's align with the internal combustion engine (ICE). Generally, the sector expects that BEV prices will align with ICE vehicles closer to the end of this decade. Government supports are vital to support the continued growth of electric vehicles in Ireland.

In the meantime, the sector continues its transition offering greater choice of new low and zero emission vehicles. New cars with petrol, diesel and hybrid engines will be sold alongside electric vehicles until at least the end of this decade.

Outlook

We are cautiously optimistic with regard to our outlook for this important sector in Ireland. In 2021 new car retail sales were almost on a par with 2019 levels if we exclude the hire drive sales channel. The sector worked through the pandemic and has suffered supply shortages at a point when demand soared. New car sales increased 2% in the first half this year, however combined new car and van vehicle sales fell back 3%. This is caused by supply side constraints rather than weak demand.

We now operate in an inflationary environment and the uncertainty it brings. Despite the doomsayers (who may eventually be right) there are still positive nuggets to be found in a sea of uncertainty. We have full employment in Ireland. That is an extraordinary achievement following a pandemic unseen for 100 years. Of course, it brings its own challenges with regard to labour shortages, but let's focus on the positives. Savings are at an all-time high. Interest rates will rise but off a low base.

Economists are still predicting growth in Ireland, and in Europe, in 2022 and in 2023 albeit pared back from previous expectations, but growth nonetheless. Per a recent Davy broker update, if Irish GDP were flat through Q2-Q4, calendar year GDP growth in 2022 would still equal 7.5%. If we are to believe economists, all things considered equal, inflation will start normalize mid-2023. At time of writing, commodity prices are starting to soften.

Demand for electric vehicles continues to rise and ECV sales will be c. 20% of new car sales in 2022 and will continue to rise next year. New van supply was severely curtailed this year and some manufacturers have had to delay new product launches in 2022 until 2023.

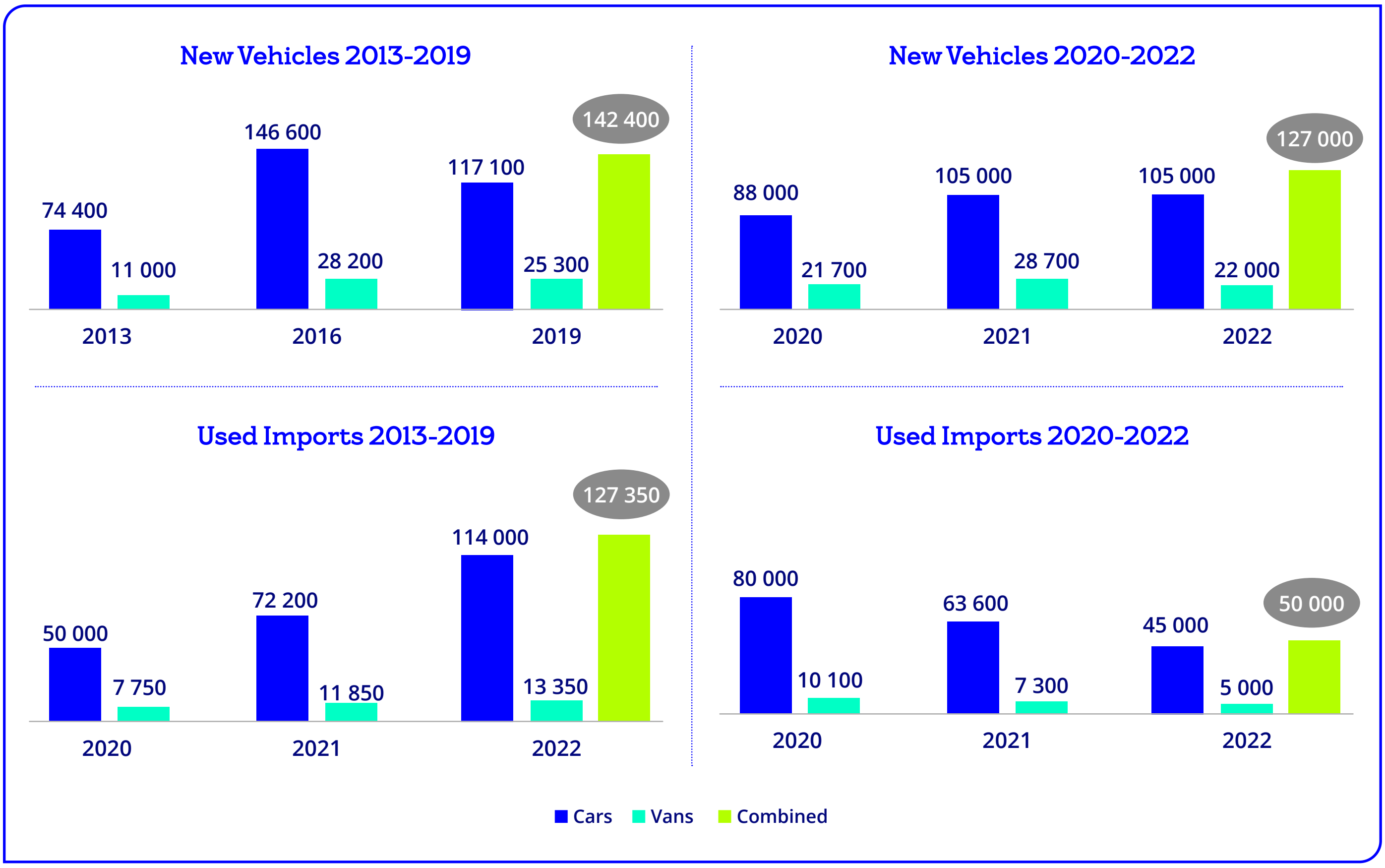
Generally speaking, new vehicle supply is expected to improve in H2 2022 for delivery in 2023. This is due to an expected supply increase already baked in for H2 and an expectation that an anticipated slowdown in demand for consumer electronics will feed much needed microchips back into vehicle manufacturers. They will be needed. Electric vehicles require far more microchips than internal combustion vehicles, so we can expect automotive manufacturers to take the increased supply.

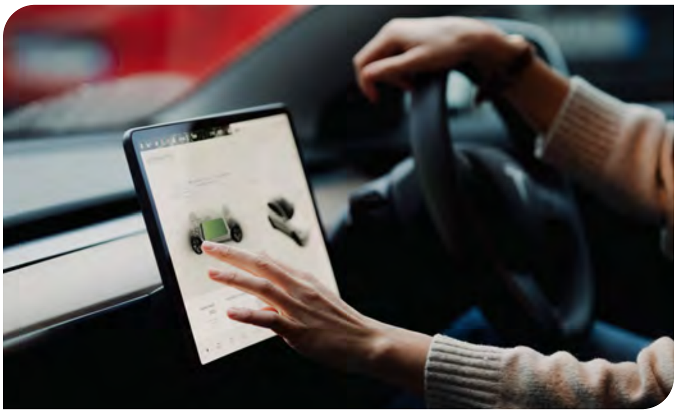
There are always headwinds. Inflation is concerning and its potential impact to consumer sentiment. If Russia turns off their gas supply to Europe, this is likely to have an impact to European vehicle manufacturing and supply. Vehicle production plants are, however, spread globally and European manufacturers with the benefit of their own power stations may revert to using coal to ensure continuity of production.

Used cars will remain in short supply in the near term as there are not many avenues open to dealers to source stock. The new car market will need to grow to generate more new cars and therefore, used cars in the market. The sector could do without further VRT increases in the next Budget that will only serve to fuel inflation and slow the rate of ECV adoption.

This year, the new car market is likely to be more or less in line with 2021. That's still about 90% of 2019 pre-pandemic levels. It takes time to recover from recent extraordinary shock events. It's early to call the market in 2023, however, we will provide updates in our monthly motor newsletters in the Autumn. In the meantime, it's important to remember those positive nuggets.

Graph: ROI Vehicle Sales





Supporting our Customers

The sector is transitioning to low emission and electric vehicles over the course of the next decade and we fully support our partners as the sector continues its transition. Bank of Ireland Finance (BIF) is partnered with 15 motor franchises and these franchises represent c. 45% of annual new vehicle sales.

We note increased activity in motor dealer acquisitions in 2021. Consolidation of single operators into larger dealer groups is likely to continue in H2 2022 and may accelerate in 2023. Refinance opportunities will present themselves from time to time and we welcome the opportunity to discuss these needs with both current and new customers.

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Stephen joined Bank of Ireland in 2018 and brings over 20 years Motor Sector experience developed in both Retail and National Distributor positions. He comes to us direct from industry having previously been employed as General Manager for a multi-franchised retail motor group for 7 years. In addition to a first class honours BA in Business Studies (Hons) from Griffith College Dublin, Stephen holds a Certificate in Transport Engineering from Dublin Institute of Technology.

Sources: Society of the Irish Motor Industry (SIMI), Society of Motor Manufacturers and Traders (SMMT), European Automobile Manufacturers' Association (ACEA), Sustainable Energy Authority of Ireland (SEAI), Automotive News Europe, Motor Trade Publishers Ltd, Climate Action Plan 2021, Davy Group.