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QUARTERLY ECONOMIC COMMENTARY

SUMMER 2021

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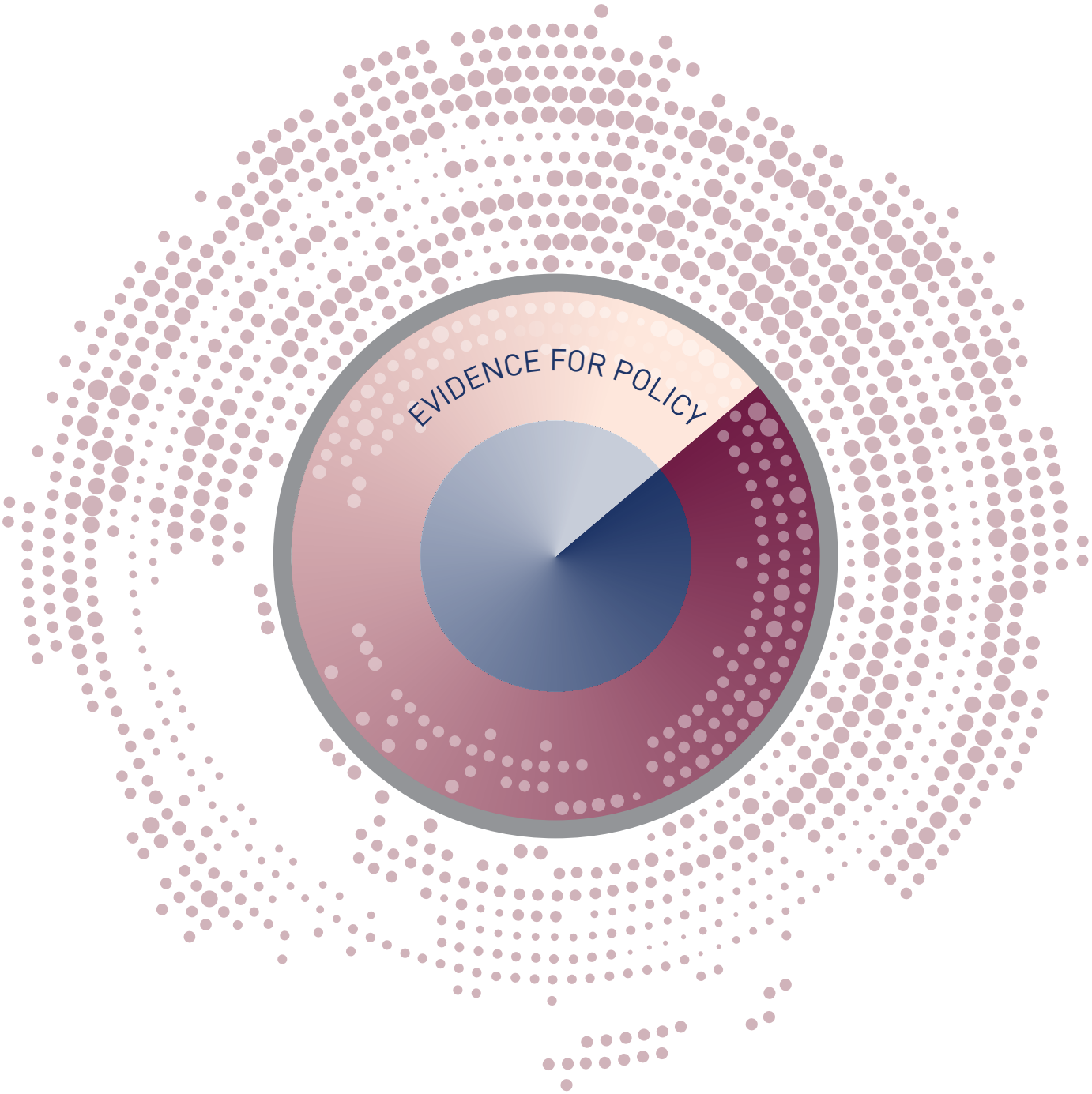

ESRI ECONOMIC & SOCIAL RESEARCH INSTITUTE

QUARTERLY ECONOMIC COMMENTARY

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THE AUTHORS

The *Commentary* is edited by Kieran McQuinn and Conor O'Toole. Kieran McQuinn is a Research Professor and Conor O'Toole is an Associate Research Professor at the Economic and Social Research Institute (ESRI). Ilias Kostarakos is a Post-Doctoral Research Fellow, while Cathal Coffey and Wendy Disch are Research Assistants at the ESRI.

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

TABLE OF CONTENTS

SPECIAL ARTICLE

SUMMARY TABLE

	2020	2021	2022
Output (Real Annual Growth %)			
Private Consumer Expenditure	-9.0	7.5	8.5
Public Net Current Expenditure	9.8	5.0	3.0
Investment	-32.3	5.8	7.6
Exports	6.2	13.3	8.3
Imports	-11.3	11.0	9.0
Gross Domestic Product (GDP)	3.4	11.1	6.9
Gross National Product (GNP)	0.6	8.5	5.7
Domestic Demand (excl. Stocks)	-19.3	6.4	7.3
Labour Market			
Employment Levels ('000)	1,976	2,039	2,307
Unemployment Levels ('000)	453	395	176
Unemployment Rate (as % of Labour Force)	18.9	16.3	7.1
Public Finances			
General Government Balance (€bn)	-18.4	-17.3	-8.7
General Government Balance (% of GDP)	-5.0	-4.1	-1.9

Note: The employment level for 2020 is based on the COVID-adjusted level of employment at the end of each quarter published by the CSO along with the quarterly LFS. As a result it represents a lower bound estimate for employment in 2020. The unemployment rate and level are based on the monthly unemployment and the COVID-adjusted monthly unemployment series published by the CSO.

The Irish Economy – Overview

- The relaxation of public health restrictions in Q2 2021, in tandem with the continued vaccine roll-out, means the Irish economy is increasingly open for business. We assume a continued, and more permanent, relaxation of public health measures in the present year and in 2022.

- Preliminary data for 2021 demonstrate that, as with 2020, foreign-dominated export orientated sectors are highly influential in the economy's growth rate for the year to date. Domestic sources of growth, on the other hand, have been impacted by the public health restrictions.

- However, with restrictions easing, both foreign and domestic sources of growth are likely to contribute considerably to the performance of the economy for the rest of the year. The export sector is set to perform particularly strongly in 2021, while domestic demand is expected to increase by 6.4 per cent in 2021 and 7.3 per cent in 2022. This means the economy is set to register substantial growth of 11.1 per cent in the present year. In 2022, the economy is forecast to increase by 6.9 per cent.

- While the pace of growth expected this year and next is encouraging, it is worth noting that COVID-19 has had a significant adverse impact on the domestic Irish economy. In a Box to the *Commentary*, Bergin, Garcia-Rodriguez and McQuinn estimate that the cost in output terms to the economy in 2020 and 2021 was almost €24 billion, when compared with where the economy would have been if COVID-19 had not occurred.

- Additionally, COVID-19 is also likely to have other significant long-lasting impacts on the Irish economy and society. In particular, the impact on residential construction means that the imbalance between housing supply and demand is greater now than it was at the start of the pandemic. In a paper to the *Commentary*, McQuinn (2021) addresses how Government policy may address these issues. The paper suggests that a modest increase in Government borrowing is sustainable over the medium term. The increase in funds provided under such a policy could facilitate extra investment in key infrastructure in the economy such as the provision of housing.

The Domestic Economy

OUTPUT

Key Points

- *We expect substantial growth of 11.1 per cent in 2021.*
- *A counterfactual exercise suggests that the cost in output terms due to COVID-19 for the Irish economy in 2020 and 2021 was approximately €24 billion.*
- *An update of previous analysis suggests European growth rates are set to remain relatively stagnant over the longer term.*

With most of the public health restrictions being eased in the second quarter of 2021, domestic sources of growth which have been constrained through the first half of 2021 are likely to rebound significantly for the rest of the year. Our forecasts now assume that a more permanent and sustained relaxation of public health measures is possible, and that both a) the vaccination process continues to be successfully rolled out for the rest of the year and b) the current vaccines continue to be sufficiently efficacious (against new variants for example) that social mixing is not constrained by restrictions or public confidences.

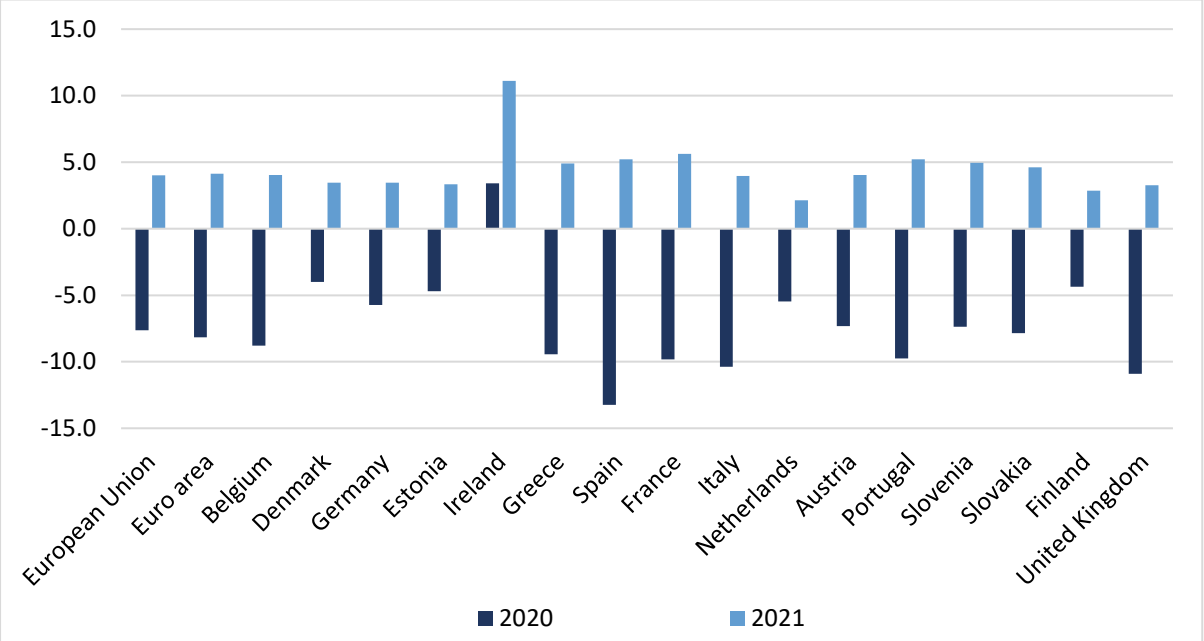
A characteristic of the Irish economy during the pandemic has been the exceptionally strong performance of certain elements of the export-orientated foreign dominated sector. Initial data for Q1 2021 indicate that exports of pharmaceutical goods and ICT continued strongly in the present year. Overall exports in Q1 2021 were up by 17 per cent year-on-year.

In this *Commentary*, consumption is expected to increase by 7.5 per cent while investment is forecast to increase by 5.8 per cent. Exports are set to increase by 13.3 per cent for the year with imports increasing by 11 per cent. Overall, this results in GDP growing by 11.1 per cent in 2021. Both domestic and external sources of growth are expected to also perform well in 2022 with the economy set to increase by 6.9 per cent.

The relative performance of the Irish economy can be assessed in comparison with other European countries. Figure 1 compares the actual growth performance of a select set of European countries in 2020 with the EU Commission forecast for the same countries in 2021. Interestingly, it appears the Commission assumes that the more significant the impact of the pandemic on an economy in 2020, the greater

the recovery experienced by that country in 2021.[1] The Irish economy is an outlier in that it alone amongst all European countries witnessed positive growth in 2020 and it is also expected to experience one of the most robust recoveries in 2021.

FIGURE 1 ACTUAL GDP GROWTH FOR 2020 AND EU FORECAST FOR 2021 (%)



Source: *QEC* calculations and EU Commission.

While the domestic economy is expected to exhibit strong growth this year and next, it is important to consider the impact of the pandemic on the *level* of Irish economic activity. In Box A results from Bergin et al. (2021) are used to examine what the cost of COVID-19 has been for the Irish economy. Using COSMO, they conduct a counterfactual scenario, where they project where the Irish economy would have been in 2021 and 2022 in the absence of the pandemic. They refer to this counterfactual scenario as the 'baseline'. This baseline scenario is then compared with the latest forecasts of the economy in the *Commentary*.

[1] A regression of the forecasts in 2021 on the actual growth rates in 2020 results in a negative and significant coefficient of 0.218.

BOX A THE IMPACT OF COVID-19 ON THE IRISH ECONOMY

In this Box we compare the actual and future performance of the Irish economy due to COVID-19 with how the economy would likely have performed if COVID-19 had not occurred. This allows us to examine the impact of COVID-19 on the Irish economy and allows us to answer the question: 'where would the economy be now if COVID-19 had not arisen?' This is important as it enables us to estimate the cost of the pandemic to the Irish economy in the short term.

To address this issue we draw on the work of Bergin et al. (2021), which generates a no-pandemic baseline in order to examine the recovery path of the Irish economy after COVID-19. Bergin et al. (2021) use COSMO – the largescale macro-econometric model of the Irish economy – to generate an alternative growth path in the absence of the pandemic. This baseline includes a free trade agreement (FTA) between the UK and EU being in place by the beginning of 2021 and captures the historical and recent evolution of the Irish economy, with a medium-run GDP growth rate close to 3.5 per cent.

In Table A.1 we summarise the projected growth rates for the key aggregates of the Irish economy for the period 2020-2022 under this baseline. Also included in the table, are the actual growth rates for 2020 and the latest forecasts from the *Quarterly Economic Commentary*.

TABLE A.1 ALTERNATIVE GROWTH RATES FOR THE IRISH ECONOMY (%)

Component	No-pandemic baseline			Actual	*QEC* Forecast	
	2020	2021	2022	2020	2021	2022
Private Consumption	3.1	3.7	3.2	-9.0	7.5	9.5
Government Consumption	2.6	2.6	3.2	9.8	5.0	3.0
Investment	23.6	6.3	6.7	-32.3	5.8	7.6
Exports	8.3	6.9	5.6	6.2	13.3	8.3
Imports	11.5	5.4	5.7	-11.3	11.0	9.0
Output	9.5	7.0	5.2	3.4	11.1	6.9

Source: Bergin, Garcia-Rodriguez, Rehill and Sweeney (2021), CSO and *QEC* estimates.

The significant differences in the growth rates due to the pandemic are readily apparent from the table. In Table A.2, for each of the components of growth, we calculate the percentage difference between what the level for these components would be under the baseline scenario and what the actual level for the components was in 2020, and what the forecast of the levels are in 2021 and 2022 based on the *Commentary*.

TABLE A.2 PERCENTAGE DIFFERENCE FOR THE COMPONENTS OF IRISH GROWTH BETWEEN SCENARIOS

Component	2020	2021	2022
Private Consumption	-13.3	-9.3	-4.0
Government Consumption	6.6	8.7	8.5
Investment	-82.6	-83.4	-81.9
Exports	-2.0	3.8	6.2
Imports	-25.7	-19.4	-15.7
Output	-5.0	-1.5	0.2

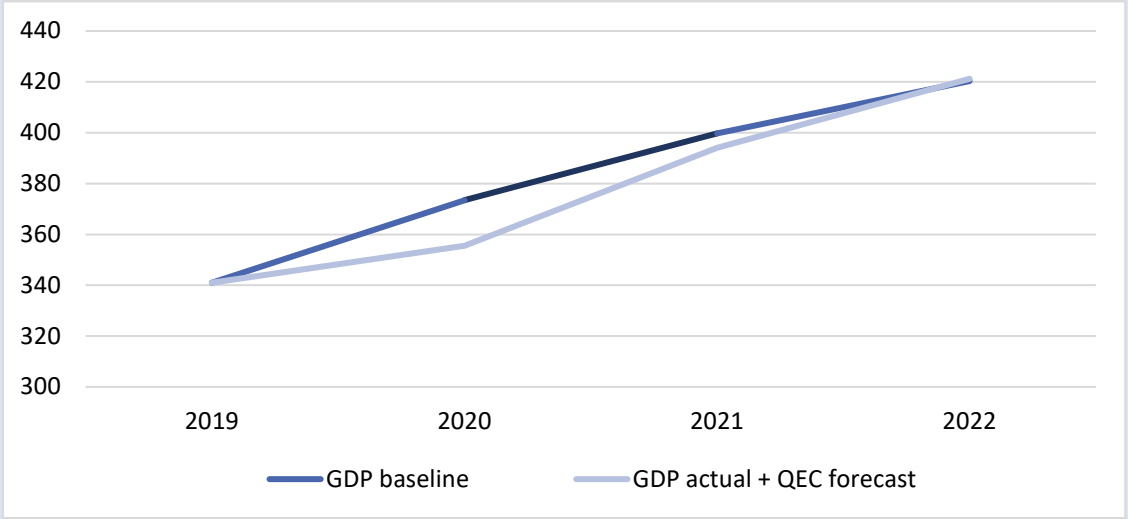
Source: *QEC* estimates.

By comparing the levels under the no-pandemic scenario and under the *QEC* forecasts, we can estimate the cost in output terms to the economy of the pandemic.

The biggest difference is for the investment category, with investment being over 80 per cent less under the pandemic than it would have been in the absence of COVID-19. Investment registered a particularly large decline in 2020. The component of growth least adversely impacted by COVID-19 is the export sector; certain sectors of the Irish pharmaceutical sector actually registered strong exports in 2020 and are forecast to perform particularly well both in 2021 and 2022. Government consumption is, unsurprisingly, the only growth component that is greater under the COVID-19 scenario. This reflects the increased Government expenditure on welfare payments and in the health sector.

Overall, output in both 2020 and 2021 is somewhat lower due to COVID-19 than what it would have been if the pandemic had not occurred. Figure 1 plots the two different output levels from 2019 to 2022. Clearly by 2022, it is apparent that the economy is back to where it would have been in the absence of the pandemic. However, between 2020 and 2021 the loss in output terms is equivalent to approximately €24 billion in monetary terms.

FIGURE A.1 ALTERNATIVE GDP LEVELS 2019-2022 (€ BILLION)



Source: Authors' calculations.

References

Bergin A., A. Garcia-Rodriguez, L. Rehill and E. Sweeney (2021). *Exploring the Impact of COVID-19 and Recovery Paths for the Economy.* Department of Finance.

This Box was prepared by Adele Bergin, Abian Garcia-Rodriguez and Kieran McQuinn.

Another Box in the *Commentary* by McQuinn and Whelan updates earlier work by the same authors in assessing the growth performance of the Euro Area as a whole and of key Member States. The analysis in the Box suggests that, notwithstanding the recent increases in output growth rates in the Euro Area, the relatively modest contribution of TFP growth and investment point to longer-term difficulties for European growth rates. This is compounded by the expected changes in demographics with significant ageing already occurring across the population in most European countries.

BOX B RECENT GROWTH PROSPECTS OF THE EURO AREA

In a series of papers McQuinn and Whelan (2008; 2015; 2016; 2018) have assessed the growth performance of both the Euro Area as a whole and of many of the individual countries in it. Using a growth accounting approach, the analysis examines the contribution of labour, capital and total factor productivity (TFP) to output growth. Based on the analysis, these papers have also produced long-term forecasts for the Euro Area, and in general the conclusions have been quite pessimistic. This is mainly because of the expected ageing of the European population, with the number of people in the key working age set to decline significantly over the longer term. The other underlying issue which has negative implications for long-term growth prospects is the observed decline in total factor productivity. For example, TFP growth in the Euro Area over the period 2000-2013 had almost ground to a halt at 0.2 per cent per year. As is well known, in the Solow model, output per worker is determined in the long run by the rate of TFP growth.

In this Box, we update McQuinn and Whelan (2018), which assessed European growth performance up to 2014, to cover the period 2014-2019. This allows us to assess whether there has been a pick-up in the rate of TFP growth as the European economy has gradually recovered from the aftermath of the great financial crisis (GFC). It is particularly appropriate to examine the growth potential of the Euro Area at a time when it is just recovering from the COVID-19 epidemic.

The analytical framework is based on the standard assumption that output is produced according to a Cobb-Douglas production function:

$$Y_t = A_t K_t^{\alpha} L_t^{1-\alpha} \quad (1)$$

where Y_t is real output, K_t is capital input, L_t is labour input (defined as total hours worked) and A_t is total factor productivity. Output growth can then be expressed as:

$$\frac{\dot{Y}_t}{Y_t} = \frac{\dot{A}_t}{A_t} + \alpha \frac{\dot{K}_t}{K_t} + (1 - \alpha) \frac{\dot{L}_t}{L_t} \quad (2)$$

Using data on output growth, capital growth and labour growth, TFP growth can be calculated. As there is no official capital stock series for the European economy, we construct this series ourselves. To do this we assume that the initial stock of capital in 1970 equals the steady-state value implied by the Solow growth model in this year based on the trends at that point for GDP growth, the investment share of GDP and the growth rate of labour input. The rest of the capital stock series is then derived using the following definition:

$$K_t = (1 - \delta)K_{t-1} + I_{t-1} \quad (3)$$

where I_t is gross fixed capital formation. Depreciation (δ) is assumed to be 6 per cent. Table B.1 summarises the performance of the Euro Area and some select countries over the period 2014-2019.[2]

TABLE B.1 ANNUAL AVERAGE GROWTH PERFORMANCE OF SELECT EURO AREA COUNTRIES (%): 2014-2019

Component	Output	Technology	Capital	Total labour
Germany	1.6	0.6	0.5	0.5
France	1.5	0.7	0.5	0.4
Italy	1.0	0.4	0.0	0.6
Spain	2.8	1.0	0.3	1.6
EA11[3]	1.7	0.6	0.4	0.7

Source: *QEC* estimates.

Overall, while the results are slightly better than the forecasts for the same period in McQuinn and Whelan (2018), they are still underwhelming. For example, over the period 2007-2013, output growth in the Euro Area had contracted by 0.2 per cent. Therefore, a more robust recovery would have been expected in the aftermath of the GFC. It is clear that most of the growth in the 2014-2019 period is coming from increases in labour input, which is unsurprising given the relatively high rates of unemployment after the financial crisis in 2013. However, there has not been a resurgence in TFP growth. While the 0.6 per cent increase in Euro Area TFP growth is an improvement on the 2000-2013 average mentioned earlier, it is somewhat less than the average of 1.5 per cent over the earlier 1970-2000 time period.

Using the same framework, output per worker growth can then be expressed as:

$$\frac{\dot{Y}_t}{Y_t} - \frac{\dot{L}}{L_t} = \frac{\dot{A}_t}{A_t} + \alpha\left(\frac{\dot{K}_t}{K_t} - \frac{\dot{L}}{L_t}\right) \quad (3)$$

2 Note data are available for 2020, however owing to the impact of the pandemic, we have elected not to include that year.

3 Note the Euro Area here refers to the 11 original members of the Euro Area minus Ireland. McQuinn and Whelan (2018) usually use the original 12 members of the Euro Area when referring to the Euro Area aggregate. Ireland is excluded from these results as the distortions in the Irish National Accounts in 2015 can have a quantitative effect on the Euro Area aggregate.

Labour productivity growth can be characterised as a function of TFP growth and 'capital deepening' (growth in capital per unit of labour). Table B.2 summarises the results for output per worker growth for the same countries over the same period.

TABLE B.2 ANNUAL AVERAGE OUTPUT PER WORKER GROWTH PERFORMANCE OF SELECT EURO AREA COUNTRIES (%): 2014-2019

Component	Output	Technology	Capital
Germany	0.8	0.6	0.2
France	1.0	0.7	0.3
Italy	0.4	1.0	-0.5
Spain	0.1	0.4	-0.3
EA11[4]	0.6	0.7	0.0

Source: *QEC* estimates.

Again, the results are somewhat underwhelming with labour productivity in the Euro Area only increasing by 0.6 per cent per annum during the recovery period. It is also worth noting that capital deepening actually declined for two of the countries – Italy and Spain – over the period.

Concluding thoughts

An assessment of the recent contribution to growth for the Euro Area as a whole and for its individual countries reveals only a very modest increase in output growth. From a longer-term perspective, the relatively small contribution to the recovery period 2014-2019 of TFP growth re-emphasises the concerns expressed about longer-term growth prospects for the area in earlier studies by McQuinn and Whelan. Coupled with expected trends in demographics, the prospects for growth in the Euro Area economy over the next few decades are unpromising.

The negligible contribution of investment and capital to the 2014-2019 recovery as evidenced in the results above highlights the comments made by Schnabel (2020) who argued for a more imaginative role for fiscal policy in stimulating European growth performance in the short to medium term. This is particularly the case in a post COVID-19 world.

References

McQuinn K. and K. Whelan (2018). 'Europe's long-term growth prospects: With and without structural reforms' in Campos, N., P. De Grauwe and Ji Yuemei (Eds). *The Political Economy of Structural Reforms in Europe*, Oxford University Press.

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[4] See footnote 3.

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This Box was prepared by Kieran McQuinn and Karl Whelan (UCD).

DEMAND

Key Points

- *Consumption was over 11 per cent lower in the first quarter of 2021 compared with Q4 2020 as public health restrictions were imposed to slow the spread of COVID-19.*
- *The fall in consumption in Q1 2021 was larger in Ireland than that typically experienced by other European countries.*
- *A considerable recovery in consumption is expected as households unwind savings balances and undertake postponed expenditure as the economy reopens.*
- *Consumer price inflation has increased in Ireland and the Eurozone in 2021 mainly due to energy prices.*

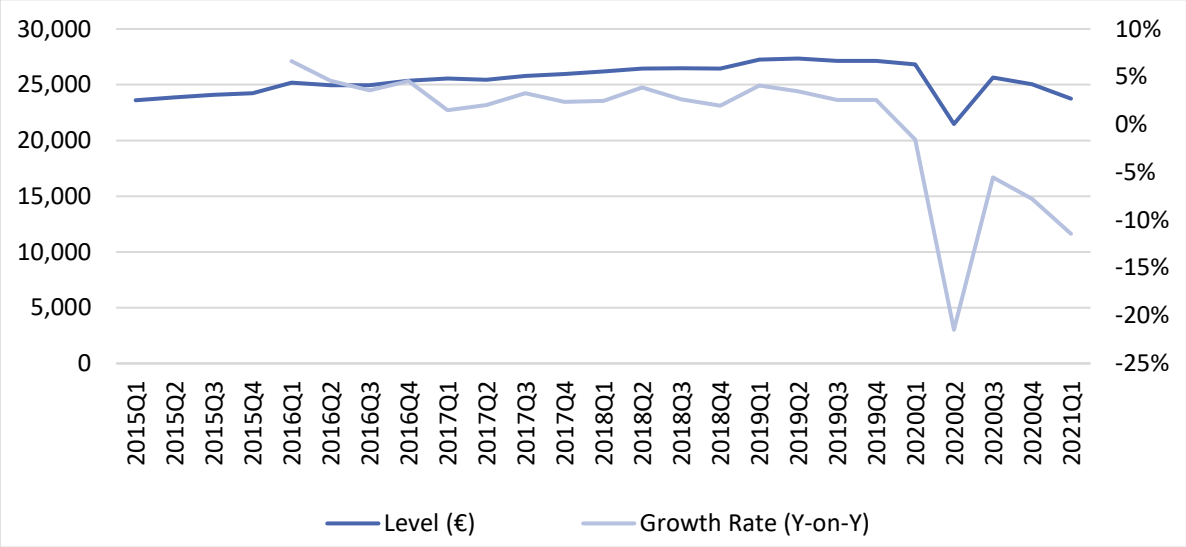
Household sector consumption

Following a rapid increase in infections in December 2020 and January 2021, strict public health measures were reimposed during the first and into the second quarters of 2021 to control the spread of COVID-19 in Ireland. These measures required the closure of large parts of the Irish economy and society and restricted households' ability to undertake consumption.

Figure 2 presents the trend in the level (LHS) and year-on-year growth rate (RHS) of household consumption at constant market prices. While the largest drop in 2020 occurred during the second quarter, all quarters in 2020 registered lower consumption than in 2019. As noted in the previous *Commentary* (McQuinn et al., 2021), overall consumption was 9 per cent lower in 2020 than in 2019 which

represents a very severe contraction in household spending. The decline continued in 2021 and consumption was lower by over 11 per cent on a year-on-year basis in the first quarter.

FIGURE 2 QUARTERLY PERSONAL CONSUMPTION ON GOODS AND SERVICES: CONSTANT MARKET PRICES AND SEASONALLY-ADJUSTED GROWTH RATES (RHS) & LEVEL (LHS)



Source: Central Statistics Office.

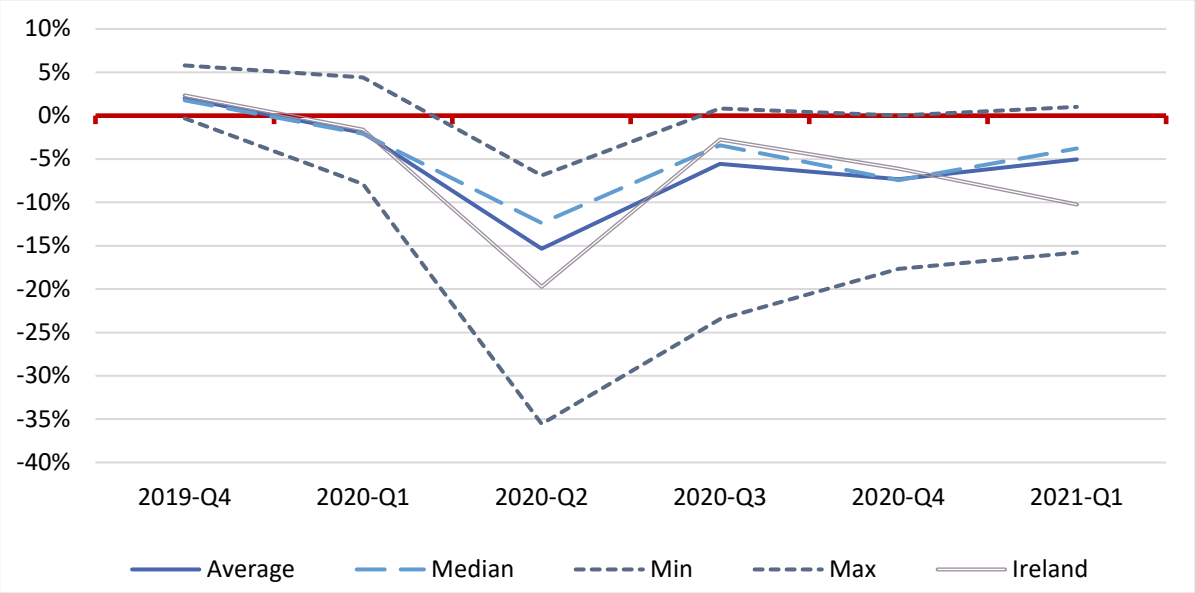
Given the path of consumption expenditure is highly dependent on the degree of public health measures in place and the number of COVID-19 infections, it is useful to benchmark the Irish experience with other countries. Figure 3 presents the annual growth rate of consumption expenditure of households for Ireland and selected other European countries for which data were available.[5] The figure presents the average and median growth rates[6] across the other countries (excluding Ireland) to capture the typical experience. Also presented are the minimum and maximum growth rates to provide an indication of the spread across countries. The fall in consumption in Ireland was larger in the second quarter of 2020 than the mean and median change in other countries. This coincided with a more stringent set of public health restrictions being in place in Ireland than elsewhere during this period (O'Toole, 2020). The recovery in Q3 and Q4 of 2020 in Ireland was notable and in line with other countries. However, as noted earlier for Ireland, the average and median consumption growth for other countries (year-on-year) was negative in all quarters of 2020 relative to 2019, indicating the sustained contraction from the COVID-19 pandemic across Europe.

5 Please note the figures differ from the CSO data due to differences in data definitions between the selected series in Eurostat and the CSO data. The countries included are as follows: Ireland, Belgium, Czechia, Denmark, Germany, Estonia, Greece, Spain, France, Croatia, Italy, Latvia, Lithuania, Luxembourg, Hungary, Malta, Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, Iceland, Norway, and Switzerland.

6 These are unweighted, simple averages and medians across the countries. They do not take into account country size etc.

In 2021, the drop in consumption in Ireland was larger than the mean and median of the other countries examined; the median fall was just under 4 per cent whereas Ireland experienced a double-digit decline.

FIGURE 3 YEAR-ON-YEAR CHANGE IN FINAL CONSUMPTION EXPENDITURE FOR SELECTED EUROPEAN ECONOMIES (Q4 2019 – Q1 2021)



Source: ESRI Analysis of Eurostat data. Series: Final consumption expenditure of households, chain linked volumes (2015). Figures may differ between these data and the CSO National Accounts Consumption Figure reported elsewhere due to definitional differences. The selection of this indicator was undertaken to ensure a consistent comparison across counties with the same variable from Eurostat.

As public health restrictions differ across sectors and activities, and many companies attempt to adapt to differing expenditure channels such as online or click and collect activities, it is informative to explore trends in expenditure activity across different types of goods and services that constitute overall consumption. Figure 4 presents Eurostat data on different types of goods and services for Ireland and selected other European countries. The number of countries is lower for these charts as fewer countries report the subcomponents of consumption to Eurostat.[7] The data are presented for durable goods (such as vehicles or furniture), non-durables (such as food items and non-reusable items), semi-durable goods, and services.

[7] The countries are: Czechia, Denmark, Germany, Estonia, France, Italy, Latvia, Luxembourg, Malta, Netherlands, Austria, Romania, Finland, and Sweden as well as Ireland.

FIGURE 4 YEAR-ON-YEAR CHANGE IN FINAL CONSUMPTION EXPENDITURE SUBGROUPS FOR SELECTED EUROPEAN ECONOMIES (Q4 2019 – Q1 2021)

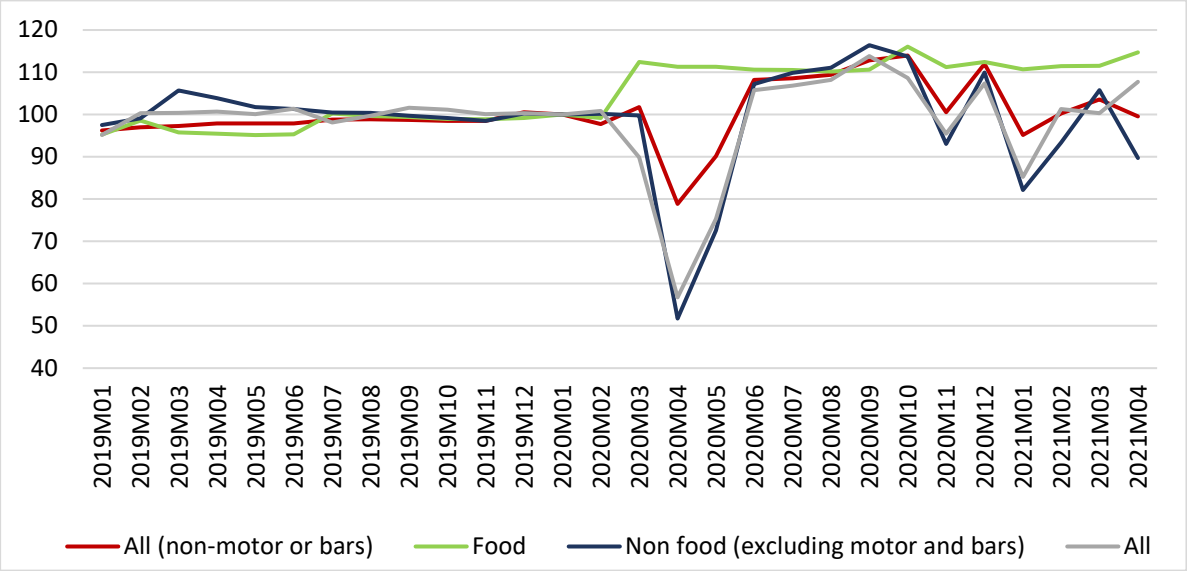
Source: ESRI Analysis of Eurostat data. Series: Final consumption expenditure of households, chain linked volumes (2015).
Note: Figures may differ between these data and the CSO National Accounts Consumption Figure reported elsewhere due to definitional differences. The selection of this indicator was undertaken to ensure a consistent comparison across counties with the same variable from Eurostat.

For Ireland, the drop in consumption of durables and non-durable goods was much larger than in other European countries for Q3 and Q4 2020 as well as in Q1 2021. The fall in semi-durable goods in Ireland was more in line with other European countries in 2020 but larger in Q1 2021. For services, Ireland experienced a lower fall in consumption in Q3 and Q4 2020 and the decline in Q1 2021 was in line with the experience of other European countries. In general, it appears that, relative to other countries, the adjustment of consumption on goods in Ireland was more than

that for services. This likely reflects the relative strictness across countries of public health restrictions around retail outlet openings etc.

To provide more insight into the development of expenditure within Ireland, Figure 5 presents the retail sales index. The chart presents the overall retail sales index as well as several sub-indices. The major drop in Q2 2020 was followed by a marked pick-up in Q3 whereby the retail sales index was above its pre-pandemic level. A consistent increase in food expenditure can be observed as households spent more time at home. Declines in non-food items were experienced periodically and correlate with the public health restrictions. The re-imposition of Level 5 measures in October-November 2020 and again in the first quarter of 2021 are associated with further drops in expenditure on non-food items. Overall a moderate increase was experienced in April 2021 as the economy began to reopen.

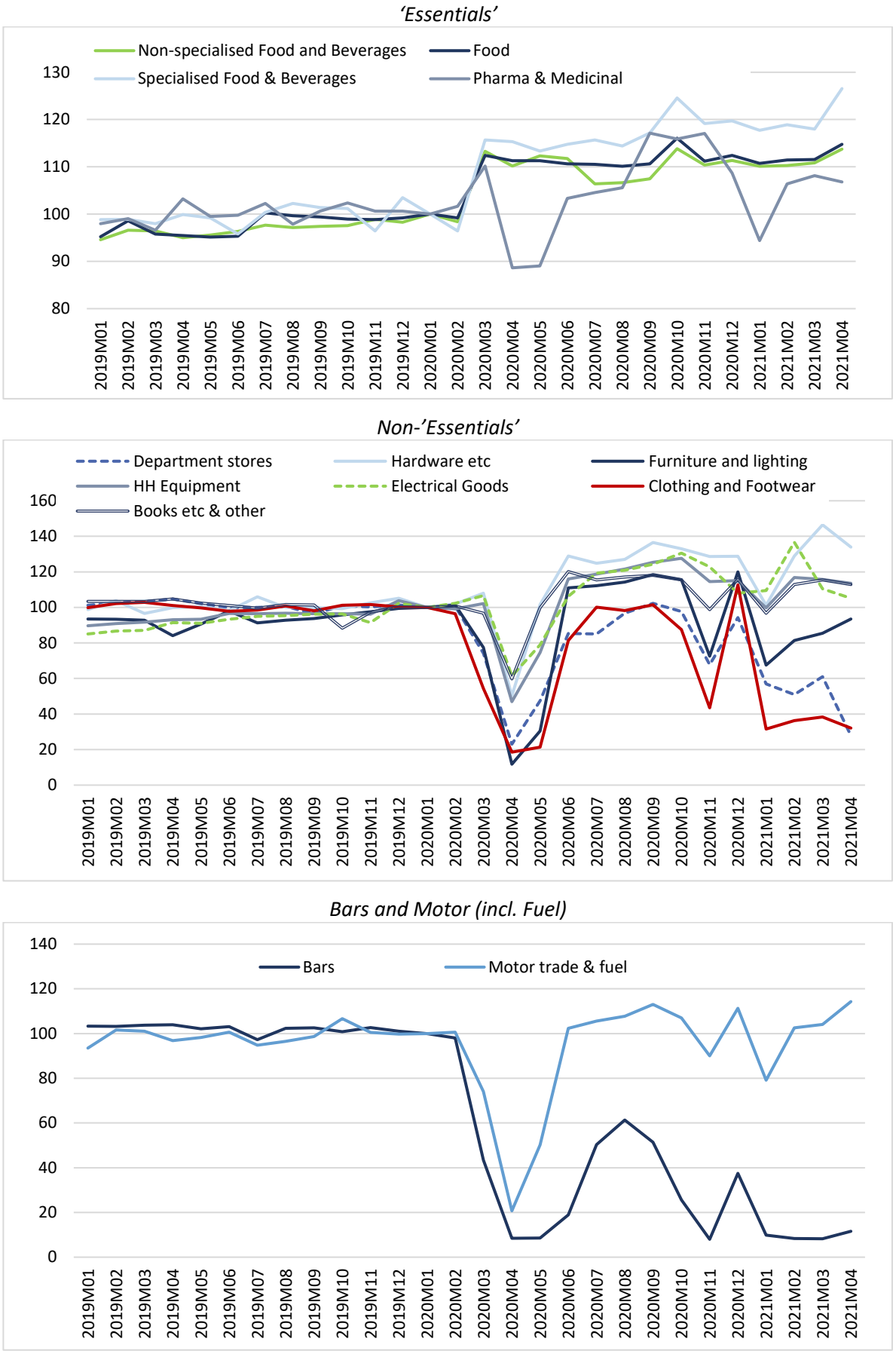
FIGURE 5 DEVELOPMENTS IN RETAIL SALES INDEX (ADJUSTED TO 100 IN JANUARY 2020)



Source: ESRI Analysis of CSO data. This sets the retail sales index (volumes) at 100 in January 2020.

To understand potential paths for consumption for 2021 and beyond, it is useful to further explore the specific changes in detailed retail sales sub-items. Figure 6 breaks out the sub-indices by loosely defined categories of essentials (food and medical supplies), non-essentials and bars, and the motor trade. While all the essential items experienced a similar increase in spending through 2020, the expenditure pattern on non-essential items is highly differentiated. Expenditure on hardware items, household equipment, electrical goods and other items recovered from the initial Q2 2020 lockdown and have remained at elevated levels since this point, despite the imposition of different lockdown measures. This highlights the changed sectoral composition of the October 2020 and January 2021 lockdowns.

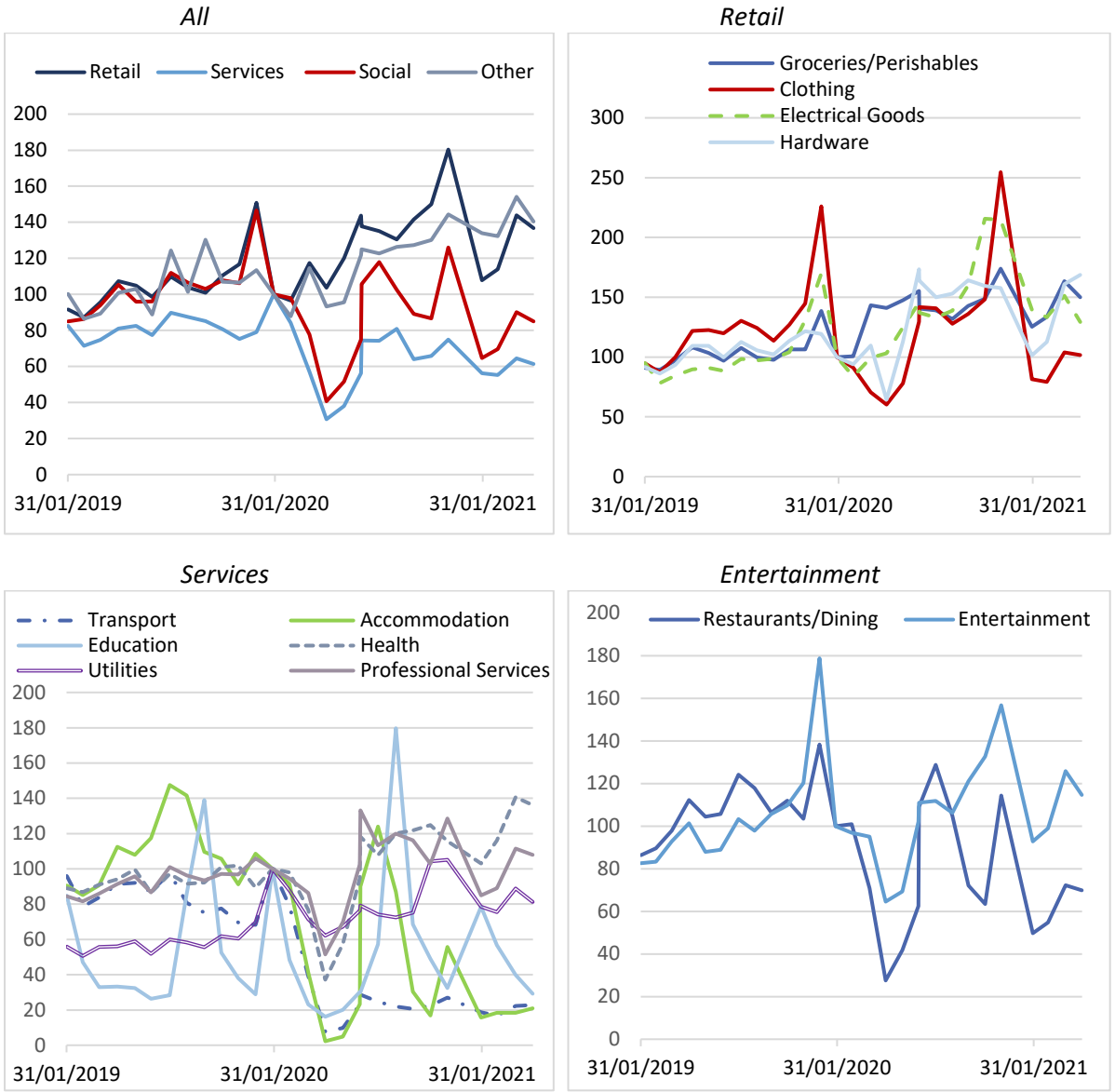
FIGURE 6 DEVELOPMENTS IN RETAIL SALES SUB-INDICES



Source: ESRI Analysis of CSO data.

Other retail items such as sales in Department stores, clothing and footwear, and furniture and lighting dropped below pre-pandemic levels in the second and third lockdowns. The final figure presents the expenditure on bar sales and motor activities (including fuel). Both of these sectors experienced a dramatic decline in Q2 2020. A similar pattern can be discerned from the Central Bank of Ireland data (Figure 7) on expenditure on credit and debit cards. These data complement the retail sales index as they capture expenditures that may not be covered by the enterprises reporting to the retail survey. However, these indices are only in value terms, so they are not adjusted for changes in prices over the period.

FIGURE 7 INDICES FOR EXPENDITURE ON CREDIT AND DEBIT CARDS (M1 2019 – M4 2021)



Source: ESRI Analysis of Central Bank data.

These data document a strong increase in expenditure on essential goods, and very large declines in expenditure on accommodation, transport, restaurants and general social activities. The data suggest that the declines in consumption are highly concentrated in certain activities. It is likely that when a recovery occurs, consumption will be concentrated in these 'constrained' areas.

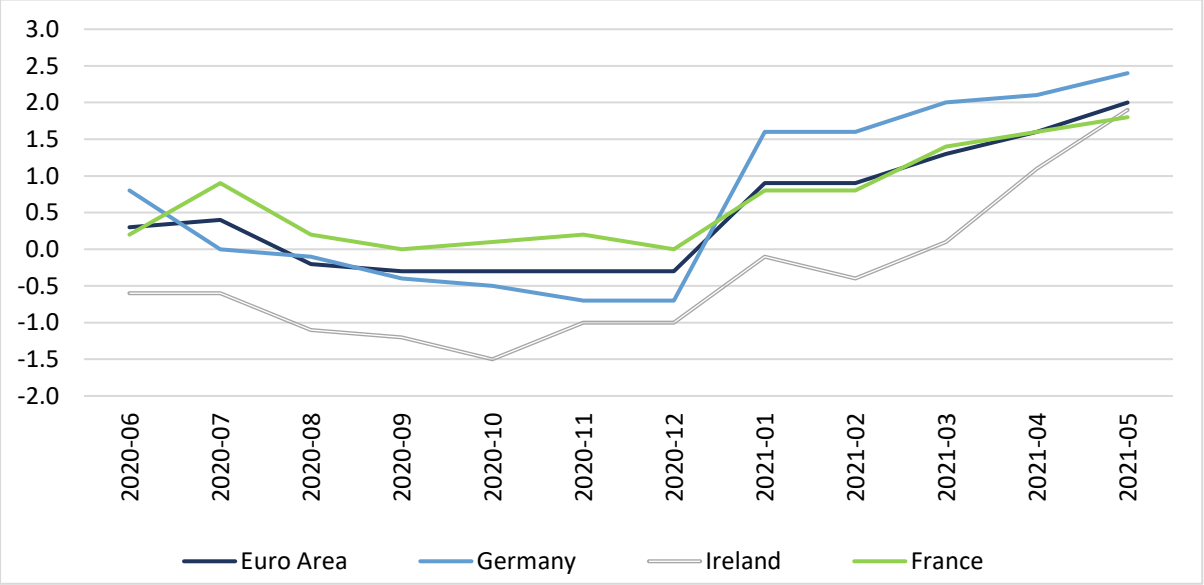
Consumption forecasts

In terms of our outlook for consumption for 2021, a number of factors are particularly important. In previous *Commentaries*, we have noted the strong increase in the savings ratio in Ireland and households have, in general, been building up excess savings during the pandemic. As the economy begins to recover, and the vaccine programme continues to provide a long-term route towards fewer public health restrictions, we expect a very strong increase in expenditure by households. The recovery is likely to be uneven and is set to be focused on those goods and services which households have been constrained from consuming. It is therefore likely that many of the retail sales areas which are currently operating well below pre-pandemic levels (bars, restaurants, clothing and footwear, department stores) are likely to experience notable increases in expenditure as the economy begins to recover. Other goods and service items which recovered strongly after the initial lockdown are less likely to experience a significant increase in consumption as restrictions ease. In our forecast for 2021, we expect consumption to increase by 7.5 per cent and, for 2022, we expect consumption growth of 8.5 per cent.

Developments in consumer prices

During 2020, consumer prices fell consistently as the pandemic led to a marked fall-off in demand for goods and services which seemed to outweigh supply disruptions. However, since the turn of the year inflationary pressures have returned to Ireland and to other European economies. In May 2021, the inflation rate for Ireland had increased to just under 2 per cent as it has in the broader Eurozone and in large economies such as Germany and France. These trends are depicted in Figure 8. The pick-up in inflation is of particular interest given the long-term price stability target of the European Central Bank which is 2 per cent. The deployment of non-standard monetary policy measures, which have been critical in eased financial conditions and financial adjustments for many countries following the pandemic, may come under pressure to be withdrawn or tapered if price pressures continue.

FIGURE 8 HARMONISED CONSUMER PRICE INDEX – YEAR-ON-YEAR % CHANGE



Source: Eurostat.

While it might not be unexpected to experience an increase in inflationary pressures following a period of constrained industrial and consumer activity (and demand rebounds), understanding the extent to which these patterns may represent a temporary or more permanent increase in inflation is critical for policymakers. To provide more insight into what is driving the rise in prices, Figure 9 presents the trend in inflation for four subgroups of items: non-energy industrial goods, energy, food, and services. It is clear that part of the inflationary pressure is coming from a sustained rebound in energy prices which is not unexpected given the declines in energy prices in 2020.

Looking forward, an important question is whether the pick-up in inflation becomes more persistent? At present, the ECB does not see this risk materialising. In its most recent Governing Council press briefing, the ECB noted the current increase in inflation was likely to be temporary, due to base effects and energy price increases. Given the economic slack in the European economy, they note longer term inflation trends are below their target rate.[8] Furthermore, Lane (2021)[9] cautioned that recent price spikes for goods and services as economies continue to reopen from COVID-19 restrictions do not mark a new era of high inflation. However, there is a risk that, even a short period of higher inflation could lead to raised inflation expectations which would be incorporated into wage bargaining and lead to increases in labour costs. Close monitoring of inflation rates,

8 https://www.ecb.europa.eu/press/pressconf/2021/html/ecb.is210610~115f4c0246.en.html.

9 For more details see: https://www.irishtimes.com/business/economy/reopening-price-spikes-do-not-mark-new-era-of-inflation-philip-lane-1.4570494.

and their determinants, will be needed as the Irish and European economies reopen.

FIGURE 9 HARMONISED CONSUMER PRICE INDEX, BY SUBCOMPONENT, Y AXIS: YEAR-ON-YEAR % CHANGE

Source: Eurostat.

Given the developments in prices, our projections for consumer price inflation for 2021 is 1.2 per cent and 1.5 per cent for 2022. However, there is a risk that these estimates may be low if the increase in consumption is very strong in 2021 and this spills over into inflation in particular items where pent-up demand may be focused.

TRADED SECTOR

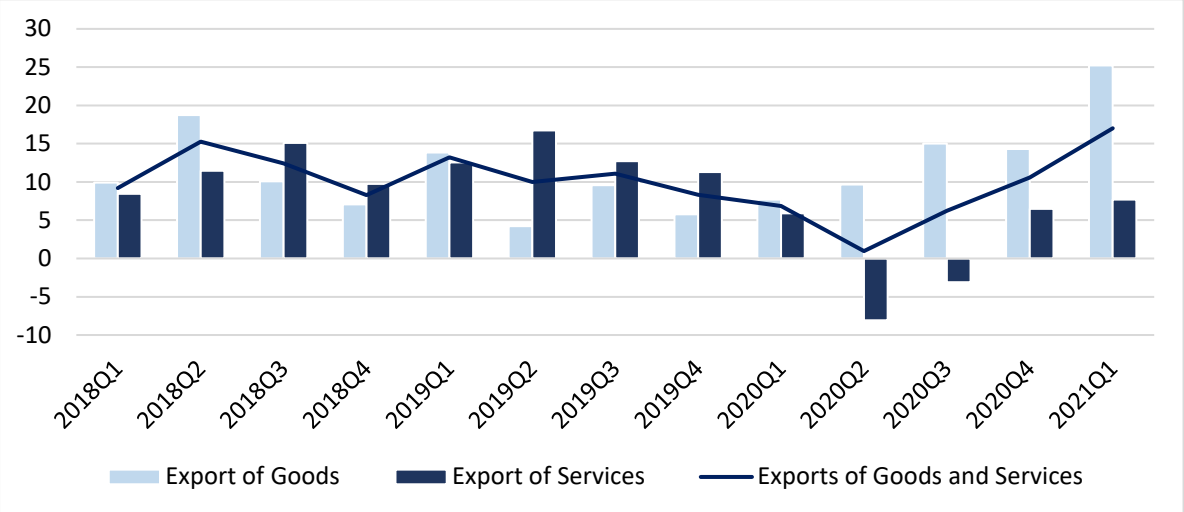
Key Points

- *Exports grew by 5.8 per cent in Q1 2021 compared to Q4 2020.*
- *The main drivers of export growth have been medicinal and pharmaceutical goods and ICT which have grown strongly throughout the pandemic.*
- *Compared to Q4 2020, imports declined by 8.9 per cent in Q1 2020 as both goods and service imports declined.*
- *Irish net exports were €46.3 billion in Q1 2021.*

A notable characteristic of the Irish economy during the COVID-19 pandemic has been the particularly strong performance of the Irish traded sector. In Q1 2021, Irish exports increased by 5.8 per cent relative to the final quarter of 2020. This was complemented with a decline in imports of 8.9 per cent over the same period. The joint impact of these changes was to increase Irish net exports by €15.7 billion compared to Q4 2020, to approximately €46.3 billion in Q1 2021.

Exports of both goods (merchandise) and services performed well in the first quarter of 2021. Figure 10 shows the annual growth in seasonally-adjusted Irish exports by quarter. In Q1 2021 exports increased by 17.0 per cent annually. This was driven by the strong growth in both services and goods exports with the former increasing by 7.7 per cent and the latter increasing by 25.2 per cent compared to Q1 2020.

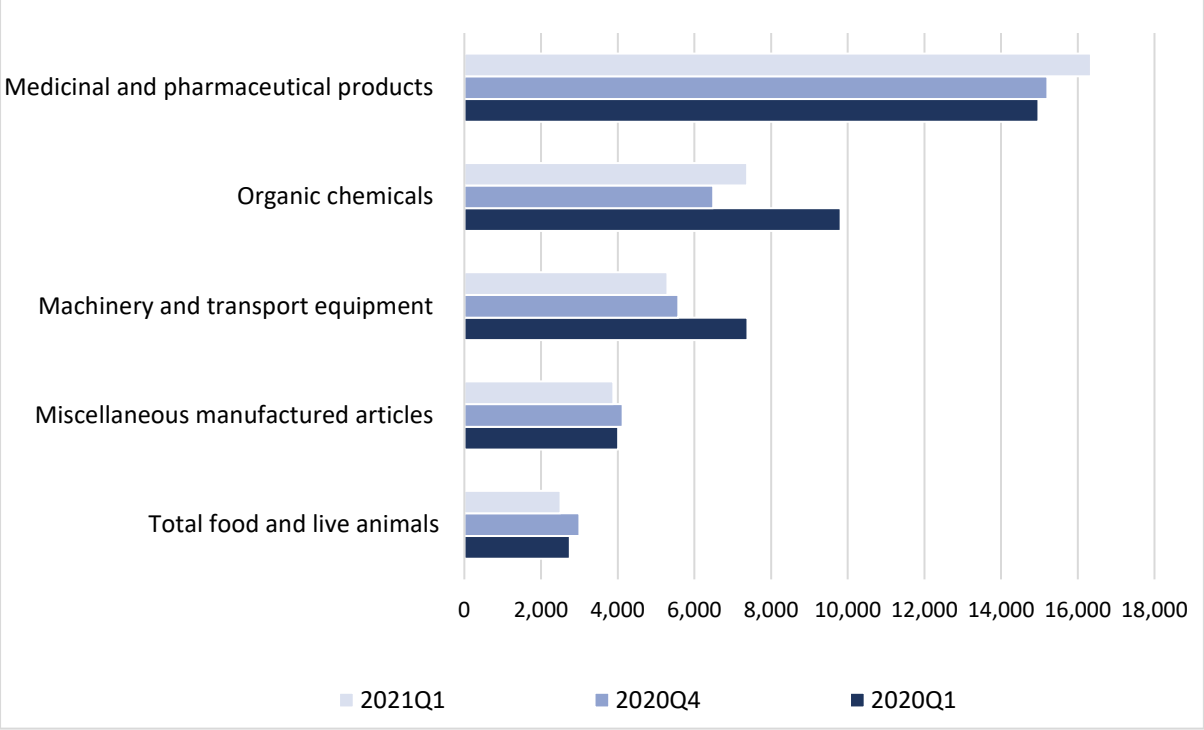
FIGURE 10 SEASONALLY-ADJUSTED EXPORTS: YEAR-ON-YEAR GROWTH (VOLUME, %)



Source: Central Statistics Office.

Medical and pharmaceutical products accounted for around 40 per cent of Irish goods exports in Q1 2020 in terms of value. Figure 11 shows that exports of this commodity group were up compared to the previous quarter (7.5 per cent) and the same period the previous year (9.2 per cent) in Q1 2021. While the strong growth of this commodity sector is undoubtedly positive for the Irish economy, the fact that this sector is dominated by a small number of multinational corporations leaves the Irish economy vulnerable to the performance of a relatively small number of companies. As mentioned in previous *Commentaries*, it is also important to note that exports of these products may be elevated due to the nature of the pandemic, and once the global health emergency passes it is possible that there will be a reduction in such exports. Between Q4 2020 and Q1 2021 the value of organic chemicals exports increased by 13.6 per cent but was down by 24.8 per cent annually. The value of exported miscellaneous manufactured goods fell by 5.9 per cent over the same period. The value of exports of machinery and transport equipment declined by 5.2 per cent compared to Q4 2020 but was down by 28.3 per cent compared to Q1 2020.

FIGURE 11 GOODS EXPORTS BY COMMODITY GROUP (VALUE, € MILLION)

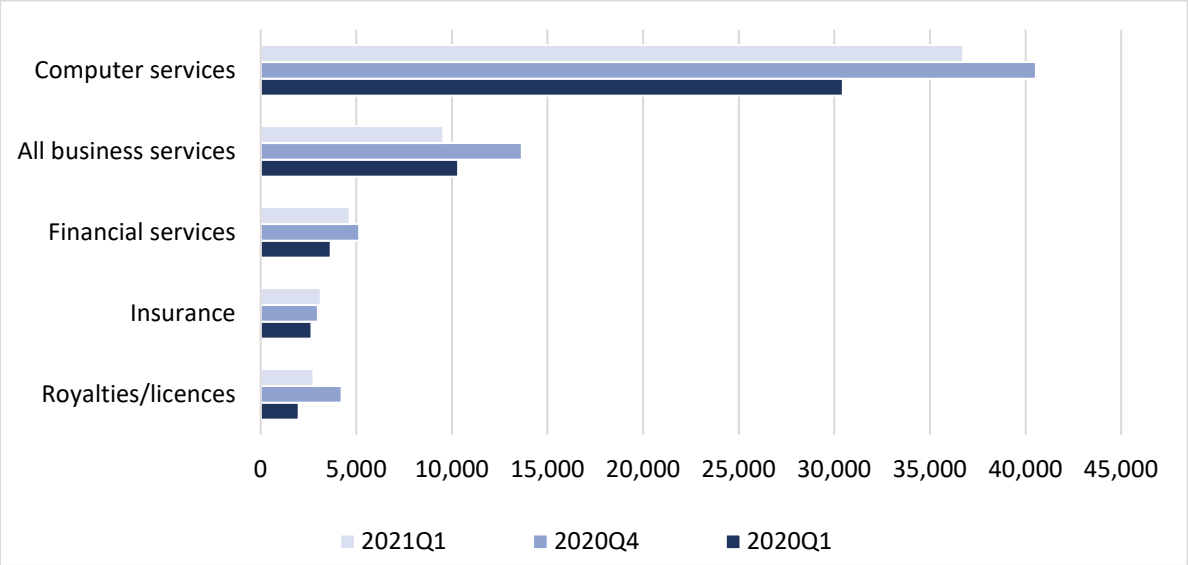


Source: Central Statistics Office.

Service exports performed well over the first quarter of 2021. Computer services, which accounted for 61 per cent of the value of total service exports in Q1 2021, grew by 20.7 per cent in the year to Q1 2021 despite being down 9.4 per cent on Q4 2020. As shown in Figure 12 the performance of service exports is predominantly influenced by the performance of the computer services sector.

On the other hand, business services, which also account for a significant proportion of Irish service exports (16 per cent), experienced a decline on both an annual and quarterly basis in Q1 2021. The value of exports in this area decreased by 30.1 per cent relative to Q4 2020 and by 7.4 per cent relative to Q1 2020. Financial services, insurance and royalties/licenses each increased annually by 26.8, 18.4 and 39.1 per cent respectively.

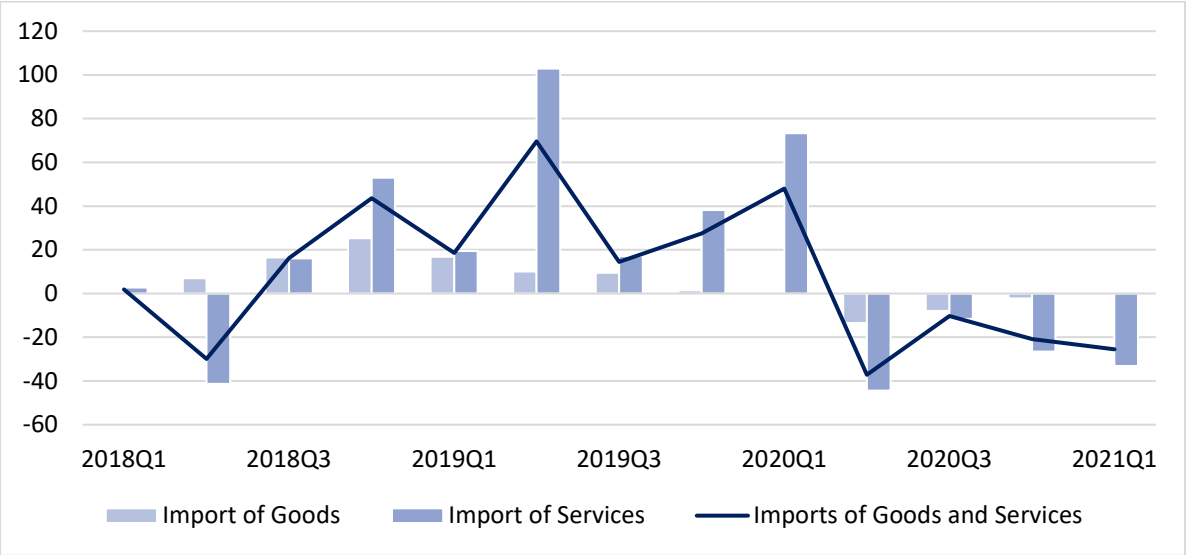
FIGURE 12 SERVICE EXPORTS BY COMPONENT (VALUE, € MILLION)



Source: Central Statistics Office.

Figure 13 shows annual import growth remained negative in Q1 2021 as imports of both goods and services declined over the period. Compared to Q1 2020, imports were down by 8.9 per cent, with goods imports declining 2.0 per cent and services declining by 11.7 per cent. Furthermore, as is evident in the Figure 13, Q1 2021 marks the fourth quarter in a row that imports have decreased on an annual basis.

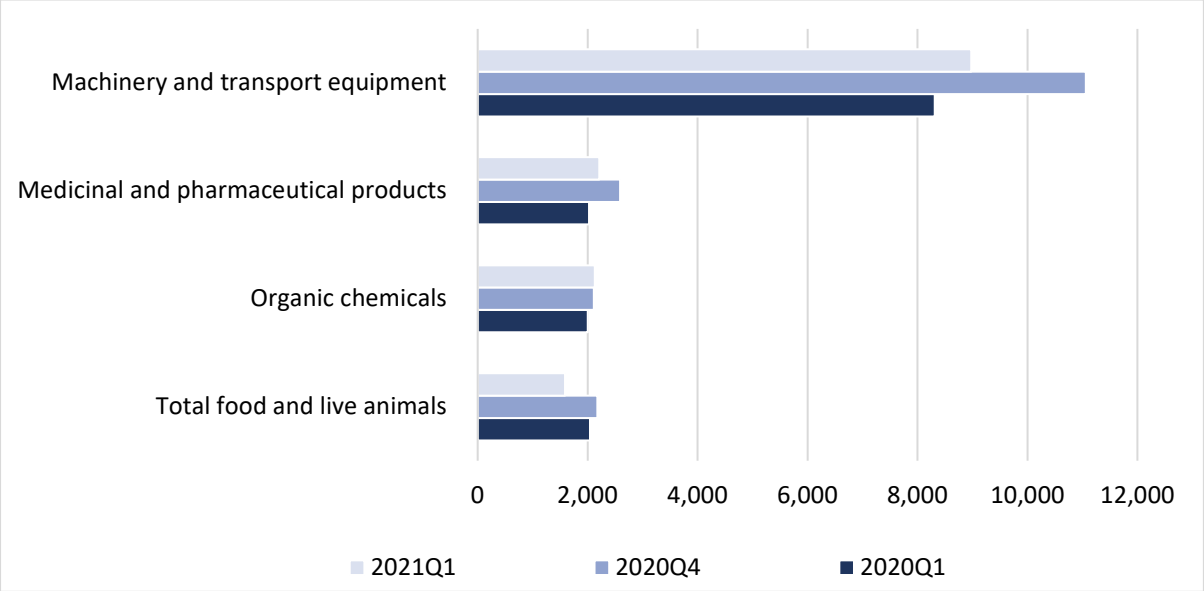
FIGURE 13 SEASONALLY-ADJUSTED IMPORTS: YEAR-ON-YEAR GROWTH (VOLUME, %)



Source: Central Statistics Office.

Figure 14 shows goods imports by commodity group. Machinery and transport equipment accounted for 42 per cent of goods imports in terms of value in Q1 2021. While imports of machinery and transport equipment increased by 8.0 per cent in the year to Q1 2021, they declined by 18.8 per cent compared to Q4 2020. However, this quarterly decline is on the back of a relatively large figure for Q4 2020, some of which may be attributable to stockpiling or purchases brought forward in advance of Customs changes stemming from Brexit. Organic chemicals and medicinal and pharmaceutical products each accounted for approximately 10 per cent of the value of good imports in Q1 2021. Imports of organic chemicals increased by 6.5 per cent annually in Q1 2021 in terms of value, while imports of medicinal and pharmaceutical products increased by 9.1 per cent over the same period despite being down 14.8 per cent on Q4 2020.

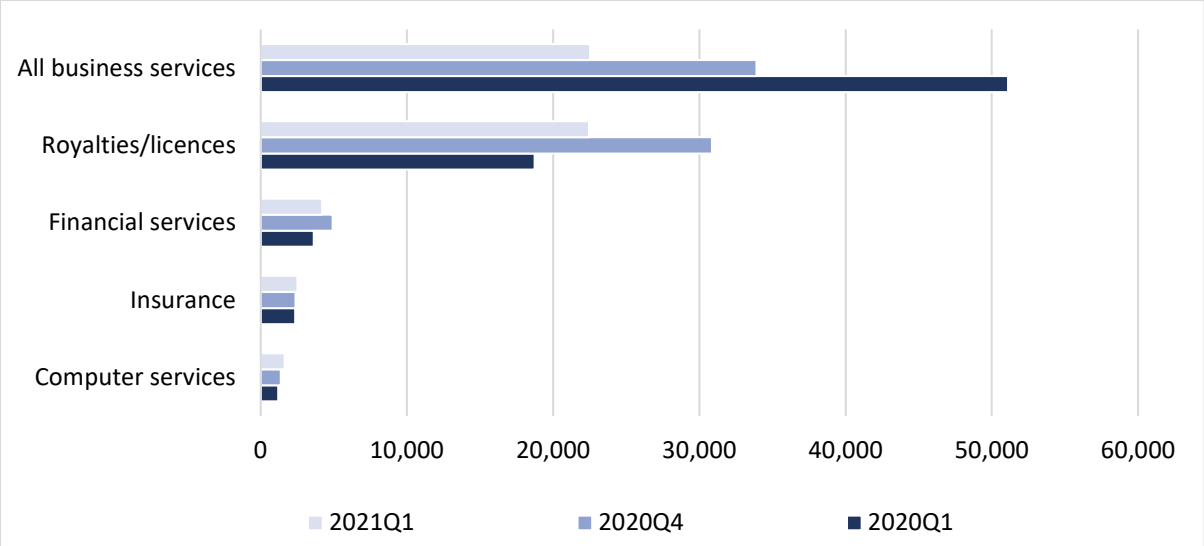
FIGURE 14 GOODS IMPORTS BY COMMODITY GROUP (VALUE, € MILLION)



Source: Central Statistics Office.

Figure 15 shows service imports by commodity group. Business services accounted for 40 per cent of service imports in terms of value in Q1 2021. This includes services such as research and development, and operational leasing. Service imports in this field were down substantially both quarterly (33.6 per cent) and annually (55.9 per cent). While imports of royalties and licences decreased by 27.2 per cent on a quarterly basis, service imports from this category increased by 19.9 per cent annually. Similarly, financial service imports also experienced a quarterly decline (14.6 per cent) and an annual increase (15.5 per cent).

FIGURE 15 SERVICE IMPORTS BY COMMODITY GROUP (VALUE, € MILLION)



Source: Central Statistics Office.

After lengthy negotiations, the UK officially left the EU on 31 January 2020 and entered the transition period. On 31 December 2020, the transition period ended, and the UK now trades with EU on terms agreed in the Trade and Cooperation Agreement signed on 30 December 2020. However, not all aspects of the trade deal are fully in force at present and the pathway of trade between the UK and Ireland throughout 2021 and beyond will likely be affected by the manner and timing of the trade deal's further implementation by both the EU and the UK.

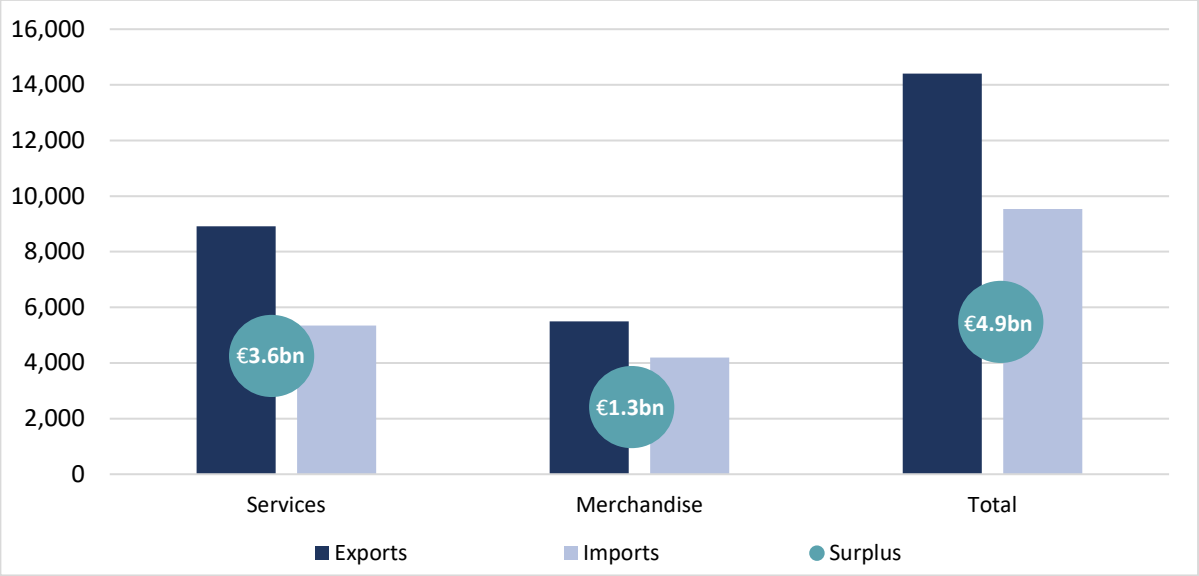
At present there is an asymmetry in the required Customs checks on cross-border trade between the EU and UK. To export goods from the UK to the EU, businesses now need to comply with new procedures such as UK export declarations and the import requirements of EU Member States. Some products such as certain chilled meats and plant species can no longer be exported from the UK to the EU. While VAT and excise rules, and 'rules of origin' now apply on trade in both directions, for imports from the EU, the UK is introducing border controls in stages with full Customs checks not applying until January 2022.[10] While there is still a significant degree of uncertainty around the timing of increases in Customs checks and the Northern Ireland Protocol, stricter trade rules will almost certainly have a negative impact on trade.

Figure 16 shows the value of Irish trade with the UK in Q1 2021. In the first quarter of 2021, the value of goods exports to the UK was greater than that of imports resulting in a goods trade surplus of €1.3 billion. In terms of value, exports of services to the UK were also greater than imports resulting in a services trade surplus of €3.6 billion. As a result, total Irish exports to the UK were greater than total imports resulting in an overall trade surplus of approximately €4.9 billion.[11]

10 For more Information see: https://www.gov.uk/government/publications/summary-the-uks-new-relationship-with-the-eu/summary-the-uks-new-relationship-with-the-eu#importing-and-exporting-goods.

11 For more information see: https://www.cso.ie/en/releasesandpublications/er/gei/goodsexportsandimportsmarch2021/.

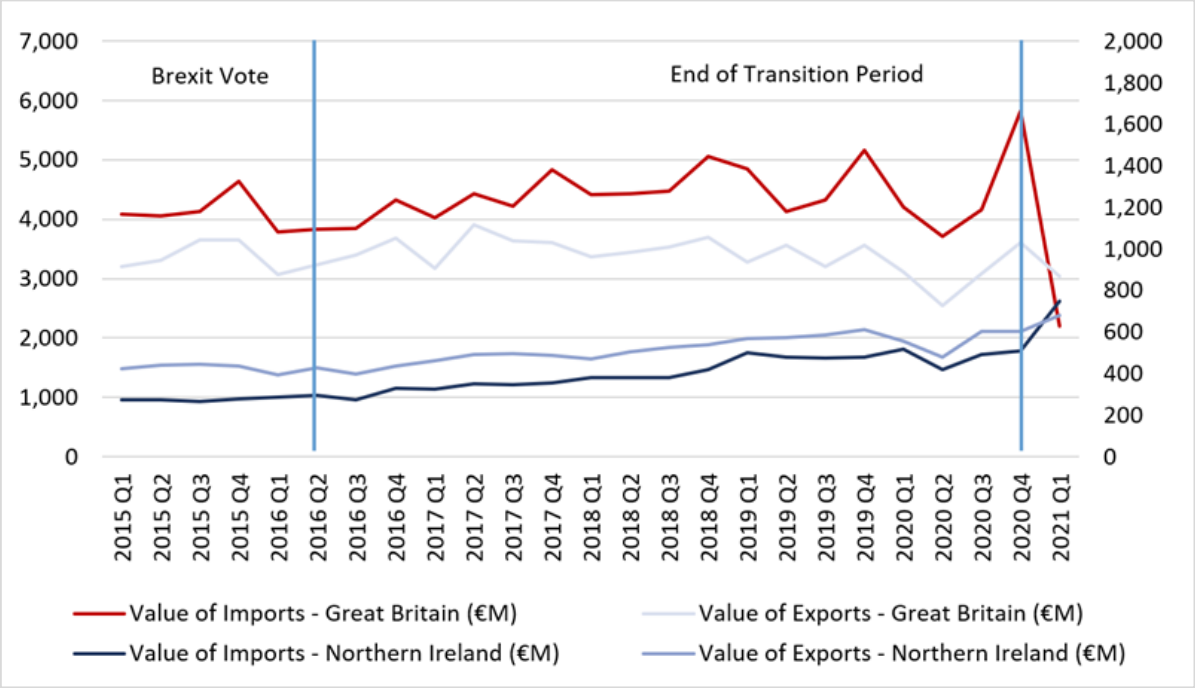
FIGURE 16 TRADE WITH THE UK IN Q1 2021 (VALUE, € MILLION)



Source: Central Statistics Office.

Monthly goods trade data offer an insight into the impact of Brexit in the first quarter of 2021. Figure 17 shows the value of goods imports and exports from/to Great Britain (mainland UK) and Northern Ireland from January 2015 to March 2021. While goods imports from Great Britain (GB) declined by 47.6 per cent in terms of value in Q1 2021 compared to Q1 2020, goods exports to GB only declined by 2.6 per cent over the same period. This decline in imports from GB without a commensurate decline in exports to GB is likely linked to the aforementioned asymmetry in Customs procedures between the UK and EU and has contributed to the increase in the Irish trade surplus documented above. The value of trade between Ireland and Northern Ireland also increased in Q1 2021. The value of goods exports to Northern Ireland increased by 22.4 per cent between Q1 2021 and Q1 2020. The value of goods imports from Northern Ireland also increased (by 44.2 per cent) over the same period. While the increase in imports from Northern Ireland represents a significant growth rate, in level terms it is dwarfed by the fall in imports from GB with the former worth around €82 million and the latter approximately €2 billion.

FIGURE 17 TRADE WITH GREAT BRITAIN (LHS) AND NORTHERN IRELAND (RHS) (VALUE, € MILLION)



Source: *QEC* calculations using Central Statistics Office data.

As the vaccine is rolled out in many countries this year and lockdowns lift, the economies of Ireland's largest trading partners are expected to grow. In 2021 we expected both exports and imports to record positive growth with exports increasing by 13.3 per cent and imports increasing by 11.0 per cent annually. While this would constitute somewhat of a slow-down in the growth rate of exports for the remainder of the year compared with that observed in the first quarter, strong growth is still expected. We expect exports to grow by 8.3 per cent in 2022 while imports are expected to grow by 9.0 per cent.

INVESTMENT

Key Points

- *Modified investment declined by 4.8 per cent annually in Q1 2021 compared to a 3.8 per cent decline in Q4 2020.*
- *We expect approximately 18,000 housing completions in 2021 and 21,000 in 2022.*
- *Investment forecast to grow by 5.8 per cent in 2021 and by 7.6 per cent in 2022.*

The lasting negative impact of the COVID-19 pandemic on the rate of investment continued during the first quarter of 2021 as public health restrictions were reintroduced in January. In particular, overall gross fixed capital formation (GFCF)

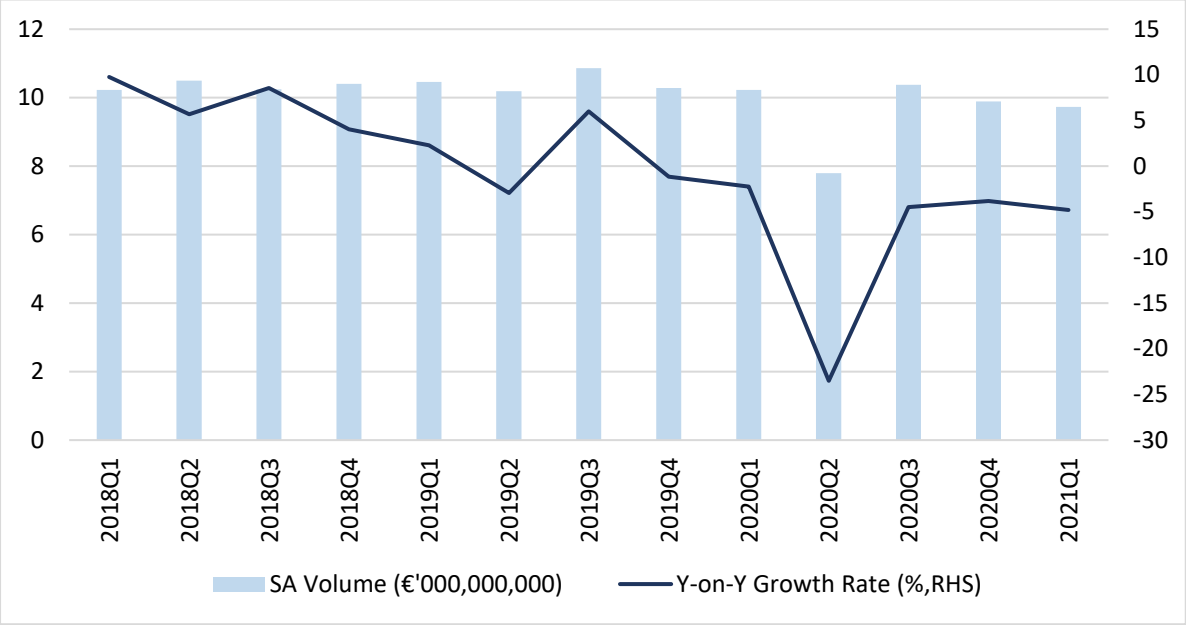
declined by almost 62 per cent compared to the first quarter of 2020, while the quarterly change (compared to Q4 of 2020) was almost 19.5 per cent. This marks the fourth consecutive quarter that total investment registered negative growth. The significant decline is a result of the large drop in the machinery and equipment and intangibles categories, where investment expenditures dropped by €30 billion compared to Q1 2020 (-69 per cent), while investment expenditures in building and construction declined by 17.9 per cent.

As has been mentioned in previous *Commentaries*, the overall rate of investment is not indicative of real investment activity in Ireland. This is due to the well documented distortions in the headline investment figures caused by the operations of large multinational firms (see FitzGerald, 2018; 2020) which mask the developments in underlying domestic investment behaviour. In order to obtain a better indication of domestic investment activity, we focus on the Modified Domestic GFCF series developed by the CSO, which excludes investment in intellectual property and aircraft related to leasing, thus removing the distortionary impact.

The developments in domestic investment activity are depicted in Figure 18; following the 24 per cent annual decline in investment during Q2 2020, investment growth was negative for the rest of 2020 and for the first quarter of 2021. In Q1 2021 domestic GFCF declined by 4.8 per cent. Although the data for most of the subcomponents of modified investment were not released for this time period due to confidentiality reasons, the data available for the building and construction activity category[12] show a decline of 17.9 per cent for Q1 2021. This marks the sixth consecutive quarter during which domestic investment growth was negative, indicating the highly adverse impact of COVID-19 on investment in the Irish economy.

[12] This category includes Dwellings, improvements and other buildings and construction. The aggregation to one category is necessary due to the lack of identifiable seasonality in some of the subcomponents.

FIGURE 18 MODIFIED GROSS DOMESTIC FIXED CAPITAL FORMATION



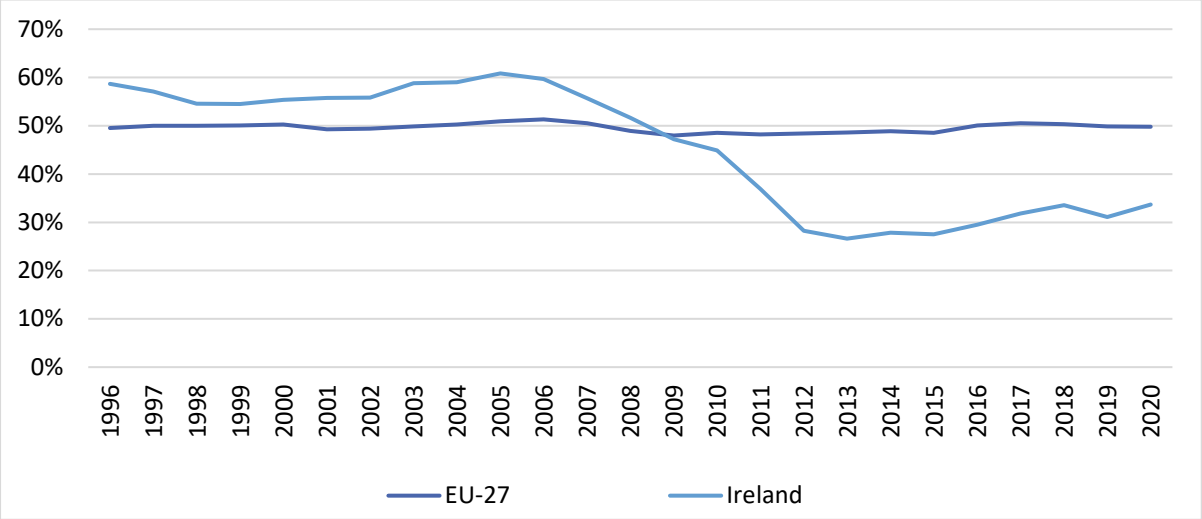
Source: Central Statistics Office.

Construction investment

Investment expenditures in the Construction sector were exhibiting a strong growth in the post-financial crisis period, averaging a 9 per cent annual increase over the period 2013 to 2019. This strong expansion was halted during the COVID-19 pandemic, with construction investment contracting by almost 15 per cent in 2020.

An important characteristic of the Irish Construction sector investment is the change in the composition of the relevant expenditures. This is evident in Figure 19, which shows that the share of dwellings investment started declining before the eruption of the global financial crisis of 2008 and has remained below the EU average ever since. As a result, Irish construction expenditures have mainly concentrated on non-residential investment, which in 2020 represented 65 per cent of total construction investment.

FIGURE 19 INVESTMENT IN DWELLINGS (% OF TOTAL CONSTRUCTION EXPENDITURES)

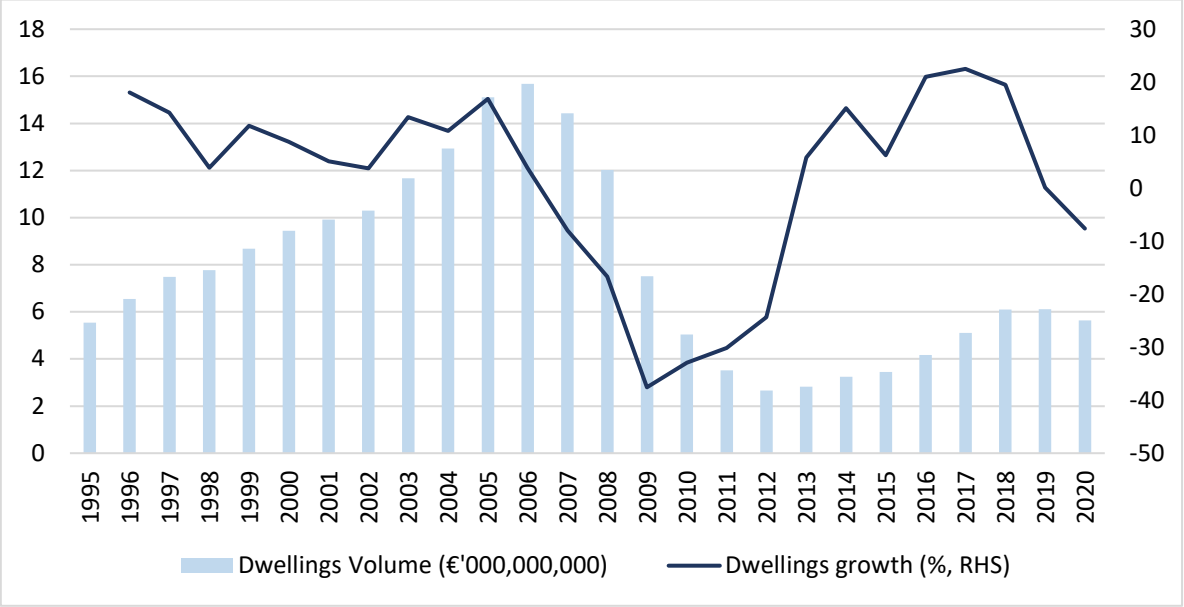


Source: Eurostat. Data are in 2010 chain linked volumes.

In order to examine the evolution of investment in dwellings in more detail, Figure 20 depicts the level and the growth rate of dwelling-related investment expenditures in Ireland. Even though there was a robust growth in dwelling investment in the post-2013 period, the level is still significantly lower compared to the pre-crisis levels (almost €10 billion less in 2020 compared to 2006). Given that, as a result of the pandemic there may be a long-lasting negative impact on this category of expenditures (the 2020 figure for dwellings exhibited a 7.5 per cent decline), strategies for boosting dwelling investment may have to be considered. One approach is examined by McQuinn (2021)[13] in a Special Article accompanying the *Commentary*, which argues that such increases could be financed via a sustainable increase in the Government's primary balance.

[13] McQuinn, K. (2021). 'With 'g' greater than 'r', should we be borrowing to increase Irish housing supply?' *Quarterly Economic Commentary*, Summer: Special Article.

FIGURE 20 INVESTMENT IN DWELLINGS



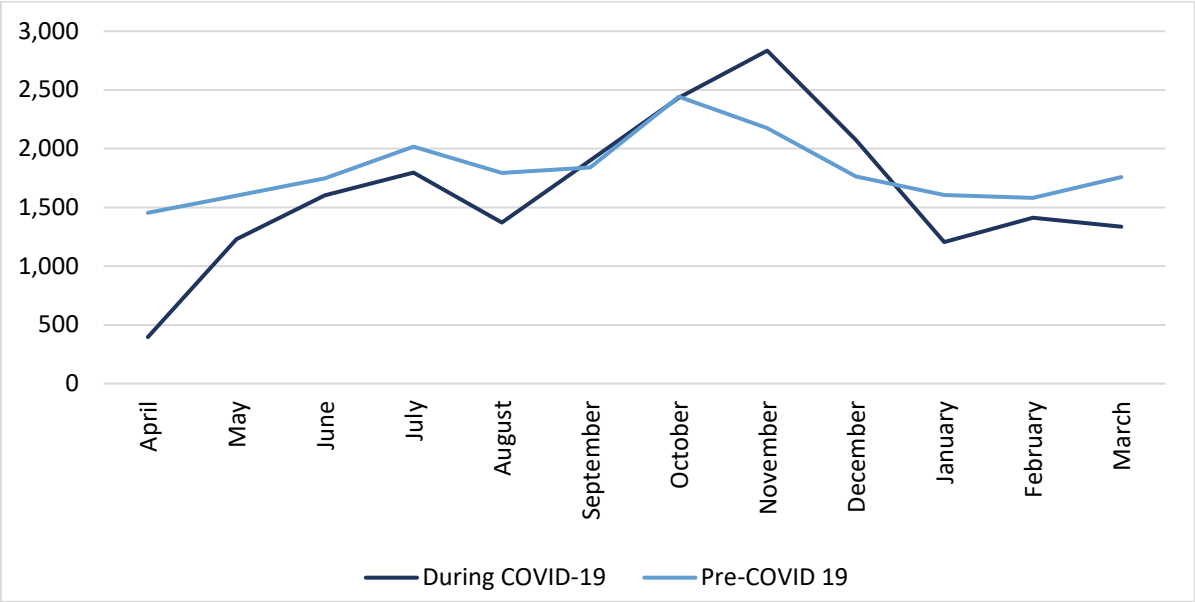
Source: Eurostat. Data are in 2010 chain linked volumes.

Housing completions

In Q1 2021 there were 3,953 new dwelling completions, a 20 per cent decline compared to Q1 2020 and 46 per cent decline compared to the previous quarter. The impact of the pandemic and the public health-related restrictions on dwelling completions are evident in Figure 21, which depicts monthly dwelling completions pre- and during the pandemic. As can be gleaned from the figure, the easing of restrictions in the last quarter of 2020 led to a significant increase in the number of completions compared to the last quarter of 2019; however, the lockdown restrictions introduced in early January 2021, under which construction work was no longer designated as essential, led to the abovementioned decline in completions during the first quarter of 2021.

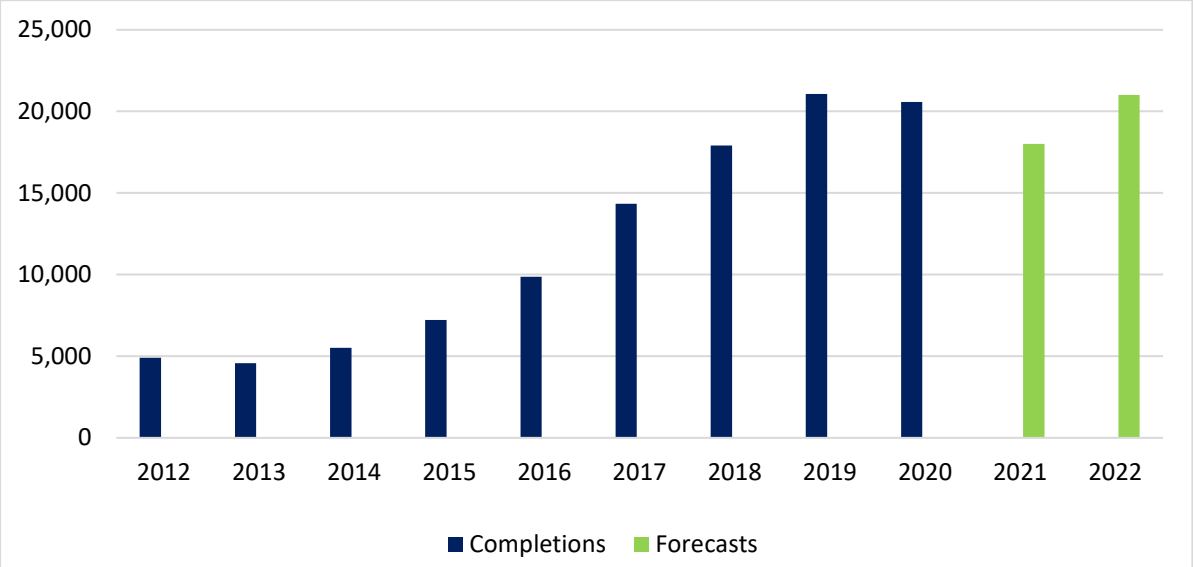
Overall, given that construction activity resumed partly in mid-April and in full by May, we revise our previous forecast regarding new dwelling completions and now expect that a total of 18,000 new dwellings will be delivered in 2021, while for 2022 we forecast a return to the pre-pandemic levels with 21,000 completions (Figure 22). The most recent forecast pre-pandemic in the *Commentary* indicated that almost 30,000 new dwellings could be expected in 2021.

FIGURE 21 MONTHLY DWELLING COMPLETIONS



Source: CSO New Dwelling Completions Q1 2021, 6 May 2021 Release.

FIGURE 22 HOUSING COMPLETIONS



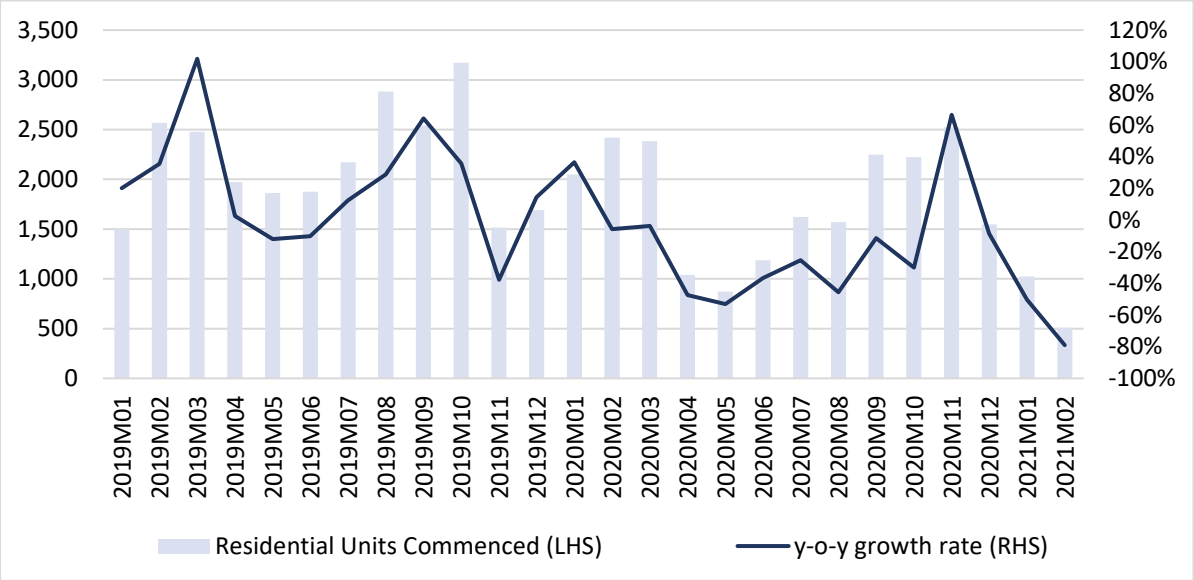
Source: Central Statistics Office.

McQuinn (2021) mentions that one potential long-lasting effect of the pandemic will be its impact on housing investment, which could cause a further tightening of housing supply. This decline in supply may further exacerbate the gap with structural demand, especially in the short-run, an issue analysed in Allen-Coghlan et al. (2020).[14]

[14] Allen-Coghlan, M., K. McQuinn and C. O'Toole (2020). 'Assessing the impacts of COVID-19 on the Irish property market: An overview of the issues' *Quarterly Economic Commentary,* Autumn: Special Article.

A first indication of the potential shortages in short-run housing supply is provided by the number of residential commencements; commencements act as a leading indicator for completions. As can be gleaned from Figure 23, in the first two months of 2021, a total of 1,530 commencements was registered, almost 65 per cent less compared to the first two months of 2020.

FIGURE 23 RESIDENTIAL COMMENCEMENTS



Source: Housing Agency.

Overall assessment

In light of the easing of the lockdown restrictions and the continued rollout of the vaccination programme, investment activity is expected to pick up during the rest of the year.

Under these conditions, we assume that economic activity will not suffer further disruptions. Based on this assumption, we forecast that overall investment will rebound significantly during the second half of the year and, as a result, we expect investment to grow by 5.8 per cent in 2021. This recovery will continue into 2022 and with the economy expected to be operating without any public health restrictions, we envisage investment growth of 7.6 per cent next year.

LABOUR MARKET

Key Points

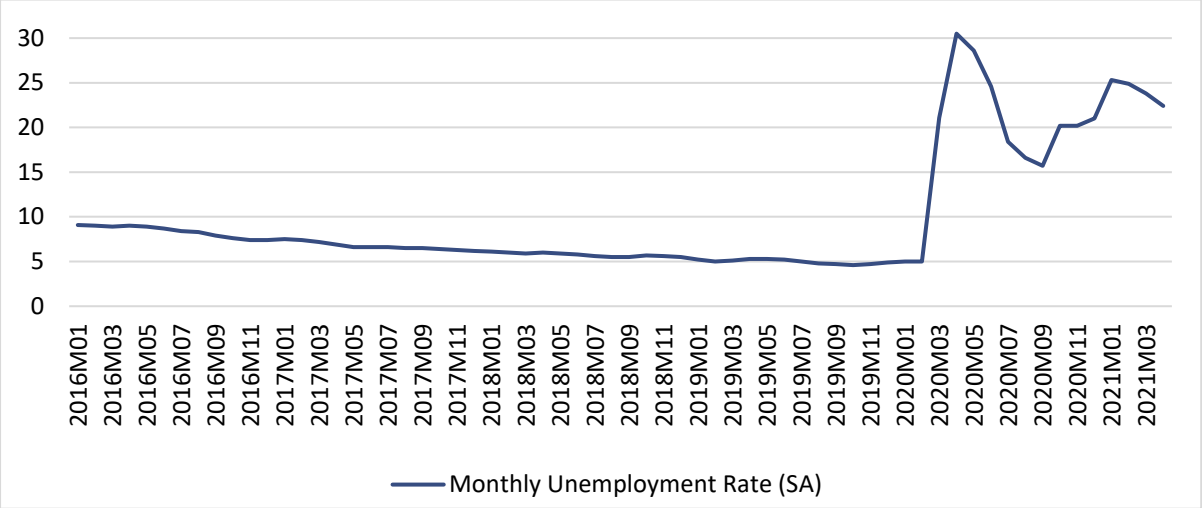
- *The unemployment rate was 22.4 per cent in April 2021.*
- *Approximately 309,500 people were on the Pandemic Unemployment Payment (PUP) on 30 May 2021.*
- *Employers received Employment Wage Subsidy Scheme (EWSS) payments for approximately 298,500 qualifying employees in May 2021.*
- *We estimate that the unemployment rate in Q4 of 2021 will be approximately 9.0 per cent with the average unemployment rate overall being 16.3 per cent for 2021 and 7.1 per cent for 2022.*

The COVID-19 pandemic has had a significant and lasting impact on the Irish labour market. Substantial fluctuations in the unemployment rate since early 2020 reflect the impact of the tightening and loosening of public health restrictions on businesses. The unemployment rate in February 2020 was 5 per cent while the COVID-adjusted unemployment rate[15] peaked at 30.5 per cent only two months later in April 2020. When restrictions were eased during the summer of 2020, the unemployment rate experienced a significant decline between May and September 2020.

In line with the re-introduction of more stringent public health restrictions, the unemployment rate increased from 15.7 per cent in September 2020 to 25.3 per cent in January 2021. Since January 2021 the unemployment rate has declined, to stand at 22.4 per cent in April 2021. The average monthly unemployment rate for 2020 was approximately 18.9 per cent while the average for Q1 2021 was 24.7 per cent. Figure 24 shows the monthly unemployment rate from January 2016 to April 2021.

[15] The COVID-adjusted unemployment rate classifies those on the PUP as unemployed. Where the text refers to an unemployment rate for a period after February 2020 the authors are referring to the COVID-adjusted unemployment rate.

FIGURE 24 UNEMPLOYMENT RATE BY MONTH (%)



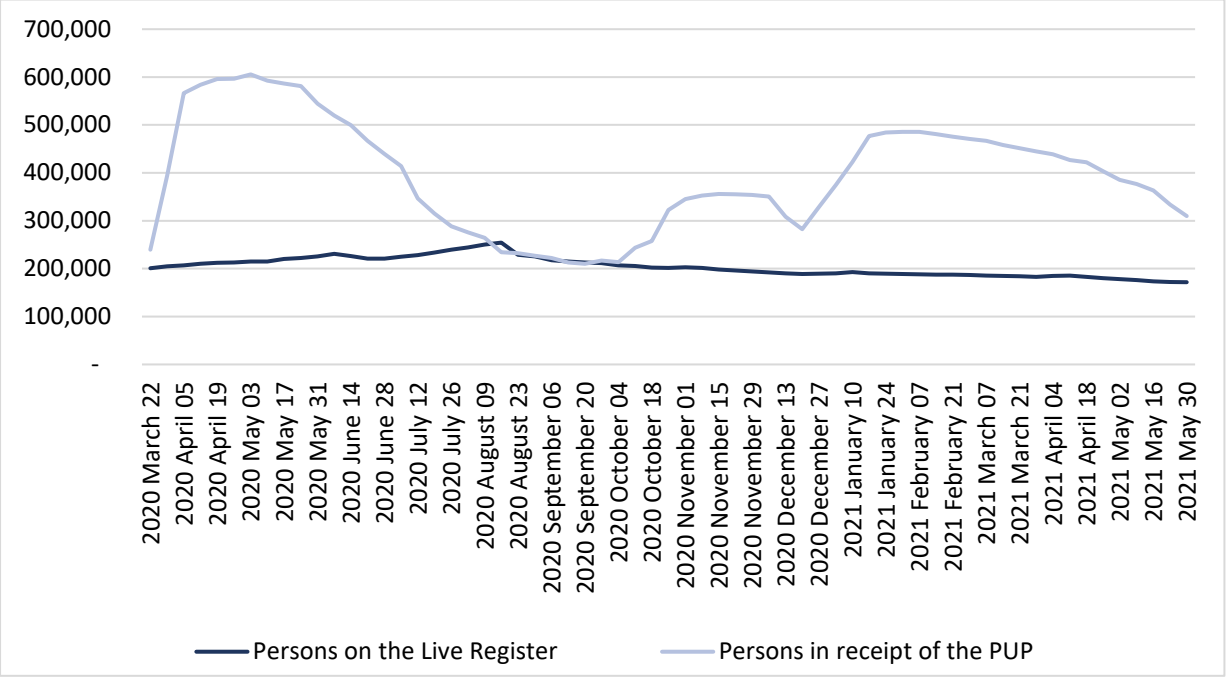
Sources: Seasonally-Adjusted Monthly Unemployment Rate Series and the COVID-19 Adjusted Monthly Unemployment Rate Series. Central Statistics Office.

Note: The COVID-19 Adjusted Monthly Unemployment Rate is used from March 2020 onward, rather than the traditional Monthly Unemployment Rate.

Figure 25 shows the number of individuals in receipt of the Pandemic Unemployment Payment (PUP) or on the Live Register by week from March 2020 to May 2021. Three peaks are evident in the number of people on the PUP and these peaks coincide with the implementation of the strictest public health measures over the last 12 months. The first peak occurred in early May 2020 when the number of individuals in receipt of the PUP was just over 605,500. Restrictions were eased and by the end of September 2020 there were just over 210,000 people in receipt of the PUP.

More stringent public health restrictions were brought in during October 2020 due to an increase in the number of COVID-19 infections. This resulted in the second peak occurring in mid-November 2020 when approximately 355,900 people were in receipt of the PUP. The re-introduction of restrictions in December 2020 resulted in the third peak in the number of PUP claimants in early February 2021 when over 485,800 were in receipt of the PUP. Since February 2021 the number of individuals in receipt of the PUP has reduced and as of 30 May 2021 approximately 309,500 individuals were claiming the PUP.

FIGURE 25 NUMBER OF PEOPLE ON THE PUP AND LIVE REGISTER BY WEEK



Source: Central Statistics Office.

The impact of the pandemic has not been evenly distributed across sectors or age groups with younger workers and public facing sectors faring worse than others. Table 1 shows the age breakdown of those in receipt of the PUP on 30 May 2021. In terms of age, 25.9 per cent of those in receipt of the PUP were aged under 25 while a further 21.9 per cent were between 25 and 34. Approximately 17 per cent were aged between 45 and 54 while only 13.7 per cent were 55 or over.

TABLE 1 BREAKDOWN OF PUP RECIPIENTS BY AGE

Age category	Number ('000)	Share (%)
< 25	80.1	25.9
25-34	67.7	21.9
35-44	66.6	21.5
45-54	52.6	17.0
55+	42.5	13.7
Total	**309.5**	**100.0**

Source: *Payments Awarded for COVID-19 Pandemic Unemployment Payment and Enhanced Illness Benefit – Statistics*. Published on 2 June 2021 by Department of Social Protection.
Note: Figures refer to those on the PUP as of 30 May 2021 who received a PUP payment on 1 June 2021.

Table 2 shows a breakdown of PUP recipients by sector. Of those on the PUP on 30 May 2021, 29.1 per cent were from the Accommodation and food sector, 15.0 per cent were from the Wholesale and retail trade/repair of motor vehicles sector, and 8.6 per cent were from the Construction sector. These three sectors alone account for 52.7 per cent of PUP recipients. Accommodation and food

services has accounted for at least 21.0 per cent of PUP recipients in each week since April 2020 while Wholesale and retail trade etc. has accounted for at least 13.0 per cent of PUP recipients over the same period. This is consistent with the findings of McGuinness and Kelly (2020) who found that employees in Accommodation and food sectors (among others) were among the PUP claimants with the highest risk of becoming long-term unemployed (unemployed for 12 months or more).[16]

TABLE 2 BREAKDOWN OF PUP RECIPIENTS BY SECTOR

Sector	Number ('000)	Share (%)
Agriculture, forestry and fishing; Mining and quarrying	4.2	1.4
Manufacturing	15.8	5.1
Electricity, gas supply; Water supply, sewerage and waste management	1.1	0.3
Construction	26.5	8.6
Wholesale and retail trade; Repair of motor vehicles and motorcycles	46.4	15.0
Transportation and storage	9.0	2.9
Accommodation and food service activities	90.1	29.1
Information and communication activities	6.7	2.1
Financial and insurance activities	6.2	2.0
Real estate activities	4.6	1.5
Professional, scientific and technical activities	12.0	3.9
Administrative and support service activities	29.3	9.5
Public administration and defence; Compulsory social security	4.7	1.5
Education	9.1	2.9
Human health and social work activities	9.3	3.0
Arts, entertainment and recreation	10.3	3.3
Other sectors e.g. hairdressing and beauty salons	16.0	5.2
Unclassified or unknown	8.3	2.7
Total	**309.5**	**100.0**

Source: *Payments Awarded for COVID-19 Pandemic Unemployment Payment and Enhanced Illness Benefit – Statistics*. Published on 2 June 2021 by Department of Social Protection.
Note: Figures refer to those on the PUP as of 30 May 2021 who received a PUP payment on 1 June 2021.

Under the Economic Recovery Plan 2021 published by the Government on 1 June 2021, the payment of the PUP has been extended beyond the end of June, but the scheme will close to new applicants from 1 July. It is planned that the current payment rates will be continued until 7 September after which phased reductions will be implemented.[17] If, as presented in this *Commentary*, household consumption rebounds strongly and is focused in areas which have been

16 McGuinness, S. and E. Kelly (2020). *Managing mass unemployment flows during the COVID-19 pandemic*. ESRI Survey and Statistical Report Series No.95 (July 2020).
Available at: https://www.esri.ie/system/files/publications/SUSTAT95_0.pdf.

17 For more information see: https://www.gov.ie/en/publication/49b23-overview-of-economic-recovery-plan-2021/.

'constrained' by the public health measures, many of the sectors such as Accommodation and food services may experience a strong rebound. The dependence of workers from such sectors on the PUP as an emergency support may reduce if the sector begins to grow strongly again.

The level and composition of those employed has also been affected by the pandemic. According to the Labour Force Survey there were an estimated 2,306,200 people employed in Q4 2020. This figure does not represent the full impact of the COVID-19 pandemic on the Irish labour market as it has been determined using strict classification criteria set by the ILO.[18] To address this problem, a COVID-19 adjusted estimate of employment has been produced. The CSO estimates that 1,970,609 persons aged 15 and over were in employment in December 2020 (the end of Q4).[19]

Many of those still working are being supported by a wage subsidy scheme. These schemes allow employees, whose employers were negatively impacted by the pandemic, to be supported directly through their employer's payroll system. The Temporary Wage Subsidy Scheme (TWSS) was announced by Government on 24 March 2020 with Revenue making the first payments under the scheme four days later. The scheme ran until 31 August 2020. While the TWSS was active, 66,600 employers received subsidy payments of approximately €2.8 billion in respect of 664,500 employees. Approximately 233,800 other employees who were not directly supported by the TWSS were indirectly supported through their employer's participation in the scheme. While the TWSS was active, approximately 116,100 people regained employment and transitioned from the PUP to the TWSS. Approximately 22,000 individuals supported by the TWSS lost their jobs and transitioned from the scheme to the PUP. Approximately 260,900 individuals moved from the TWSS to non-TWSS employment.[20] This shows the significant role that wage subsidy schemes played in helping individuals retain/regain their jobs during the pandemic.

The Employment Wage Subsidy Scheme (EWSS) replaced the TWSS from 1 September 2020, although the TWSS and the EWSS operated in parallel throughout July and August 2020. The EWSS provides a subsidy to qualifying employers based on the number of eligible employees on their payroll. By 3 June 2021 subsidies to the value of €3.4 billion had been paid to 49,800 employers for 575,800 employees. EWSS payments were made for 298,500 employees in May

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18 For more information on ILO definitions see: https://www.cso.ie/en/releasesandpublications/in/lfs/informationnote-implicationsofcovid-19onthelabourforcesurvey-quarter22020update/.

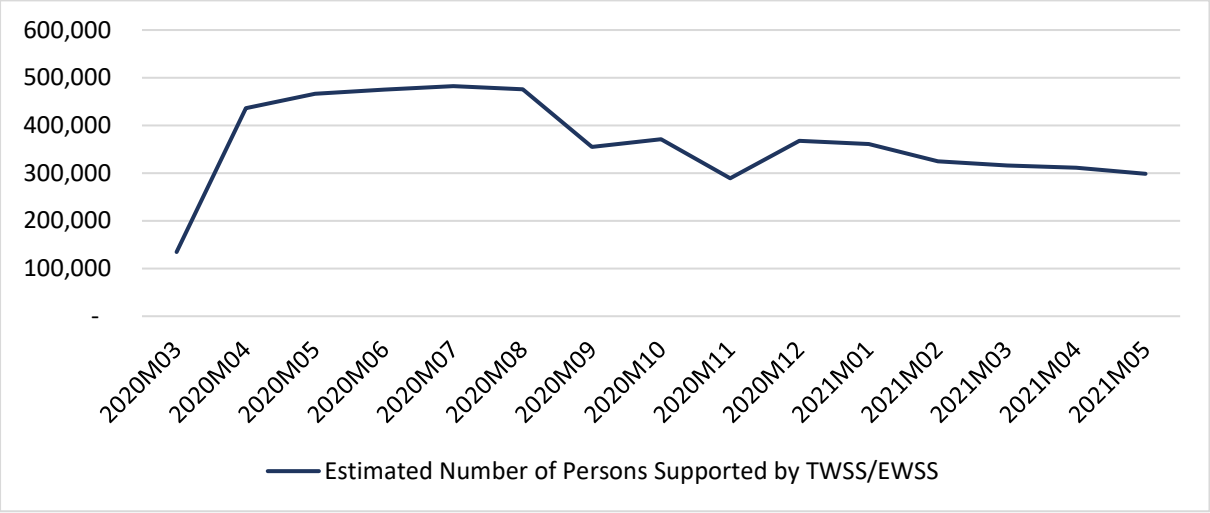
19 For more information see: https://www.cso.ie/en/releasesandpublications/er/lfs/labourforcesurveylfsquarter42020.

20 For more details see: https://www.revenue.ie/en/corporate/documents/statistics/registrations/a-year-of-covid-19-tax-supports.pdf.

2021. This is down from approximately 361,200 employees in January 2021. Figure 26 shows the number of individuals supported by the TWSS or EWSS from March 2020 to May 2021. Under the Economic Recovery Plan 2021 the EWSS has been extended until 31 December 2021.

Another impact of the pandemic on the labour market has been that employer PRSI has been forgone due to the reduced wages paid that are eligible for EWSS support. These receipts have also been impacted by the fact that under the TWSS, employer PRSI did not apply to the subsidy and was reduced from 10.5 per cent to 0.5 per cent for top-up payments. PRSI forgone under TWSS could not be directly calculated by Revenue but was estimated to be around €460 million. PSRI forgone under the EWSS to 3 June 2021 was calculated by Revenue to be €559 million.

FIGURE 26 NUMBER OF EMPLOYEES ON WAGE SUBSIDY SCHEMES BY MONTH



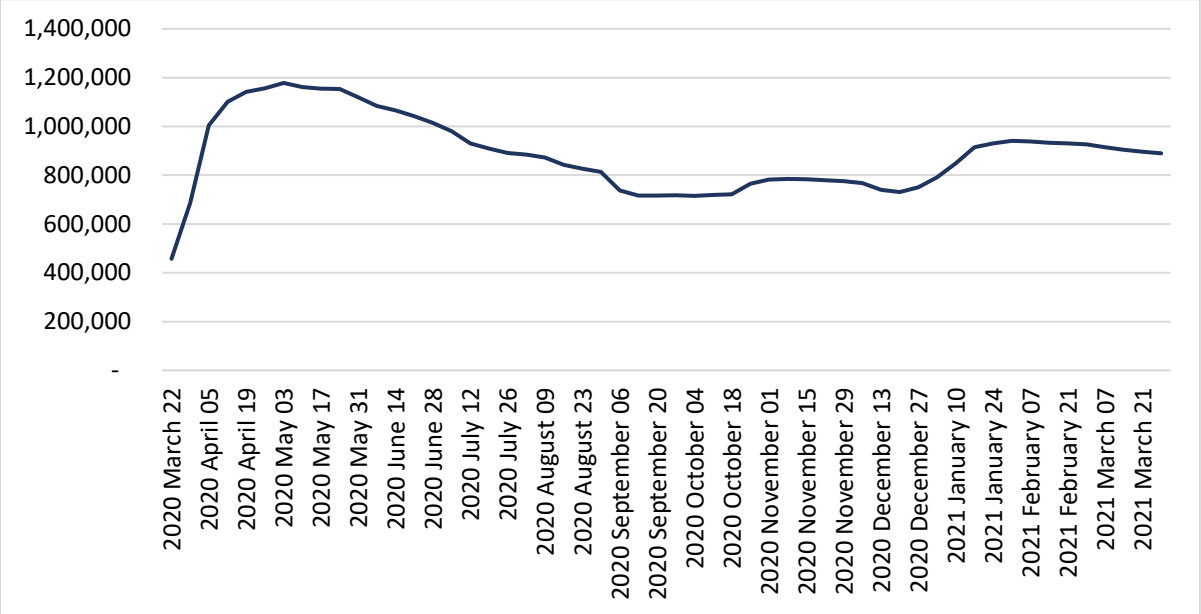
Source: CSO and Revenue Commissioners.

The proportion of total employment per sector supported by the EWSS varied across the sectors in Q1 2021. The highest was in the Accommodation and food services sector (71.5 per cent) and the Arts, entertainment, recreation and other service activities sector (39.5 per cent). Public administration and defence sector had the lowest proportion at 0.3 per cent. In Q1 2021, EWSS payments accounted for 49.5 per cent of total earnings in the Accommodation and food services sector, while it represented 17.0 per cent and 13.1 per cent of the total earnings in the Arts, entertainment, recreation and other services sector and the Construction sector respectively.[21]

[21] For more information see: https://www.cso.ie/en/releasesandpublications/br/b-lfs/labourmarketinsightbulletinseries7q12021/.

Looking at the number of individuals supported by the State via the Live Register, the Pandemic Unemployment Payment (PUP) or the TWSS/EWSS on a weekly basis illustrates the sheer extent to which the State has supported the labour market. Figure 27 shows the number of persons on the Live Register, the PUP, or the TWSS/EWSS by week for the year between March 2020 and March 2021. During the period considered, the number peaked at just over 1,178,200 people in early May 2020. The number of people supported was at its lowest in early October 2020 at just over 715,400 before it began to increase again in line with the reintroduction of further public health restrictions. In 2021 the number peaked at just over 940,650 at the end of January.

FIGURE 27 NUMBER OF PERSONS ON THE LIVE REGISTER OR BENEFITTING FROM PUP, TWSS OR EWSS BY WEEK



Source: Central Statistics Office.

The average monthly unemployment rate for 2020 was 18.9 per cent. Given the strong increase expected in domestic sources of growth in the latter half of the year, we estimate that the unemployment rate in Q4 of 2021 will be approximately 9 per cent with the average unemployment rate for 2021 overall being 16.3 per cent. Owing to scarring effects in the economy after the pandemic, we believe it is unlikely that the unemployment rate will approach its pre-COVID low of 4.6 per cent until 2023 at the earliest. Unemployment is expected to average 7.1 per cent for 2022 as continued growth in consumption, exports and investment results in improvements in the labour market.

PUBLIC FINANCES

Key Points

- *Despite the easing of restrictions, a significant deficit is expected in 2021.*
- *A deficit is likely again in 2022.*
- *Potential for prudent borrowing over the medium term?*

Table 3 presents both the levels and annual growth rates for the period January to May for the main taxation items over the period 2019-2021. It also compares the tax take for the January to May period in 2021 with that for 2019 to see how the present tax take compares with the pre-pandemic levels.

TABLE 3 GROWTH RATE AND LEVELS FOR MAIN TAXATION ITEMS: JANUARY TO MAY 2019-2021

Taxation Item	Levels (€ billion)			Growth Rate (%)	
	2019	2020	2021	2021 v 2020	2021 v 2019
Income	8.7	9.1	10.2	10.6	15.3
Corporation	1.8	3.5	2.9	-16.5	48.7
VAT	7.3	5.7	7.0	19.9	-4.6
Excise	2.5	1.9	2.1	10.3	-15.1
Total	15.2	15.1	15.7	4.0	3.6

Source: *QEC* calculations.

With the exception of corporation tax receipts, the other main tax items register significant growth for 2021 compared with 2020. This is to be expected given that most taxation items experienced a significant decline for the first five months in 2020 owing to the public health restrictions that were introduced for most of that period.

However, income taxes and corporation taxes also experience significant increases on the equivalent figure in 2019. Both VAT and Excise returns are still below their 2019 levels in 2021. This is despite the fact that both witnessed sizeable increases over the past year. As the public health restrictions are eased through 2021 and the economy increasingly opens up for business, both VAT and Excise are likely to experience significant increases for the rest of the year. Overall, total income tax receipts for the January to May period are up 4 per cent on the equivalent levels last year and 3.6 per cent up on the 2019 level.

The relatively modest impact of the pandemic to date on the total tax take and income taxes in particular highlights two features of the Irish economy, which have been noted previously: (1) the relatively dynamic nature of the Irish economy prior to the pandemic; and (2) the disproportionate impact of the pandemic on relatively low paid jobs. Many who lost their jobs may have been outside the income tax net altogether or work in sectors that have a high proportion of low wage and/or part-time employment.

In Table 4 we summarise the forecasts for the main taxation items for both 2021 and 2022.

TABLE 4 FORECAST OF KEY TAXATION AGGREGATES IN 2021 (%)

Tax	Forecast Growth (%)	
	2021	2022
Income	8.0	8.0
VAT	25.0	15.0
Corporation	0.0	0.0
Excise	15.0	7.0
Total	10.2	7.8

Source: Department of Finance and *QEC*.

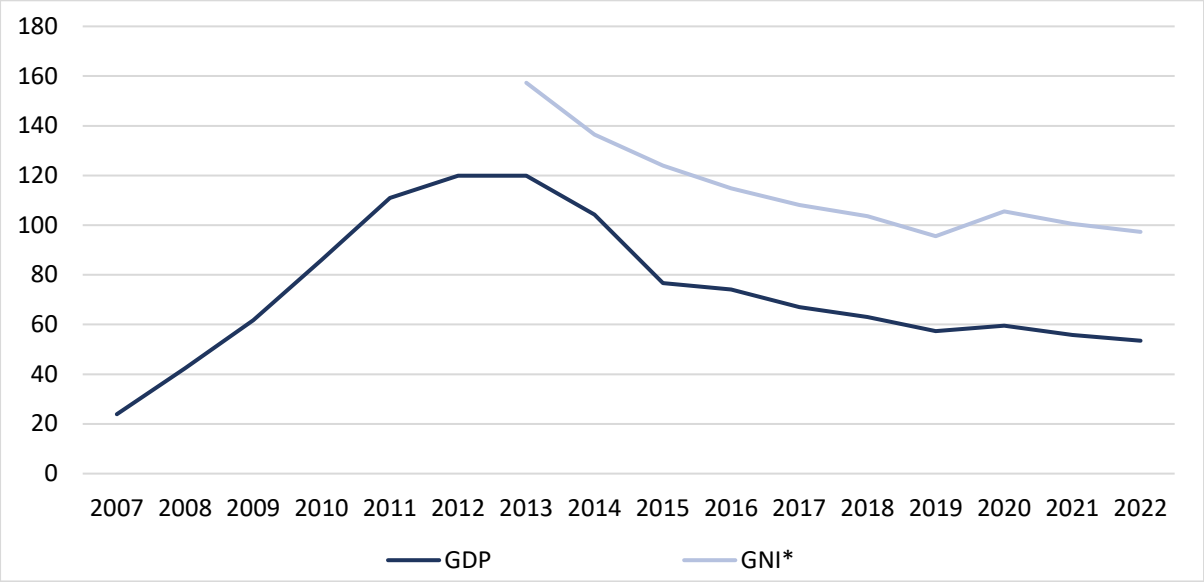
Income tax receipts are expected to increase quite robustly in the present year and in 2022 as the economy fully opens up after the public health restrictions. We expect VAT and excise duties to increase particularly strongly in the present year and especially in the second half of the year. Following previous *Commentaries*, we forecast a zero-growth rate for Corporation tax receipts; this reflects concerns about the sustainability of recent increases observed for this tax heading.

On 6 July last, the G7 reached agreement on global corporation tax reform aimed at tackling corporation tax avoidance. The communique from the agreement focusses on two main aspects. Firstly, on Pillar 1 of the reforms, countries will be awarded 'taxing rights on at least 20 per cent of profit exceeding a 10 per cent profit margin for the most profitable multinational enterprises'. As a result, tax residency will no longer be the sole determinant of where taxes are paid, at least for a proportion of profits. Second, on Pillar 2, the G7 has committed to 'a global minimum tax rate of at least 15 per cent on a country-by-country basis'. The Irish Government has estimated that domestic corporation tax receipts could be reduced by 20 per cent as a result of these reforms.

The recent announcement by the Government of the continuation of both the Pandemic Unemployment Payments (PUP) and the wage subsidy scheme beyond the end of June 2021 means that Government expenditure in areas such as social protection is likely to be quite elevated again in the present year. As a result, we expect the General Government Balance to be 4.1 per cent of GDP or just over €17 billion. This is somewhat smaller than our forecast in the previous *Commentary* due to the greater than expected taxation take for the first five months of the year. Given that unemployment is set to be averaging over 7 per cent in 2022 we also expect a deficit for that year of €8.7 billion or 1.9 per cent of GDP.

Given the *Commentary*'s growth rates, we summarise the resulting implications for our forecasts of the debt-to-output ratios in Figure 28. At the end of 2020, the debt-to-GDP ratio stood at 59.5 per cent while debt-to-GNI* increased to almost 105.6 per cent. In 2019, the debt-to-GNI* ratio had fallen to 96 per cent. In 2021 both ratios will actually decline to 55.8 and 100.5 per cent respectively, and in 2022 we believe the pace of recovery in the domestic economy will cause those ratios to decline further to 53.5 per cent of GDP and 97.3 per cent of GNI*. The two ratios are included for the period 2007 to 2022 to put the recent increase in these ratios in perspective vis-à-vis the increase which occurred after the great financial crisis (GFC).

FIGURE 28 DEBT-TO-GDP AND GNI* RATIOS (%)



Sources: *QEC* calculations.

In a paper to the *Commentary* McQuinn (2021) argued that a significant increase in the provision of publicly provided housing is now required to help bridge the growing gap between actual supply levels and the structural demand for housing. To investigate the public financing of such an investment the paper also examined

the future conduct of Irish fiscal policy. In Box C, the results of the fiscal policy simulations conducted are summarised.

BOX C FUTURE IRISH GOVERNMENT BORROWING?

In a paper to the *Commentary* McQuinn (2021), using likely future trends in the growth rate of the economy (*g*) and sovereign debt costs (*r*), examines the relationship between Government debt and the primary balance ratio:

$$b = s\left(\frac{1+g}{r-g}\right), \text{or equivalently } s = b\left(\frac{r-g}{1+g}\right) \qquad (1)$$

As outlined in Blanchard, Leandro and Zettelmeyer (2021), for a specific level of the primary balance *s*, there is a debt-to-GDP ratio *b*, which if exceeded will cause the debt level to explode. Similarly, for any debt-to-GDP ratio *b*, there is a primary balance *s*, which if the actual balance is lower than *s*, then the debt will again explode.

McQuinn (2021) specifies a specific debt-to-GDP ratio and solves for the corresponding primary balance ratio *s*. This is because McQuinn (2021) believes a small open economy such as Ireland's should set the debt-to-GDP ratio on a relatively conservative basis. Consequently, the baseline ratio b_{base} is set equal to 45 per cent. Pre-pandemic, government policy had stated that 45 per cent of GDP was the relevant medium-term target for Ireland (Budget 2017). To demonstrate the sensitivity of the results, simulations with a debt-to-GDP ratio of 60 per cent (b_{alt}) are also included. Table C.1, reproduced from McQuinn (2021) summarises the scenarios.

For example, if Irish fiscal policy targets a debt-to-GDP ratio (*b*) of 45 per cent in the medium term, then if the economy were to grow by 5 per cent in nominal terms and the interest rate on sovereign debt was 1.5 per cent over the same period, then a primary balance of 1.5 per cent of GDP is sustainable. In terms of 2021 GDP, this would provide an additional €6 billion for the Irish Exchequer on an annual basis.

TABLE C.1 FUTURE FISCAL POLICY SIMULATIONS FOR THE IRISH ECONOMY (%)

b_{base}		r=1		r=1.5		r=2	
45	*g*	*s*	€bn	*s*	€bn	s	€bn
	4.0	-1.3	5.13	-1.1	4.27	-0.009	3.42
	4.5	-1.5	5.95	-1.3	5.10	-1.1	4.25
	5.0	-1.7	6.77	-1.5	5.93	-1.3	5.08
	5.5	-1.9	7.58	-1.7	6.74	-1.5	5.90
	6.0	-2.1	8.38	-1.9	7.55	-1.7	6.71
b_{alt}							
60	*g*	*s*	€bn	*s*	€bn	s	€bn
	4.0	-1.7	6.84	-1.4	5.70	-1.2	4.56
	4.5	-2.0	7.94	-1.7	6.80	-1.4	5.67
	5.0	-2.3	9.03	-2.0	7.90	-1.7	6.77
	5.5	-2.6	10.11	-2.3	8.99	-2.0	7.86
	6.0	-2.8	11.18	-2.5	10.06	-2.3	8.94

Source: McQuinn (2021).
Note: The additional revenue generated (€ billion) is in terms of 2021 GDP (€395 billion).

McQuinn (2021) outlines a series of guidelines which would oversee this policy. One of these is a continuous assessment of the impact of the borrowing policy on the cost of Irish Government debt. The low cost of sovereign debt is in part driven by the extensive, non-standard monetary policy stance of the European Central Bank (ECB). This approach, which has aggressively expanded the ECB's balance sheet, is predicated on the continuation of the low inflation environment experienced in recent years. In recent months inflation has begun to rise in the Euro Area on the back of increases in energy costs. While there is little evidence to date to suggest anything other than a temporary realignment as households and businesses resume more normalised activity, if inflation were to rise in the medium term, this may require a less accommodative monetary policy stance which may impact the cost of financing.

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Budget 2017 (2016). *Department of Finance Financial Statement*. Available online at: http://www.budget.gov.ie/Budgets/2017/2017.aspx.

McQuinn K. (2021). 'With 'g' greater than 'r', should we be borrowing to increase Irish housing supply?', Special Article, *Quarterly Economic Commentary*, Summer.

This Box was prepared by Kieran McQuinn.

General Assessment of the Irish Economy

The decision by the Government to significantly ease public health restrictions in Q2 2021 has enabled most commercial entities to re-engage in economic activity. This is particularly fortuitous as we enter the summer period as it enables the tourism sector, one of the sectors of the economy most impacted by the public health measures, to earn some badly needed revenue.

The slightly earlier than expected easing of the public health restrictions coupled with the increasing vaccination of the general population means domestic sources of growth are well poised to rebound considerably for the rest of 2021. Private consumption, in particular, is set to register strong increases. Furthermore, a notable feature of the Irish economy during the COVID-19 pandemic has been the robust performance of certain segments of the export sector. Pharmaceutical and ICT exports have all seen elevated rates of growth in 2020 and early 2021.

The continued strong performance of the export sector in 2021, coupled with a significant recovery in consumption and investment, suggests that the domestic economy could grow substantially in the present year. Overall, we believe the Irish economy will grow by over 11 per cent in the current year with growth of almost 7 per cent likely in 2022. Unemployment, which will peak at 25 per cent in Q1 2021 is set to decline to 9 per cent by the end of the current year and will average 7 per cent in 2022.

Ireland's future trade performance will also be significantly impacted by the way in which the Trade and Cooperation Agreement signed on 30 December 2020 between the United Kingdom and the European Union is fully implemented. Significant uncertainty still exists about the manner and timing of the escalation of the trade deal's implementation over the next six to nine months. In the trade section of the *Commentary*, we also present some preliminary data on exports and imports between Ireland, Northern Ireland and Great Britain. This shows that there has been a significant decline in imports between Ireland and GB since the start of the year, while exports have remained relatively unchanged from previous years. However, this is likely due to the asymmetry in Customs procedures between the UK and EU.

The relatively strong pace of the domestic recovery should not hide the cost of COVID-19 to the Irish economy. In a Box to the *Commentary*, Bergin, Garcia-Rodriguez and McQuinn (2021) compare the actual expected path of the economy

with where the economy was likely to have been if COVID-19 had not occurred. Using COSMO, the large macroeconomic model of the Irish economy, it is estimated that between 2020 and 2021 the output loss to the Irish economy of COVID-19 is approximately €24 billion. The level of Irish GDP in 2022 is set to be the same as what it would have been for that year in the absence of COVID-19.

One feature of the economic adjustment during the COVID-19 crisis has been its uneven nature. Recent research by Kren et al. (2021)[22] noted that over 70 per cent of Irish SMEs experienced a marked drop of turnover in the first wave of the crisis. They also note that the fall is very uneven, with many sectors (such as hotels and restaurants) experiencing huge declines while others have performed very well. Given the evidence in the *Commentary* of the likely strong consumption rebound in 2021, many firms in these sectors may experience a rebound in the final quarters of this year as households focus spending on the areas that have been constrained since March 2020. The extent to which this occurs is critical to the recovery (or otherwise) of affected SMEs.

The agreement reached by the G7 in June 2021 on global tax reforms aimed at tackling corporation tax avoidance will, if fully implemented, raise significant question marks about the future trends of domestic corporation tax receipts. As has been noted previously in the *Commentary*, this element of Government tax receipts has grown substantially in recent years and concerns have been expressed as to the sustainability of this source of revenue. The Irish authorities have acknowledged these concerns and have assumed that it would lose revenues from these changes – after the G7 agreement, the Government repeated that corporation tax revenues would decline by 20 per cent due to these reforms.

In a Box to the *Commentary*, the recent growth performance of the Euro Area is also assessed. This involves updating previous work in this area by McQuinn and Whelan (2008; 2015; 2016; 2018). The analysis confirms trends apparent from the earlier studies, that the rate of total factor productivity growth (TFP) in the Euro Area is still disappointingly low. This coupled with the likely ongoing ageing of the European population means that the growth prospects for the Euro Area are decidedly modest in the medium term.

The relatively poor contribution of investment and capital growth to the recent European growth performance highlights the role that a significant Europe-wide investment stimulus could play in boosting growth rates. A number of

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22 O'Toole, C., F. McCann, M. Lawless, J. Kren and J. McQuinn (2021). 'New Survey Evidence on COVID-19 and Irish SMEs: Measuring the Impact and Policy Response', *The Economic and Social Review*, forthcoming.

commentators such as Schnabel (2020)[23] have highlighted the role for a more expansive fiscal policy to facilitate greater investment within the Euro Area. This is particularly the case after the highly adverse impacts of COVID-19 on European economic performance.

The case for increases in government capital expenditure in Ireland has been put forward by McQuinn (2021) in an article in this *Commentary*. While prudent management of current expenditure is necessary to restore sustainability to the public finances given the costs of the pandemic, the research argues that, given the anticipated growth rates for the domestic economy over the coming years and the anticipated low cost of sovereign debt financing, Government borrowing is a viable option for funding critical capital related projects. Expanding spending to address these bottlenecks (such as in housing, climate change and healthcare provision) can positively impact long-term competitiveness. Housing has been identified as a significant challenge to domestic competitiveness (see National Competitiveness Council, 2020[24] and IMF, 2021[25]), and McQuinn (2021) calls for a sustained increase in spending in this area.

23 Schnabel I. (2020). *The shadow of fiscal dominance: Misconceptions, perceptions and perspectives*. Schnabel is a member of the executive board of the ECB. Speech available at: https://www.ecb.europa.eu/press/key/date/2020/html/ecb.sp200911~ea32bd8bb3.en.html.

24 Available at: http://www.competitiveness.ie/publications/2020/ireland%20s%20competitiveness%20challenge%202020.pdf.

25 Available at: https://www.imf.org/en/News/Articles/2021/05/12/mcs051221-ireland-staff-concluding-statement-of-the-2021-article-iv-mission.

Special Article

WITH 'G' GREATER THAN 'R', SHOULD WE BE BORROWING TO INCREASE IRISH HOUSING SUPPLY?

* Kieran McQuinn[1]

ABSTRACT

In this Article, we address one of the major policy issues in the Irish economy at present, namely the undersupply of residential housing. Particularly given the recent, adverse impacts of pandemic-related public health restrictions on housing supply, we argue that a significant increase in the provision of publicly provided housing is now required to help bridge the growing gap between actual supply levels and the structural demand for housing. To investigate the public financing of such an investment we examine the future conduct of Irish fiscal policy. Given the expected strong post-COVID-19 performance of the Irish economy and the likely continued low cost of sovereign debt, we argue that the adoption of a consistently negative Government primary balance can be pursued under a prudent and sustainable set of conditions. Such a policy could provide the Exchequer with an additional annual amount of between €4 billion and €7 billion.

INTRODUCTION AND HOUSING MARKET PRESSURES

Arguably, one of the most significant long-lasting effects of COVID-19 on Irish society is the adverse impact on the provision of housing. While the introduction of significant fiscal support payments such as the Pandemic Unemployment Payment and the Employment Wage Subsidy Scheme have to a large extent cushioned income levels (see Doorley et al., 2020 for more on this), and hence affordability on the demand side of the housing market, the nature of the public health restrictions has had a particularly adverse impact on residential supply.

As noted in a wide variety of studies, a significant imbalance had already existed in the Irish housing market between supply and demand; however as pointed out in Allen-Coghlan et al. (2020), the relatively slow response of the supply side of the Irish housing market to a significant shock risks exacerbating this imbalance in a post-COVID world. Housing demand has not diminished as is evident from the annual increases observed in house prices for February 2021, however housing supply may take some time to recover.

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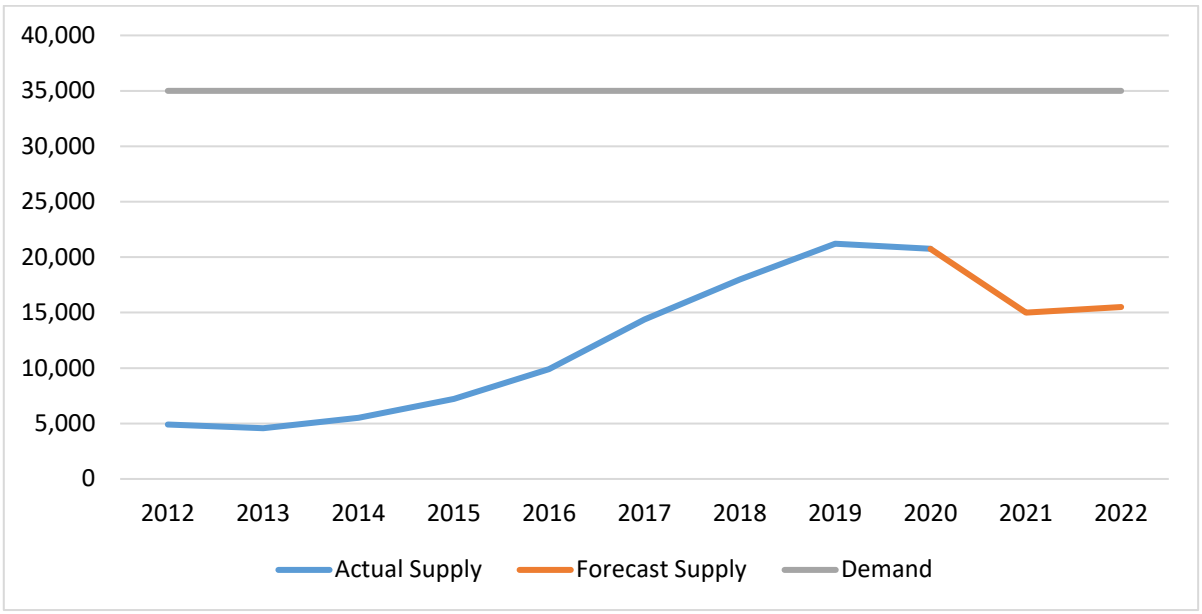
To put the imbalance in the housing market in some perspective; a recent study by Bergin and Garcia-Rodriguez (2020) estimates that the structural demand for housing in the Irish economy is approximately 35,000 units per annum. This demand for housing is largely a function of population growth and housing preferences, and population growth is largely determined by economic conditions. This estimate tallies with previous work by Duffy et al. (2016) and Byrne et al. (2014). Estimates of housing demand are of course particularly sensitive to assumptions concerning migration and headship rates. For example, Conefrey and Staunton (2019) conduct a scenario where they assume that Irish headship rates converge to UK rates; this results in an estimate of 47,000 units per annum over the period 2020-2029.

Figure 1 summarises housing completions and the structural demand estimate. It includes actual completions from 2012 to 2020 and forecasts from the latest *QEC* for 2021 and 2022. The lower forecasts for 2021 and 2022 reflect the trends in leading indicators for the residential sector such as commencement data and planning permissions. Also, under the new guidelines for the Level 5 lockdown restrictions introduced in early January 2021, construction work was no longer deemed essential and did not commence again until April 2021.

FIGURE 1 ACTUAL AND FORECAST HOUSING COMPLETIONS AND ESTIMATE OF STRUCTURAL DEMAND



Sources: CSO, *QEC* calculations and Bergin and Garcia-Rodriguez (2020).

It is clear from the graph the scale of the imbalance and the growing nature of the divergence in coming years. This is likely to result in further upward pressure on house prices and rent levels. Any such increase in housing costs comes in the context of significant existing affordability challenges in the Irish residential

market. Two recent studies of housing affordability pressures (Corrigan et al., 2019; O'Toole et al., 2020) document the high share of households facing high housing costs; prior to the pandemic approximately one-in-three households who were not in receipt of State housing supports were classed as having insufficient income after housing costs to afford a standard basket of goods and services. Indeed Corrigan et al. (2019) note that these affordability challenges are a structural feature of the Irish housing market. Separately, Honohan (2021) identifies the elevated cost of housing in Ireland as one of the main reasons for the relatively high domestic cost of living when compared with other Euro Area countries.

In this paper, we examine whether the State can afford to significantly increase the provision of housing. Using plausible future values for key fiscal parameters in the domestic context, we examine what future Irish fiscal policy could look like after the pandemic. We examine whether it is possible for the State to run a persistent negative Government primary balance in a sustainable and prudent manner over the medium term.

FUTURE IRISH FISCAL POLICY

From a cross-country perspective, one of the more significant economic impacts of the COVID-19 pandemic has been the sizeable increase in borrowing and hence sovereign debt levels which has occurred. In the European Union, for example, the fiscal rules framework introduced as part of the Stability and Growth Pact (SGP) in 2011 have been formally suspended, thereby enabling Member States to increase substantially their levels of public sector borrowing.

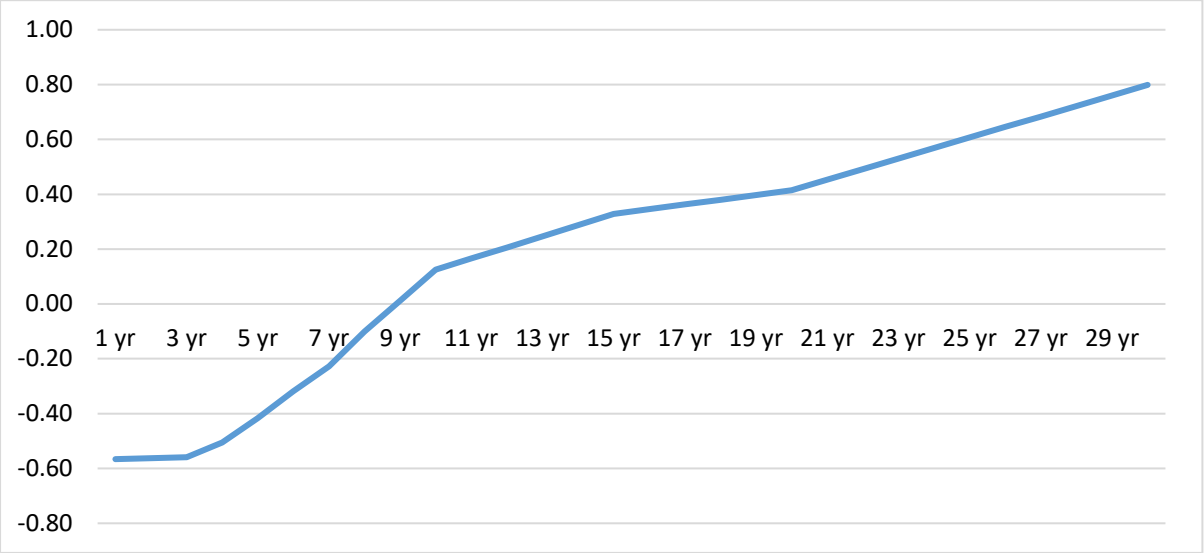
The interruption in the conduct of European fiscal policy has given rise to a growing debate about the future of the fiscal rules, especially when the effects of the pandemic have started to subside. This debate has been further stimulated by the particularly low rates of interest on sovereign debt which have been observed in recent years. Indeed, it can be argued that the European fiscal rules were originated and devised under the standard assumption that such interest rates would equal if not exceed the rate of growth of the respective economy in question; namely that:

$$r - g \geq 0 \qquad (1)$$

where r is the interest rate on government debt and g is the nominal rate of economic growth. However, even before the onset of COVID-19, interest rates, on an international basis, had been declining on a persistent basis. As noted by Furman and Summers (2020), the neutral safe real rate (the rate which maintains aggregate demand at potential output) across countries has been consistently

falling since the 1980s. Within a Euro Area context, the low cost of borrowing for sovereigns has also been greatly facilitated by the policies initiated and maintained by the European Central Bank (ECB) since 2012 (see Schnabel, 2020, for more on these). These policies have kept the yield curves for Member States relatively flat even in the presence of the increased borrowing necessitated by COVID-19.

FIGURE 2 IRISH GOVERNMENT YIELD CURVE (%): APRIL 2021



Sources: Bloomberg and author's calculations.

The present low cost of borrowing in a domestic context can be observed from Figure 2, which plots the Irish yield curve for sovereign bonds. Irish yields are negative up to eight years, the 20-year yield is 0.4 per cent while the 30-year yield is just 0.8 per cent.

This low cost of borrowing is in contrast to the expected growth outlook for the Irish economy over the next ten years. Bergin et al. (2021) have outlined a series of post-COVID-19 scenarios for the Irish economy on the basis of COSMO – the large scale macro-econometric model of the Irish economy. These and other scenarios are discussed in Allen-Coghlan and McQuinn (2020) and Allen-Coghlan and McQuinn (2021). Under a recovery scenario Bergin et al. (2021) forecast that the Irish economy will average a 4.5 per cent growth rate between 2024 and 2030.

To investigate the impact of these likely trends in *r* and *g* for future Irish fiscal policy, we avail of the well-known steady-state relationship between Government debt and the primary balance ratio:

$$b = s\left(\frac{1+g}{r-g}\right), \text{or equivalently } s = b\left(\frac{r-g}{1+g}\right) \qquad (2)$$

As outlined in Blanchard et al. (2021), for a specific level of the primary balance *s*, there is a debt-to-GDP ratio *b*, which if exceeded will cause the debt level to explode. Similarly, for any debt-to-GDP ratio *b*, there is a primary balance *s*, which if the actual balance is lower than *s*, then the debt will again explode.

In the present context we specify a specific debt-to-GDP ratio and solve for the corresponding primary balance ratio *s*. This is because we believe a small open economy such as Ireland's should set the debt-to-GDP ratio on a relatively conservative basis. The unprecedented nature of the pandemic and the costs associated with it highlight the importance of an economy such as Ireland's having a sufficient buffer established in case of such emergencies. Consequently, we set as a baseline ratio b_{base} = 45 per cent. Pre-pandemic, government policy had stated that 45 per cent of GDP was the relevant medium-term target for Ireland (Budget 2017).

Table 1 presents the results of the simulation of (2) under a variety of different growth rates and three different interest rates. While the 30-year yield on Irish bonds is short of 1 per cent, we take a range from 1 to 2 per cent as our interest rates for the scenarios. We take a relatively conservative path for the interest rate as Blanchard et al. (2021) acknowledge 'economists have little sense of the right magnitudes' in terms of the impact of additional borrowing on the sovereign's interest rate. However, Blanchard et al. (2021) do argue that the impact is likely to be smaller for countries in the European Union (EU) due to the EU's highly integrated nature.

To demonstrate the sensitivity of the results, we also include the simulations with a debt-to-GDP ratio of 60 per cent (b_{alt}).

For the nominal growth rate of the Irish economy (*g*), we again take a relatively conservative range of 4.0 to 6.0 per cent. The 4.5 per cent growth rate forecast in Bergin and Garcia-Rodriguez (2020) is a real growth rate whereas '*g*' is a nominal rate. If we assume a rate of inflation of approximately 1 per cent, this means the equivalent real output growth range is between 3.0 and 5.0 per cent.

TABLE 1 FUTURE FISCAL POLICY SIMULATIONS FOR THE IRISH ECONOMY (%)

		r=1		r=1.5		r=2	
45	***g***	***s***	**€bn**	***s***	**€bn**	**s**	**€bn**
	4.0	-1.3	5.13	-1.1	4.27	-0.009	3.42
	4.5	-1.5	5.95	-1.3	5.10	-1.1	4.25
	5.0	-1.7	6.77	-1.5	5.93	-1.3	5.08
	5.5	-1.9	7.58	-1.7	6.74	-1.5	5.90
	6.0	-2.1	8.38	-1.9	7.55	-1.7	6.71
b_{alt}	***g***	***s***	**€bn**	***s***	**€bn**	**s**	**€bn**
60	4.0	-1.7	6.84	-1.4	5.70	-1.2	4.56
	4.5	-2.0	7.94	-1.7	6.80	-1.4	5.67
	5.0	-2.3	9.03	-2.0	7.90	-1.7	6.77
	5.5	-2.6	10.11	-2.3	8.99	-2.0	7.86
	6.0	-2.8	11.18	-2.5	10.06	-2.3	8.94

Source: Author's analysis.
Note: The additional revenue generated (€ billion) is in terms of 2021 GDP (€395 billion).

The results in the table indicate that, even under prudent assumptions, the Irish Exchequer would be able to raise approximately €4 billion to €7 billion each year in additional resources for the State while still keeping the public finances on a sustainable and prudent path. The latest Stability Programme Update (SPU) released by the Department of Finance[2] expects a General Government Balance (GGB)[3] of €0.8 billion by 2025.

FUNDING CAPITAL INVESTMENT

In the present year, the Exchequer's capital allocation for housing as set out in Budget 2021 is €2.0 billion. This is forecast to add 12,750 additional units to the social housing stock. Of this, 9,500 are to be built, with 800 targeted acquisitions and 2,450 leased homes. However, given the supply and demand data presented in Figure 1, this will still leave a significant imbalance in the residential market over the medium term. Additionally, even if housing supply were to approximate the level of structural demand in a given year, this does not allow for the imbalances which have accumulated over the past ten years.

What is particularly clear from recent trends in the housing market is that the private sector, on its own, is struggling to meet current housing demands. Indeed, combining the forecast provision of State housing along with the overall forecast of 15,000 units indicates that private sector housing supply is likely to be less than

2 Available online at: https://www.gov.ie/en/publication/d3e2f-stability-programme-update-2021/.
3 Note the GGB measures the fiscal performance of all arms of government. It provides an accurate assessment of the fiscal performance of a more complete government sector, whereas the primary balance is Government net lending excluding interest payments on consolidated government liabilities.

10,000 units for both this and next year. A number of reasons have been advanced for the inability of the private sector to increase its scale of production; changes in the nature of financing after the great financial crisis (GFC) means that developers now have to provide a significant amount of equity funding up front before developments are green-lighted by financial institutions; other commentators have cited the relatively high cost of construction in the Irish market as a potential reason.[4] Either way, even in the presence of particularly high house price levels, when compared with other Western economies (see Bricongne et al., 2019, for more on this), it is evident that the domestic construction sector is unable to meet the scale of production required.

Our analysis indicates that between €4 billion and €7 billion could be generated on an annual basis through such a policy. One proposal, therefore, is to double the existing capital investment in State provided housing to €4 billion per annum. Based on current production levels, this would have the potential to deliver approximately 18,000 units per annum.

Clearly, such a significant increase in activity would bring sizeable challenges in terms of ensuring efficient delivery of the extra units. Who would build these extra units, for example? Could the private sector be engaged by the State to deliver the extra housing? More activity in the housing sector may lead to an increase in inflationary pressures more generally. It would almost certainly involve an expanded mandate for State agencies such as the recently initiated Land Development Authority (LDA) to identify suitable sites and coordinate on a nationwide basis the delivery of the units. As part of any relationship between the State and the private sector in providing housing units, capacity constraints in the domestic labour market would have to be carefully considered. One potential risk concerning any sizeable increase in State investment is the potential for 'crowding out'. However, one could argue in the present case, given the relatively low level of supply in the private sector, increased State involvement in the supply side of the market could 'crowd in' as opposed to' crowd out' residential investment.

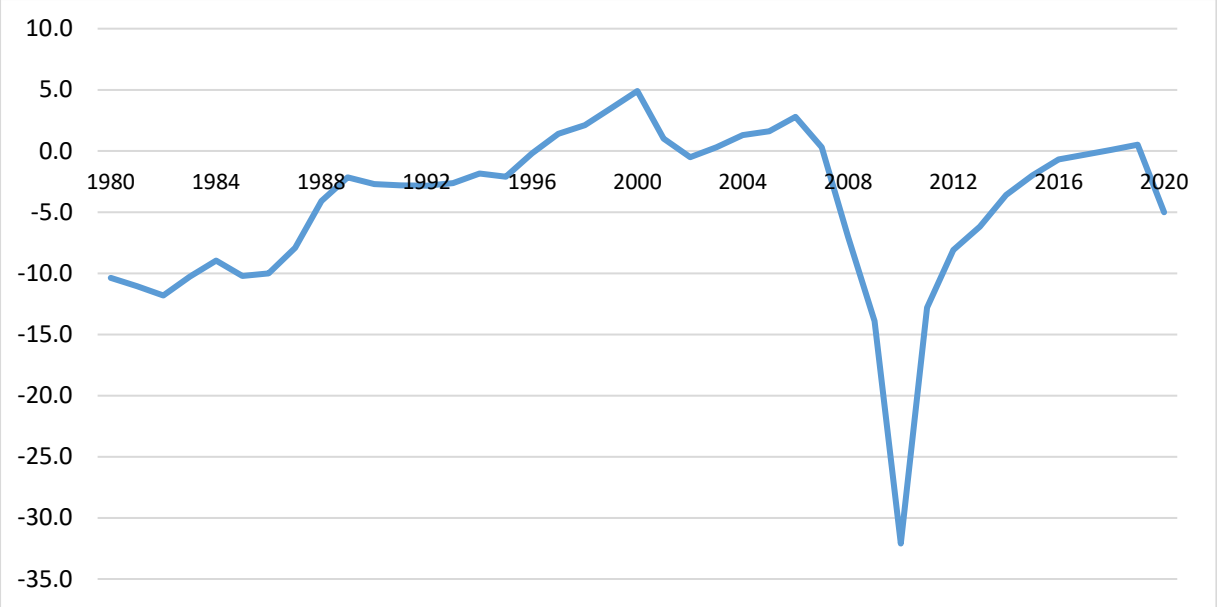
One area where crowding in could occur is in the greater availability of finance for those engaged in construction in the private sector. In seeking to increase housing output, the State could commission greater levels of activity from those in the private sector. This, in turn, could enhance the ability of those in the private sector to secure development finance from financial institutions.

[4] One difficulty in this regard is even getting agreement on the actual cost of building a residential unit in the Irish market. See https://www.irishtimes.com/business/construction/idea-that-only-councils-should-build-social-housing-is-nonsense-1.4440399 for example.

PREVIOUS EXPERIENCE OF IRISH PUBLIC SECTOR BORROWING

Attitudes amongst policymakers and analysts to public borrowing in an Irish context are somewhat conditioned by the adverse experience of the Irish State over the period 1977-1987. As can be seen from Figure 3, between 1980 and 1987 the GGB averaged over 10 per cent as the State engaged in a sustained bout of borrowing. The balance improved as the Celtic Tiger emerged in the early 1990s and actually reached a peak surplus of nearly 5 per cent in 2000.

FIGURE 3 IRISH GENERAL GOVERNMENT BALANCE (GGB) (%) 1980-2020

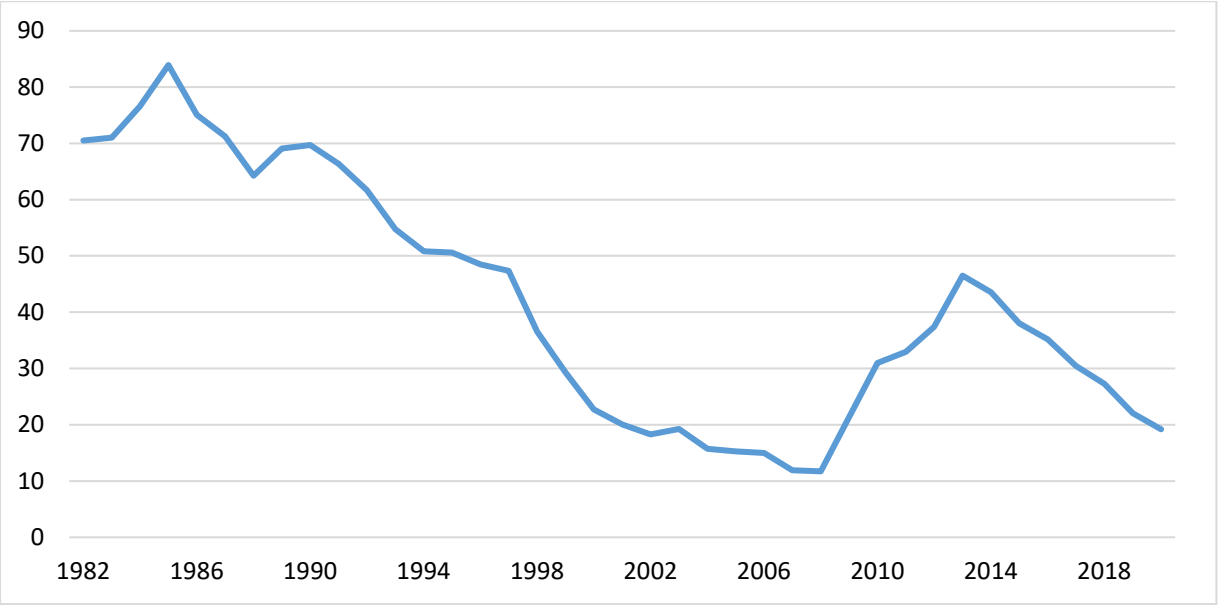


Source: Department of Finance.

The impacts of the GFC and the substantial loans provided to the banking sector are evident in the balances from 2008 to 2012, while the improvement in the public finances is again apparent from 2013 onwards. In 2020, a negative GGB of 5 per cent was recorded and a further negative balance of 4.5 per cent is forecast for 2021 (McQuinn et al., 2021). These latter deficits reflect the cost of the traditional and new welfare payments provided to support family incomes due to COVID-19.

The overall cost of debt to the State can be observed from Figure 4, which plots the ratio of debt interest payments to the total income taxation take. This is plotted from 1982 to 2020. The substantial pressure on the domestic Exchequer in the early to mid-1980s due to the high levels of borrowing and its relatively high cost are clear. In 1985 for example, the ratio of debt repayments to the income tax take was an enormous 84 per cent. Just prior to the GFC, the ratio had declined to just under 12 per cent. However, it is worth noting that even at the peak of the GFC, the resulting strain on income tax revenue at 47 per cent was still somewhat below the rates in the early 1980s.

FIGURE 4 RATIO OF DEBT REPAYMENTS TO INCOME TAXATION REVENUE (%) 1982-2020



Sources: Department of Finance and *QEC* calculations.

The political as well as economic difficulties in dealing with the deterioration in the public finances in the 1980s serve as a stark warning concerning the perils of over reliance on such a source of Government funding.

However, in considering a policy of a sustained negative primary balance ratio *s*, there are some significant differences between the present circumstance and the earlier period:

1. The Irish economy is arguably in a much more robust state at present than was the case in the 1980s;
2. This is particularly the case in terms of the performance of the Irish labour market and job creation generally;
3. There is a greater acceptance that sustained borrowing particularly for a small open economy such as Ireland's should only be for capital investment and *not* as it was in the 1980s for current expenditure purposes;
4. It should not be used, for example, to offset any shortfall which may arise due to a possible decline in current taxation receipts. For example, there has been growing concern (McQuinn et al., 2020; IMF, 2021) about the sustainability of the significant increase in Irish corporation tax receipts in recent years;
5. Ongoing analysis would assess whether a policy of sustained borrowing was having an impact on the sovereign's interest rate;

6. Any borrowing undertaken should be subject to relatively conservative fiscal assumptions as outlined in Table 1;

7. Borrowing for capital investment should prioritise projects which increase the productive capacity of the domestic economy.

This last point is of growing importance. It is clear that the high level of domestic housing costs is one of the main reasons for the increased cost of living in Ireland when compared with other countries (see Honohan, 2021 and Coffey, 2021 for more). The lack of adequate housing supply is, therefore, one of the biggest challenges to our competitiveness as an economy (see Ireland's Competitiveness Challenge, 2020). A sustained increase in housing supply should alleviate this persistent upward pressure on the cost of living.

It is true that higher levels of activity in the non-traded sector (housing) in the presence of frictions in the labour market could also damage our competitiveness. These inflationary pressures which would be more near-term in nature would have to be mitigated in some way by, for example, facilitating greater inward migration of workers with the requisite skill levels for the construction sector.

It should be noted as well that a sustained increase in housing supply and particularly in the provision of social and affordable housing could reduce expenditure by the State in other areas. In 2021, it is estimated that total State expenditure on housing assistant payments (HAP) will come to €1.4 billion. This scheme enables local authorities to make a monthly payment to a landlord on behalf of a tenant who pays a weekly contribution based on their household income. Owing to the relatively low levels of housing supply available in the Irish market, this scheme has grown in popularity since its inception in 2014 when the initial budget outlay was €390,000. A sustained increase in affordable housing supply would reduce the necessity for such a scheme and, hence, the State's outlay on it.

CONCLUDING COMMENTS

It is increasingly clear that a long-lasting impact of COVID-19 on Irish society will be the reduced pace of housing supply. This outcome compounds an already pressing issue in Irish economic and social life. The analysis in the paper suggests that, given likely developments in the Irish economy over the medium term, it will be possible for the Government to generate additional funds through borrowing in a sustained but prudent manner. Crucially, this borrowing will still enable the State to have a fiscal buffer in place to meet either anticipated or unanticipated shocks to the economy.

While such a significant scaling up in publicly provided construction would generate sizeable challenges in terms of efficient delivery, it does appear that, as a society, we will fall significantly short of meeting the level of demand for accommodation in the absence of such investment.

There are, of course, many pressing demands for additional State capital investment in areas such as health, education and the adoption of green technologies and each of these must be evaluated on its own merits. However, without significant investment, we risk experiencing another decade of inadequate housing supply and resulting upward pressure on residential prices and rents.

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