

# ESRI RESEARCH NOTE

***The lockdown tale of two economies in Ireland:  
How big tech and pharma bucked the trend***

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# THE LOCKDOWN TALE OF TWO ECONOMIES IN IRELAND: HOW BIG TECH AND PHARMA BUCKED THE TREND

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\* **Conor O'Toole**<sup>1</sup>

## 1. INTRODUCTION

The COVID-19 pandemic represents the most severe, and rapid, disruption to the Irish and international economies in the post-World War Two era. Across the globe, authorities have been imposing public health restrictions which effectively close whole of sections of the economy in an effort to limit the transmission of the virus. While such measures have proven to be effective in many countries to 'flatten the curve', the economic cost associated with these lockdowns is high (IMF, 2020; Mandel and Veetil, 2020).

In Ireland, the authorities introduced extensive restrictions on economic and social life which saw much of the economy put into a deep freeze before gradually opening in June and July 2020. Indeed, Ireland had one of the strictest and longest lockdowns as measured by the recently developed Oxford Stringency Index.<sup>2</sup> Over the first and second quarters of 2020, consumer spending fell by nearly one-quarter (in cumulative terms) and the COVID-19-adjusted unemployment rate peaked at just over one in every three workers.

However, despite the international and domestic economy shock, the economic impacts on Ireland's macroeconomy, as measured by the growth rate of gross domestic product (GDP),<sup>3</sup> were relatively benign. Despite having the third largest consumption fall across 23 European countries, Ireland's GDP decline was the sixth smallest, mainly due to robust export growth. As a small and highly globalised economy, Ireland's growth is always sensitive to international trends. However, the relatively strong performance of Irish exports during the first half of 2020 bucks the international trends when export growth around the world was falling (as evidenced by declining exports in countries such as Germany).

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<sup>2</sup> As measured by the Oxford Stringency Index (Hale et al., 2020).

<sup>3</sup> There has been considerable attention on GDP as an indicator of well-being in Ireland and alternative measures have been proposed (FitzGerald, 2020).

The aim of this Note is to explore the cross-country differences in the scale of the COVID-19 macroeconomic shock, to highlight the relative sectoral performance in a cross-country context and to provide some evidence on the very unique structure of the composition of Irish exports which enabled these areas to buck the COVID-19 economic trend.

A number of findings emerge. First, the performance of the industrial sector in Ireland has masked very large economic adjustments in other sectors. While industrial value added grew by 11 per cent cumulatively over the first half of 2020, value added in construction fell by over 40 per cent, and value added in arts, entertainment and recreation fell by nearly 75 per cent; both of these represent the largest declines of any EU country or the UK.

This duality in performance can be traced back to Ireland's export structure and its concentration in a limited number of areas. Based on 2019 data, 26 per cent of Ireland's exports are computer services, a further 15 per cent are goods for processing, 11 per cent are medical and pharmaceutical goods and 7 per cent are organic chemicals. Only 3 per cent of export values were accounted for by transport, travel and tourism activities which have been severely affected by COVID-19.

During the lockdown period, strong quarterly growth in exports of medicinal and pharmaceutical products, goods for processing (or contract manufacturing) and computer services outweighed very large declines in many other items (on a year-on-year basis).<sup>4</sup> Indeed, the value of tourism, travel and transport exports virtually collapsed (year-on-year in Q2 2020), but their contribution to the fall in overall export values (3 per cent) was completely outweighed by the growth in the value of medicinal and pharmaceutical product exports (3 per cent).

A question arises as to whether these developments were part of multinational corporate activities without any real economic activity taking place on the island of Ireland. Goods for processing activity does not relate to a core activity undertaken in Ireland and could be seen as part of the unusual globalisation effects on the Irish economy (Lane, 2017; FitzGerald, 2015). However, the relatively good performance of computer services and medicinal and pharmaceutical products comes from areas of a real sectoral specialisation advantage for Ireland. Even if

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<sup>4</sup> It is not unexpected to find major variations in output by sector during the lockdown period as some sectors continued to function as per public health advice while others were restricted in their operations.

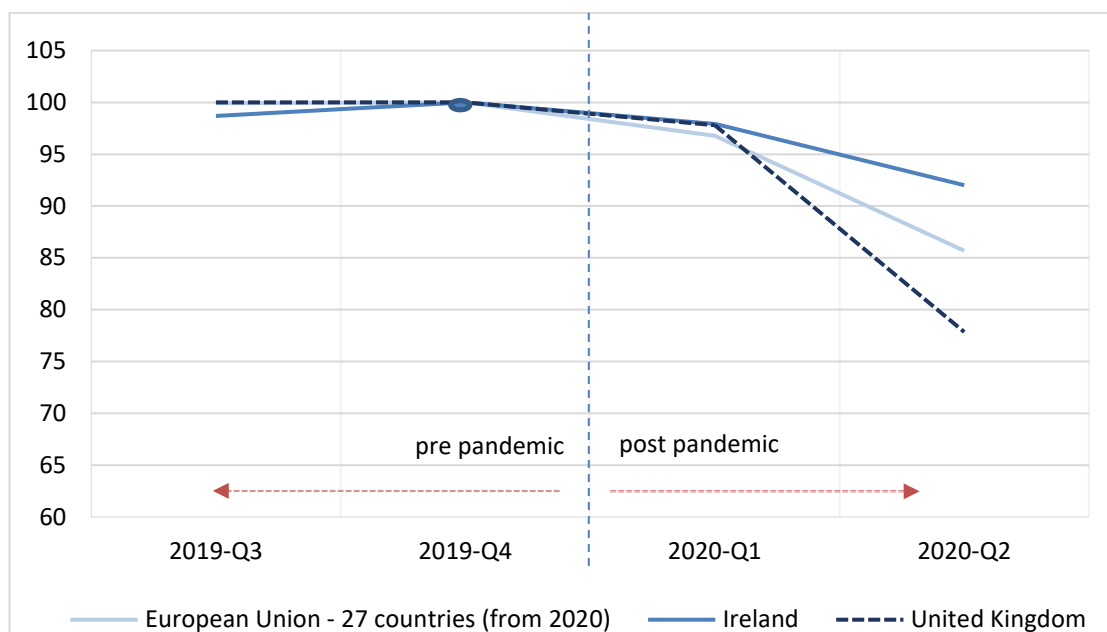
these sectors are not employment intensive, the contribution of these activities should not be discounted from the discourse around Ireland’s economic recovery.

The rest of this Note is structured as follows: Section 2 provides a short overview of the macroeconomic performance of the Irish economy during the lockdown in a comparative perspective. Section 3 contrasts the sectoral performance of the Irish economy with other European countries and Section 4 provides insights into the structure of Irish exports and their unique performance which allowed them to buck the international trend. Section 5 concludes.

## 2. THE MACROECONOMIC PERFORMANCE OF THE IRISH ECONOMY THROUGH THE LOCKDOWN IN A COMPARATIVE PERSPECTIVE

While the difficulties in using traditional macroeconomic aggregates in Ireland (such as GDP and GNP) have been well documented in recent times (FitzGerald, 2018; 2020), many forecasters, commentators and economic planners continue to glean insights into the trajectory of the Irish economy from trends in Quarterly National Accounts data in particular. Given the fast-paced nature of the current COVID-19 pandemic, the timely publication of economy wide statistics is extremely useful as a lens into recent trends. Figure 1 shows the relative macroeconomic performance of the Irish economy over the past number of years in comparison to the UK and the rest of the EU27.

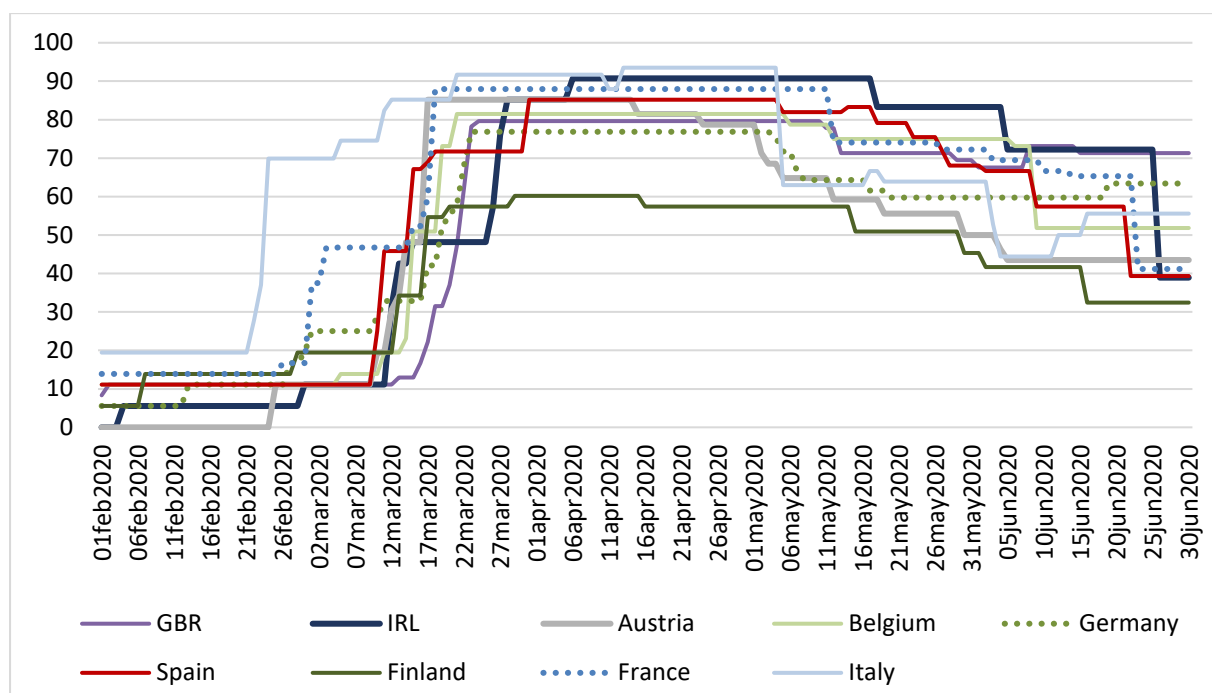
**FIGURE 1 TRENDS IN GDP (CONSTANT PRICES – INDEX 100 SET IN Q4 2019) – Y AXIS INDEX**



Source: Eurostat.  
 Note: Line above indicates pre- and post- pandemic (2019 and 2020). Oval shape indicates Q4 2019 = 100.

The drop in GDP during the lockdown (Q1 and Q2 2020) is much more benign in Ireland relative to other European countries but it also appears to be less severe relative to expectations.<sup>5</sup> Indeed, the relatively benign impact on Ireland from a macroeconomic growth perspective is surprising given the lockdown in Ireland was amongst the most severe in Europe and occurred for longer than in other countries (as measured by the Severity Index presented by Hale et al., 2020).

**FIGURE 2 TRENDS IN LOCKDOWN STRINGENCY INDEX – FEBRUARY TO JUNE 2020**

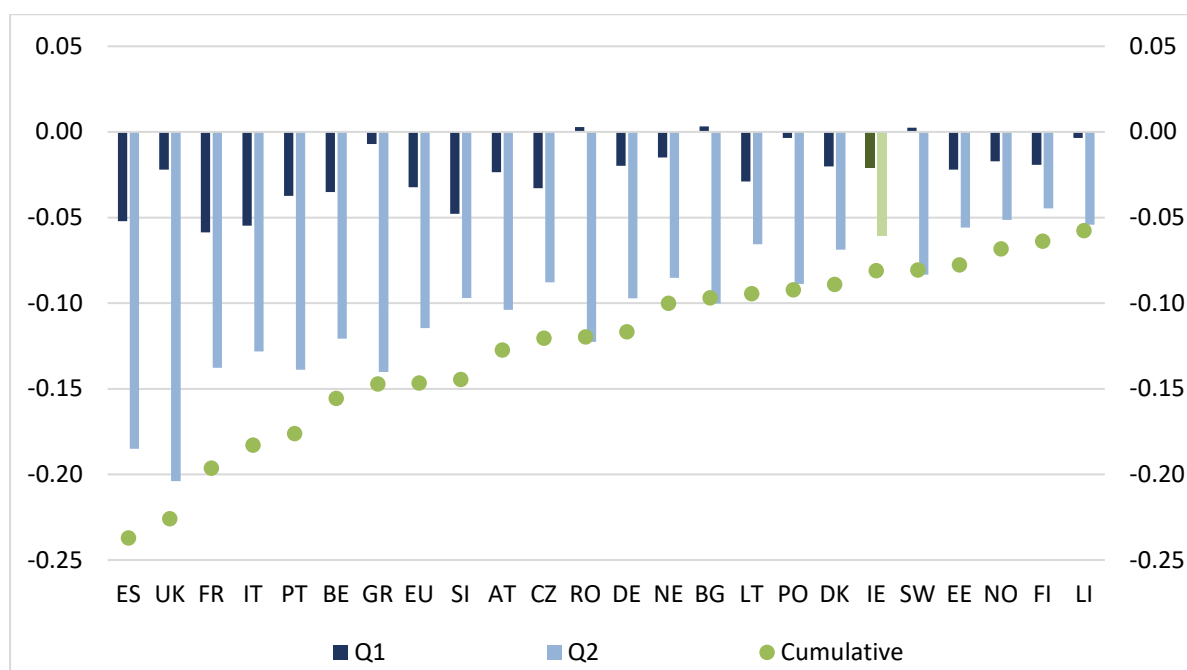


Source: Hale et al. (2020).

To provide a further cross-country perspective, Figure 2 presents the quarter-on-quarter growth rate in Q1 and Q2 2020 as well as the cumulative quarterly growth rate for the two periods combined. The data are presented in this structure to attempt to capture the severity of the initial COVID shock relative to the pre-pandemic benchmark in Q4 2019. It is clear that the impact on Ireland is on the low end of the countries presented, with an impact closer to Denmark, Switzerland and Norway. The largest declines have been in Spain, the UK, Italy and France which have all lost at least 20 per cent of GDP over the first two quarters of 2020.

<sup>5</sup> In the recent *Quarterly Economic Commentary* (Summer 2020), we forecast much more severe falls in GDP than experienced in the second quarter of 2020 using National Accounts data.

**FIGURE 3 QUARTER-ON-QUARTER CHANGES IN GDP – Q1, Q2 2020 AND CUMULATIVE Q1+Q2**

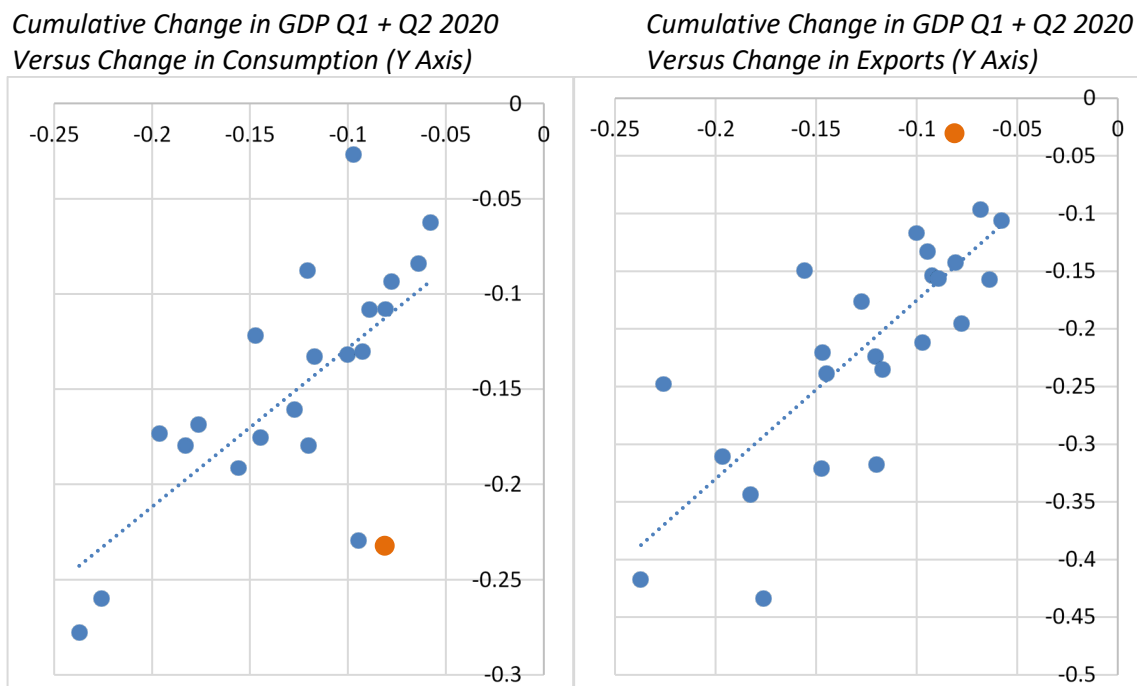


*Source:* ESRI Analysis of Eurostat data. Data presented are cumulative quarterly growth  $((Q2t/Q1t)-1) + ((Q1t/Q4t-1)-1)$  in seasonally adjusted and calendar day adjusted value added volumes (chain linked € million).  
*Note:* Data seasonally and calendar days adjusted.

This relatively benign impact on Ireland can be explained by the difference in how the pandemic has impacted on domestic consumption and exports. While consumption expenditure has dropped dramatically, exports have been much more robust. The scatterplots below show the cumulative change for the first half of 2020 (Q1 Q-on-Q change plus Q2 Q-on-Q change) in GDP on the horizontal axis and the cumulative change in consumption and exports on the vertical axis. It is clear that the Irish fall in consumption is one of the largest, and much greater than the GDP fall. Conversely, the export fall has been small relative to other countries and relative to the fall in GDP. As an economy, exports in Ireland are a much larger share of GDP (approximately 137 per cent of 2019 GDP) as compared to consumption (31 per cent of 2019 GDP).<sup>6</sup> These figures are much higher than for the EU 27 at 51 and 52 per cent respectively and for the UK at 32 and 63 per cent. This makes Ireland’s economy much more sensitive to changes in exports (naturally the final impact on GDP depends on the trade balance).

<sup>6</sup> Data using GDP volumes (GDP € million chain linked 2010) from Eurostat. Available on request from the author.

**FIGURE 4 SCATTER PLOT OF GDP FALL AND CHANGE IN CONSUMPTION AND EXPORTS**

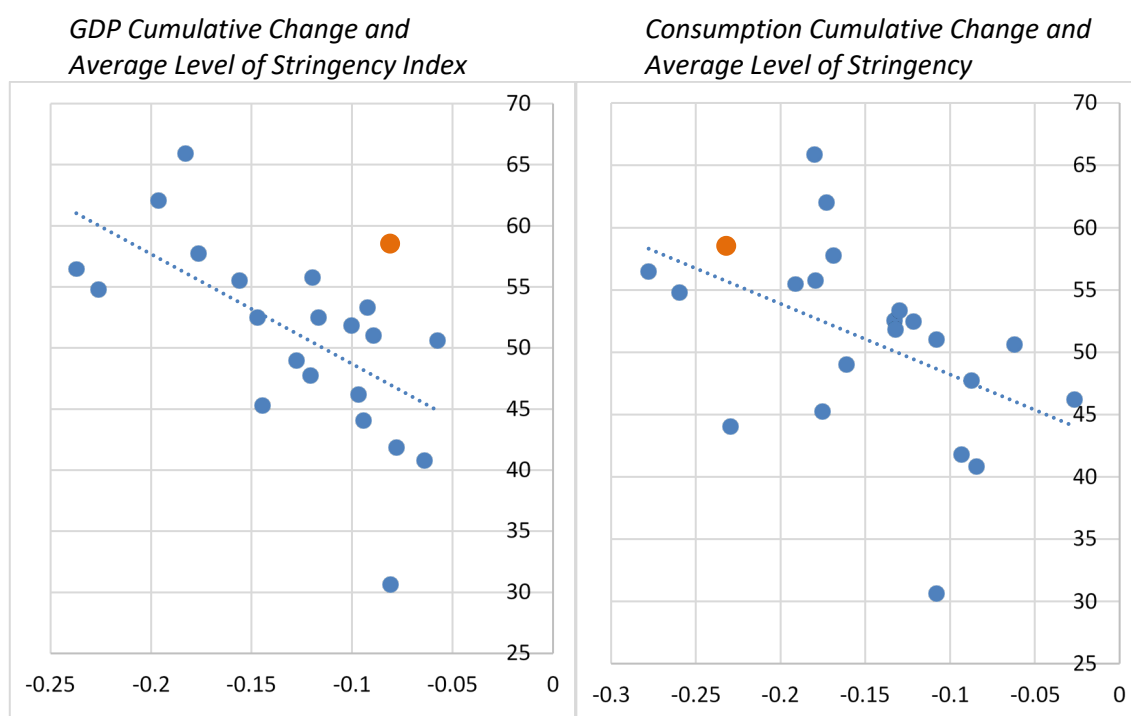


Source: ESRI Analysis of Eurostat data.  
Note: Orange dot indicates Ireland.

Indeed, Figure 5 provides clearer evidence of the impact of the stringency of the lockdown measures in Ireland and its correlation with economic activity. The scatter diagram plots the average stringency by country over the period February to June 2020 (the period in which the pandemic began in Europe) on the vertical axis, and the cumulative quarterly changes in GDP and consumption on the horizontal axis. The line in the diagram is a simple linear fitted plot. The downward sloping trend line shows a highly negative correlation between stringency and GDP change. It is clear that the impact on Irish GDP is much less than would be expected by the stringency of the lockdown when compared to other countries (orange dot is well above the fitted plot line) while the impact on Irish consumption has a similar relationship to other countries (orange dot is closer to the fitted line).



**FIGURE 5 SCATTER PLOTS OF GDP CHANGE, CONSUMPTION CHANGE AND STRINGENCY INDEX**



Source: ESRI Analysis of Eurostat data.  
 Note: Orange dot indicates Ireland.

For Ireland, the duality of the economic shock is notable. The domestic economy has been very badly affected by the pandemic with very large decreases in consumption. However, the export channel has held up extremely well and this has led to a much lower GDP adjustment than otherwise would have been expected. The rest of this Note explores the differences between sectors and export structure that can help shed further insight into this economic duality.

### 3. A DEEPER DIVE INTO THE SECTORAL EXPERIENCE ACROSS COUNTRIES

To provide further insight into the comparative difference between Ireland and other countries in terms of the macroeconomic adjustments from the pandemic, the following charts explore the differences across sectors on a cross-country basis. The figures presented in all charts are the cumulative quarterly changes in value added for Q1 and Q2 for each sector individually.<sup>7</sup> The aim of this comparison is to explore just how different the economic adjustment was relative to other countries for different sectors of the Irish economy. The cross-country comparison includes 27 countries; all EU members (excluding Slovakia for whom data on Eurostat were missing at the time of analysis) and the UK.

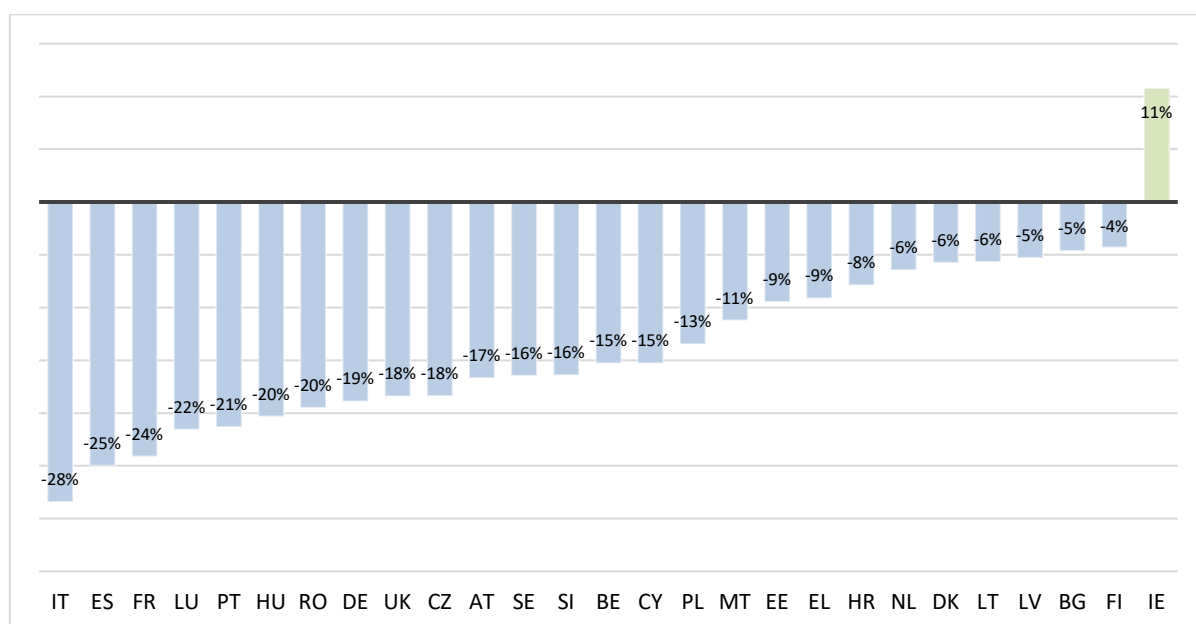
<sup>7</sup> Quarter 1, 2020 quarter-on-quarter change plus Quarter 2, 2020 quarter-on-quarter change.

Comparisons across countries for the following sectors (available from the Quarterly National Accounts) are presented:

- Industry;
- Construction;
- Wholesale, retail, transport, accommodation and food services;
- ICT;
- Financial and insurance services;
- Real estate activities;
- Professional, scientific and technical activities; admin and support services; and
- Arts, entertainment, recreation, and extra territorial activities.

To begin, the cumulative quarterly growth changes in value added for Q1 and Q2 2020 are presented below for industrial activities. Of the 27 countries considered, 15 countries experienced a decline in industrial value added of over 15 per cent. Italian industrial value added shrank by nearly one-third, and the French and Spanish value added declined by nearly one-quarter. In fact, all countries, with the exception of Ireland, experienced a decline in industrial value added; Ireland, by contrast, experienced double digit growth (11 per cent).

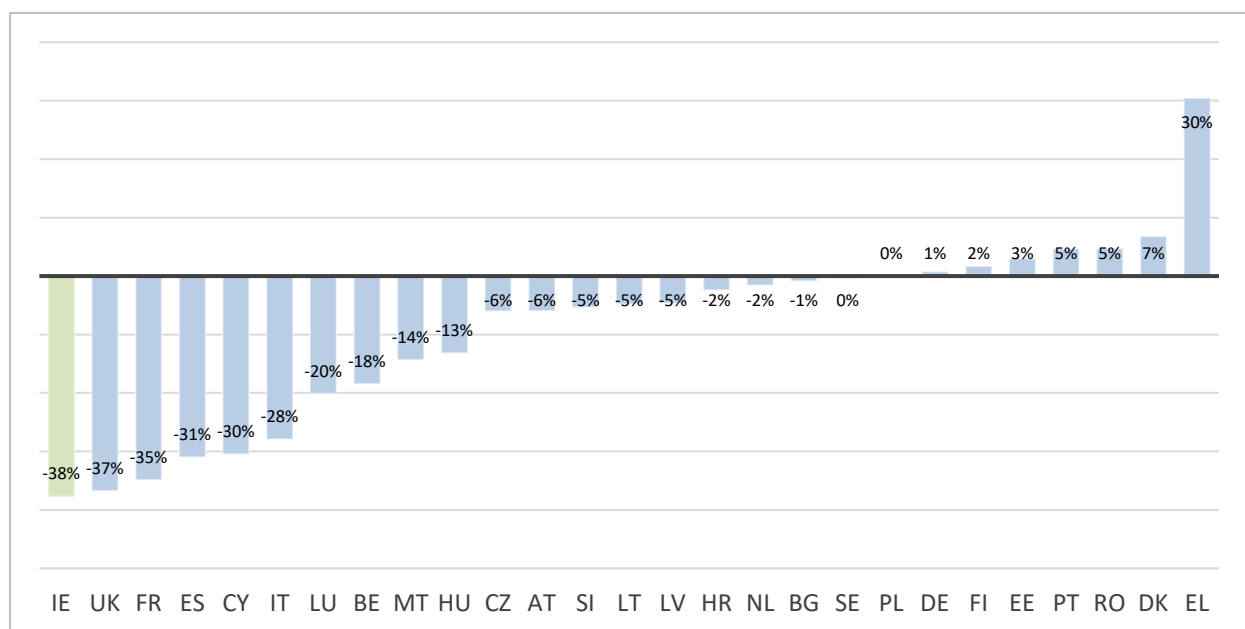
**FIGURE 6 INDUSTRY – VALUE ADDED (VOLUMES), CUMULATIVE QUARTERLY CHANGES (Q1,Q2, 2020)**



Source: ESRI Analysis of Eurostat data.  
 Note: Data seasonally and calendar days adjusted.

We next consider the change in value added in the construction sector. In contrast to the industrial sector’s performance, the decline in Irish construction value added was nearly 40 per cent, the largest of any of the 27 countries considered. The UK and France also experienced very large drops in construction value added at 37 and 35 per cent. Spain, Cyprus, and Italy also lost over a third of value added in the construction sector. A number of countries experienced growth in construction value added over the period including Denmark, Romania, Portugal, Estonia, Finland and Germany.

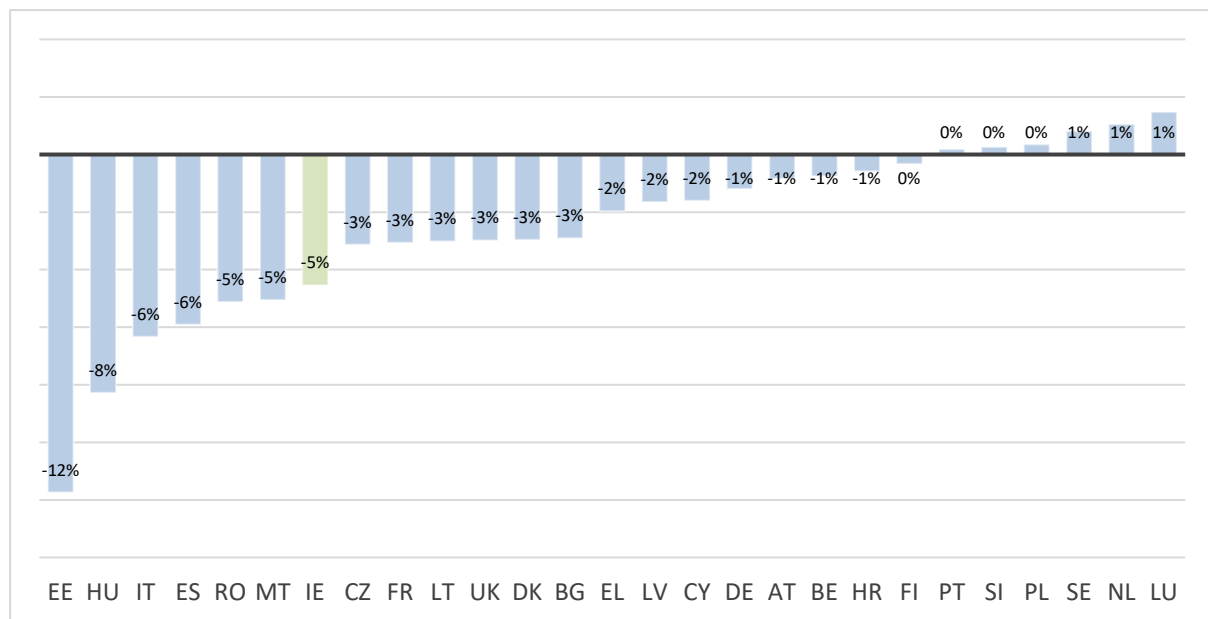
**FIGURE 7 CONSTRUCTION – VALUE ADDED (VOLUMES), CUMULATIVE QUARTERLY CHANGES (Q1,Q2, 2020)**



Source: ESRI Analysis of Eurostat data.  
 Note: Data seasonally and calendar days adjusted.

While construction value added declined extensively, value added in real estate services did not decrease by such an extent, having declined only circa 5 per cent. The country with the largest decline in this sector was Estonia at nearly 12 per cent.

**FIGURE 8 REAL ESTATE – VALUE ADDED (VOLUMES), CUMULATIVE QUARTERLY CHANGES (Q1,Q2, 2020)**

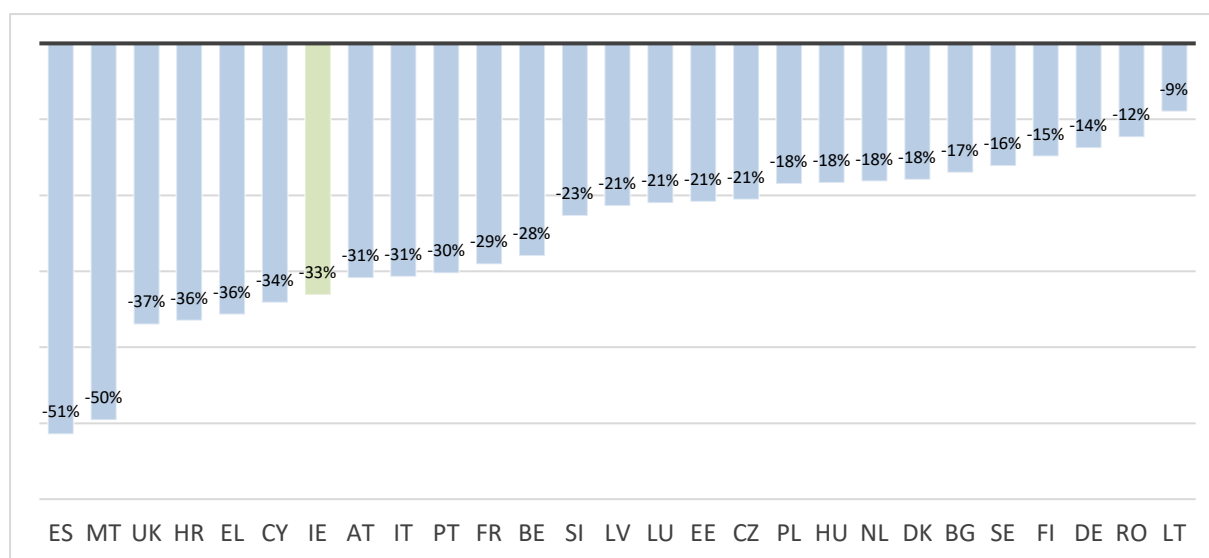


Source: ESRI Analysis of Eurostat data.  
 Note: Data seasonally and calendar days adjusted.

The next sector considered is a large composite sector including wholesale, retail, food, accommodation, transport and food services. The broad nature of this sector makes it somewhat more difficult to compare as it mixes items that we may consider to be insulated against the pandemic such as retail sale of food and groceries with services in the tourism and transport sector which are likely to have been very severely affected. Each of the European economies will have a differing reliance on these sectors which makes the comparison of this group more challenging.

Value added in these sectors fell considerably in Spain and Malta, down over 50 per cent. This is unsurprising given the reliance of these economies on tourism activities. Value added in these sectors also dropped by close to, or over, one-third in a further ten economies including Ireland, Portugal, Italy, the UK, Austria, France and Belgium. The country with the smallest decline in value added in this sector was Lithuania.

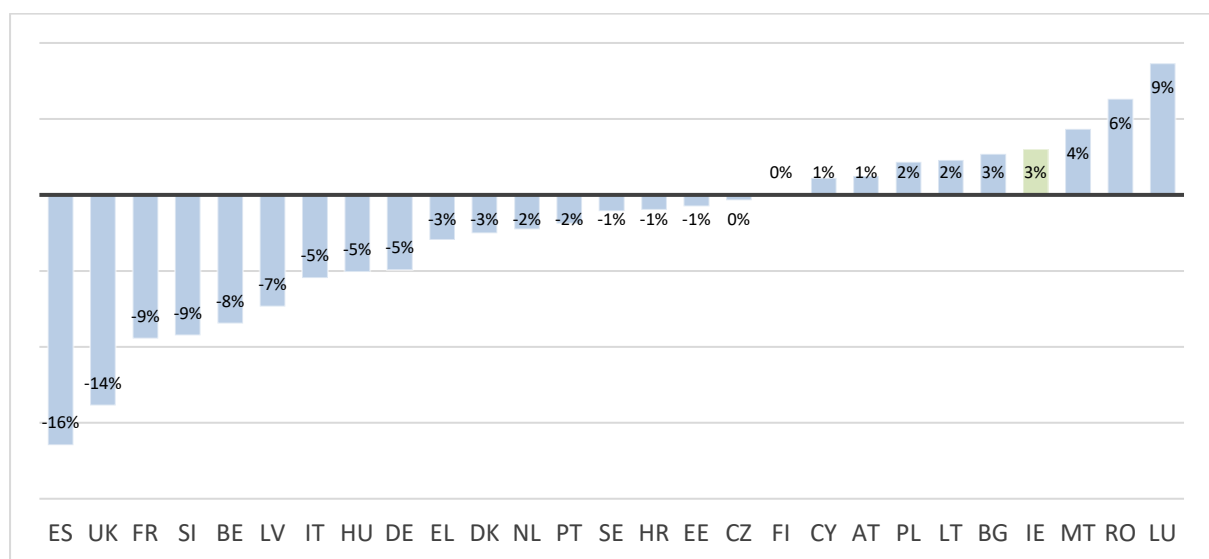
**FIGURE 9 WHOLESALE, RETAIL, FOOD, ACCOMODATION, TRANSPORT – VALUE ADDED (VOLUMES), CUMULATIVE QUARTERLY CHANGES (Q1,Q2, 2020)**



Source: ESRI Analysis of Eurostat data.  
 Note: Data seasonally and calendar days adjusted.

Ireland is well known for hosting some of the biggest technology companies and the value added in ICT is critically important for the Irish economic performance. Indeed, value added in ICT grew over the Q1-Q2 period in Ireland at over 3 per cent. This is the fourth highest of the countries considered, with Romania, Malta and Luxembourg the only countries with higher value added growth in ICT. The UK, Spain and France experienced 14, 16, and 9 per cent declines in ICT value added over the period respectively.

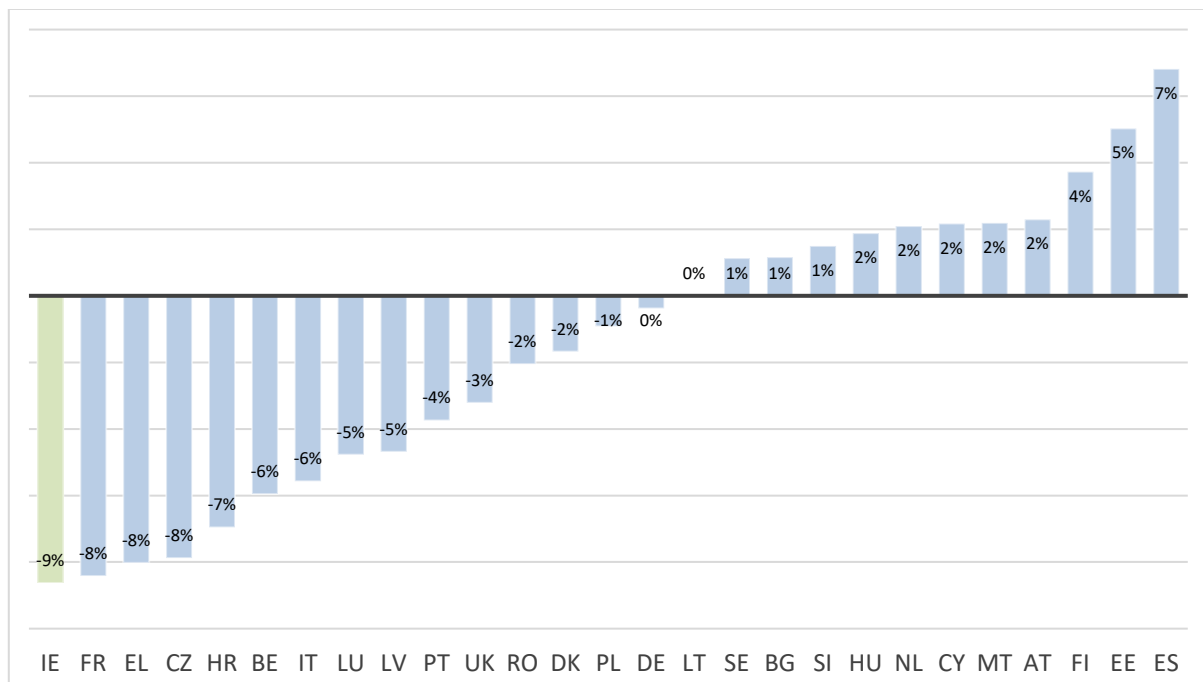
**FIGURE 10 ICT – VALUE ADDED (VOLUMES), CUMULATIVE QUARTERLY CHANGES (Q1,Q2, 2020)**



Source: ESRI Analysis of Eurostat data.  
 Note: Data seasonally and calendar days adjusted.

The next sector considered is financial and insurance activities. During the first half of 2020, Ireland experienced the largest drop in value added in financial and insurance activities of any of the 27 countries considered. Cumulatively for Q1 and Q2, value added in this sector fell by 9 per cent in Ireland. The country which experienced the largest increase in output in this sector was Spain with 7 per cent cumulative growth across the quarters.

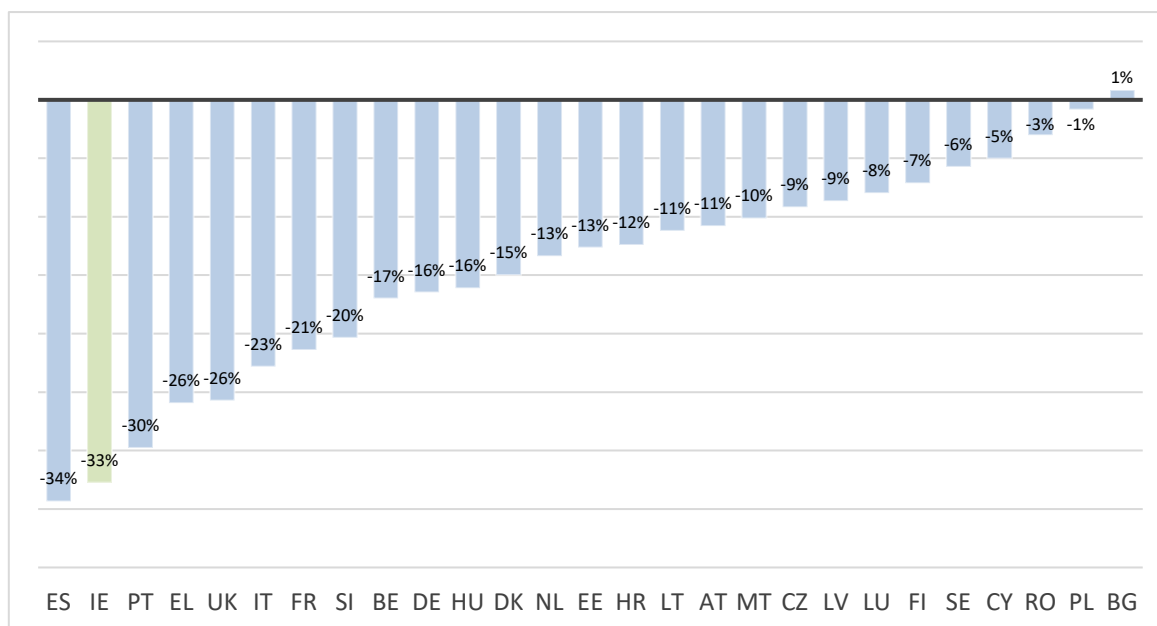
**FIGURE 11 FINANCIAL INSURANCE – VALUE ADDED (VOLUMES), CUMULATIVE QUARTERLY CHANGES (Q1,Q2, 2020)**



Source: ESRI Analysis of Eurostat data.  
 Note: Data seasonally and calendar days adjusted.

Figure 12 presents the cumulative change in value added for the professional, technical, scientific, administration and other services sectors. Ireland experienced the second largest decline in value added relative to other countries at 33 per cent. Only Spain, with a drop of 34 per cent, posted a larger decline in value added in this sector. Eight countries experienced value added falls in this sector of upwards of one-fifth. Bulgaria was the only country to experience an increase in sectoral value added in this service sector over the period.

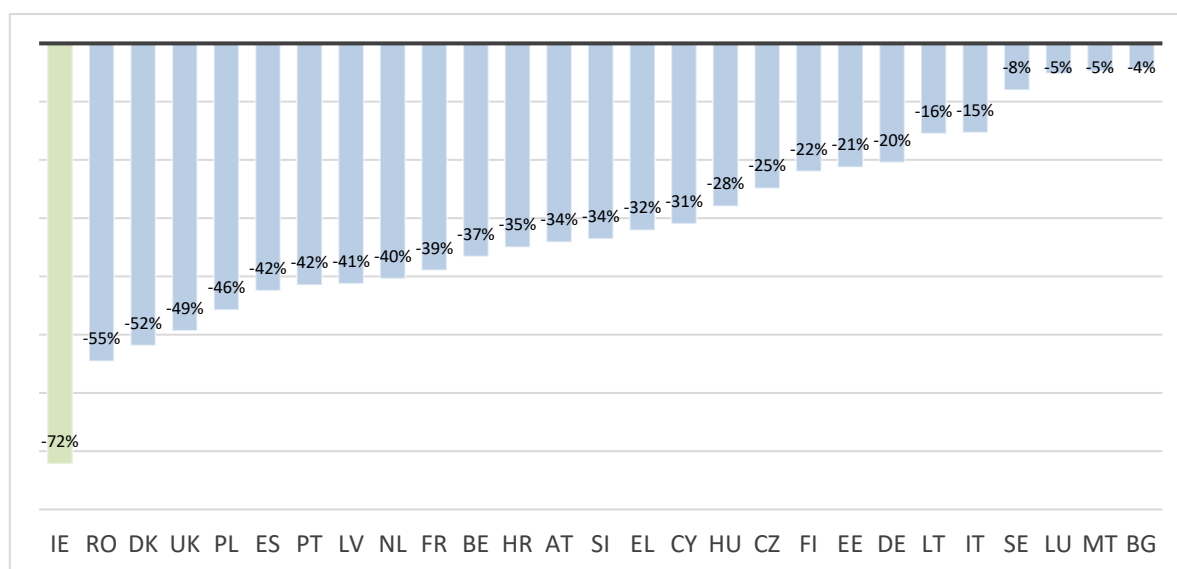
**FIGURE 12 PROF, TECH, SCIEN, ADMIN – VALUE ADDED (VOLUMES), CUMULATIVE QUARTERLY CHANGES (Q1,Q2, 2020)**



*Source:* ESRI Analysis of Eurostat data.  
*Note:* Data seasonally and calendar days adjusted.

The final sector presented covers arts, entertainment and recreation activities. Naturally, the lockdown measures which have limited households’ ability to travel far from their residence closed many public amenities, and restricted group entertainment activities will have a large impact on this sector. Indeed, Coffey et al. (2020) demonstrated the large decline in spending in this category for Ireland. While a decline in this area was to be expected, the fall in value added in this sector in Ireland was severe at 72 per cent; nearly three-quarters of value added in this sector was lost during the first half of 2020. This decline is far greater than for any other country, with Romania and Denmark the only other countries also losing more than 50 per cent of value added. The UK decline in value added in this sector was also extreme at 49 per cent. The dramatic decline in value added for Ireland in this sector highlights the severe challenge that firms operating in this area have to face to survive the pandemic. The phased reopening of the economy in Ireland continued to restrict activities in this area in order to help suppress the virus. This likely to have hampered the recovery of this sector in Ireland relative to other countries where these activities may have been allowed to restart.

**FIGURE 13 ARTS, ENTERTAINMENT AND RECREATIONAL ACTIVITIES – VALUE ADDED (VOLUMES), CUMULATIVE QUARTERLY CHANGES (Q1,Q2, 2020)**



*Source:* ESRI Analysis of Eurostat data.  
*Note:* Data seasonally and calendar days adjusted.

To summarise the sectoral experience in Ireland, it is clear industrial and ICT activities bucked the trend while Ireland experienced very large declines in construction, financial and insurance services, wholesale, retail, accommodation and food, and in particular in the arts, entertainment and recreational activities sector. Indeed, the declines in Ireland for construction, financial and insurance services, and the arts, entertainment, and recreation sectors were the largest experienced by any country of the 27 considered.

#### 4. THE RESILIENCE AND CONCENTRATION OF IRISH EXPORTS

The above sectoral analysis highlights the very robust performance of Irish industrial and ICT value added through the lockdown period. This section further investigates the specific trends occurring underlying these activities by providing detailed insight in the export patterns of Irish goods and services. As Ireland has a small domestic market, the large output of these sectors is naturally exported to other countries, and highlighting the trends in exports by product can shed more light on the extraordinary industrial performance through the lockdown.

Indeed, the exceptional performance of the Irish export sector can be seen in an international context when contrasting the growth rate of exports (for goods, services and overall) with other European economies. Figure 14 highlights the trend in annualised quarterly growth in exports for Ireland, the EU 27, Germany and the UK. While all countries experienced a severe drop in export growth, the decline is much smaller in Ireland. Indeed, goods exports from Ireland increased by



around 7 per cent on an annualised basis in Q2 2020. While services export growth was negative, the decline was much less severe than the other regions.

The contrast with Germany is interesting in that Germany provides a good proxy for international trading activity. As a highly export-oriented economy, German activity tends to move in line with international conditions. The fact that Irish activity does not follow a similar pattern provides clear insights into the structural differences which are worth exploring in more detail. In particular, this allows us to consider how the goods exports performed so well on the back of the extremely difficult international trading conditions.

**FIGURE 14 TRENDS IN OVERALL EXPORTS FOR IRELAND AND COMPARATOR COUNTRIES**



Source: Eurostat.

To begin, it is useful to explore the structure of Irish exports to provide context for the discussion. For the full year 2019, Ireland exported approximately €448 billion worth of goods and services.<sup>8</sup> Merchandise exports accounted for just over half the total at €227 billion while service exports accounted for €221 billion.<sup>9</sup> Within these totals, particular product/service activities were very dominant. Of the €227 billion of goods exports, €152 billion was accounted for by international trade activities, by which activities are classified as having products which ‘moved across borders’. This represents 34 per cent of total exports. A further €68 billion is accounted for by goods for processing. Recent CSO research notes that goods for processing (or contract manufacturing) are covered by the following activities: (a) goods sent abroad for further processing in another economy, (b) goods received from abroad

<sup>8</sup> Data taken from National Income Accounts 2019 table N1905. Current prices.

<sup>9</sup> Current account exports for 2019 taken from annual Balance of Payments Series.

for processing in Ireland, or (c) goods purchased abroad and further processed abroad. These activities accounted for nearly 15 per cent of total Irish exports in 2019. For these activities, no trade has crossed the Irish State’s border but a change in ownership has occurred involving an Irish resident firm which brings the value of activity within the context of the Irish National Accounts.

In terms of services activity, €117 billion of the total €221 billion is due to exports of computer services. These exports account for just over one-quarter of Ireland’s export activity. Activities such as transport, tourism and travel which are severely affected by the pandemic did not account for a large share of Irish export revenues, at just 3 per cent.

**TABLE 1 OVERVIEW OF TOTAL EXPORTS 2019 – BALANCE OF PAYMENTS DATA (€ MILLION)**

|                                   | € million | % of Total 2019 |
|-----------------------------------|-----------|-----------------|
| <b>Total (A+B)</b>                | 448,867   |                 |
| <b>Merchandise (A), of which:</b> | 227,497   | 51              |
| International trade               | 152,679   | 34              |
| Goods for processing              | 68,468    | 15              |
| Other conceptual adjustments      | -7,128    | -2              |
| Merchanting (net export)          | 13,477    | 3               |
| <b>Services (B)</b>               | 221,370   | 49              |
| Repairs and processing            | 2,477     | 1               |
| Transport, tourism and travel     | 13,780    | 3               |
| Financial and insurance           | 26,772    | 6               |
| Computer services                 | 117,099   | 26              |
| Royalties/licences                | 10,614    | 2               |
| All business services             | 43,792    | 10              |
| Comms and other services          | 6,837     | 2               |

Source: Central Statistics Office, Balance of Payments Data.

The breakdown of exports by product or service for the 20 largest export items are presented in Table 2 using a bottom up approach.<sup>10</sup> The items are ranked by their share of 2019 export values. The first result of note is that as well as computer services, two particular product items accounted for nearly 20 per cent of total exports in 2019 – these were medicinal and pharmaceutical products (11 per cent of 2019 export values) and organic chemicals (7 per cent of 2019 export values). Nearly 60 per cent of total exports in 2019 were accounted for by four goods and

<sup>10</sup> To measure total exports, the ‘international trade’ component in the balance of payments export data is replaced by the product specific export values from the merchandise trade (monthly) data. These figures are not identical therefore slight differences exist in the overall value of exports in this bottom up exercise. However this allows a calculation of the share of total from each of the individual items.

service export categories. It can also be seen that medicinal and pharmaceutical products grew strongly in Q2 2020 during the lockdown, increasing 5 per cent in the quarter and 31 per cent on an annualised basis. Goods for processing also increased strongly over the lockdown at 9 per cent quarter-on-quarter growth. The negative effect of the pandemic on sectors such as transport and tourism can be seen by the major declines in transport services exports (down 72 per cent Q-on-Q) and tourism (down 78 per cent Q-on-Q and 90 per cent Y-on-Y).

**TABLE 2 BREAKDOWN OF EXPORTS BY PRODUCT OR SERVICE FOR TOP 20 LARGEST ITEMS (SORTED BY 2019 SHARE OF TOTAL)**

|   | (1)        | (4)                      | (5)                             |
|---|------------|--------------------------|---------------------------------|
|   | 2019 Share | Q2 Y-on-Y                | Contribution to Growth (Y-on-Y) |
| Computer services   | 26         | 4                        | 1                               |
| Goods for processing  | 15         | 14                       | 2                               |
| Medicinal and pharmaceutical products (54)                                    | 11         | 30                       | 3                               |
| Organic chemicals (51)  | 7          | -16                      | -1                              |
| Business services other than research and development and operational leasing | 5          | -18                      | -1                              |
| Financial services  | 4          | 0                        | 0                               |
| Business services: Operational leasing  | 4          | -9                       | 0                               |
| Merchanting (Net)   | 3          | -2                       | 0                               |
| Royalties/licences  | 2          | -15                      | 0                               |
| Insurance   | 2          | 5                        | 0                               |
| Electrical machinery, appliances etc., n.e.s. (77)                            | 2          | 21                       | 0                               |
| Transport   | 2          | -86                      | -2                              |
| Essential oils, perfume materials, toilet preparations etc. (55)              | 2          | -12                      | 0                               |
| Miscellaneous manufactured articles, n.e.s. (89)                              | 2          | -18                      | 0                               |
| Professional, scientific and controlling apparatus (87)                       | 2          | -28                      | 0                               |
| Tourism and travel  | 1          | -90                      | -1                              |
| Office machines and automatic data processing equipment (75)                  | 1          | -7                       | 0                               |
| Business services: Research and development                                   | 1          | -7                       | 0                               |
| Other transport equipment (79)  | 1          | -76                      | -1                              |
| Chemical materials and products, n.e.s. (59)                                  | 1          | -25                      | 0                               |
| <b>Overall</b>  | <b>100</b> | <b>-1.7<sup>11</sup></b> |                                 |

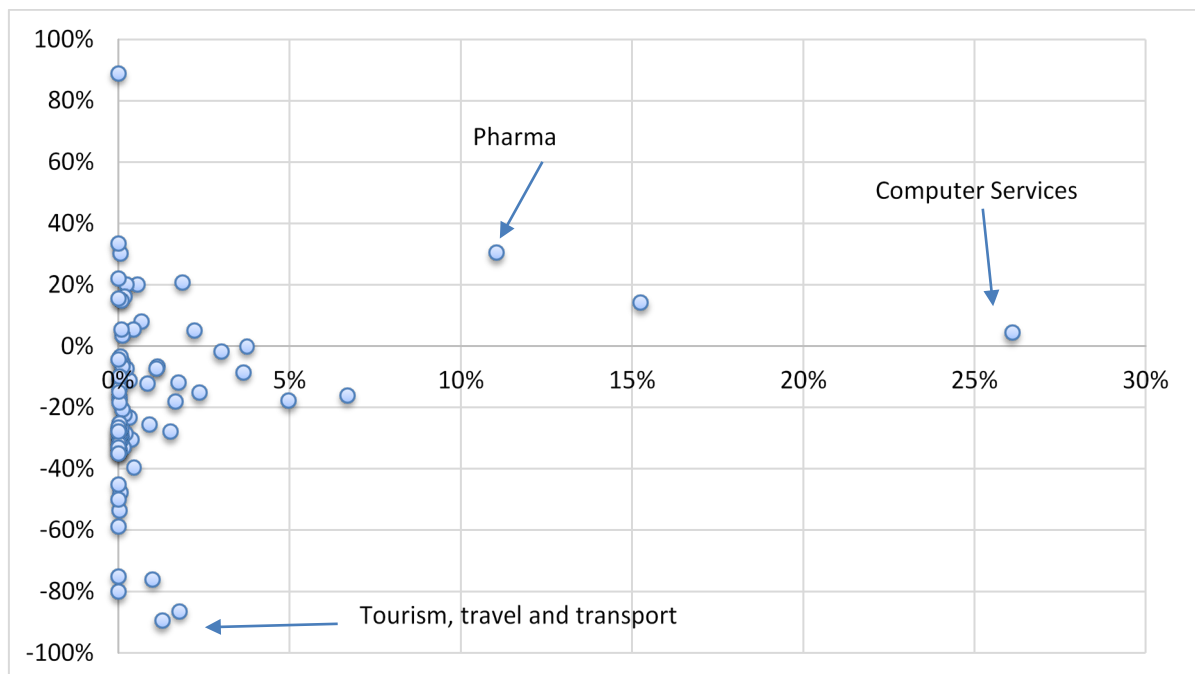
Source: ESRI Analysis of CSO International Accounts (Table 2.1) and Merchandise Trade data (Statbank Table TSM06).

<sup>11</sup> To calculate the changes and contribution to growth at a product level the individual items from the merchandise trade data are used on a monthly basis to gross up to the quarterly data. The total level of the grossed up monthly data is marginally different from the quarterly total international trade data from Table 2.1 of the Balance of Payments quarterly release. Therefore the year-on-year growth in export values presented differs from that calculated from the BOP release. The difference comes mainly from Q2 2020 which is €0.5 billion lower using the disaggregated data (growth difference -1.7 per cent to -1.4 per cent (using BOP)).

Column (5) in Table 2 highlights the contribution to the change in overall exports (in value terms) of change in each individual item.<sup>12</sup> This provides a magnitude for how each individual item affects the total change in the value of goods and service items. Computer services export growth contributed 1 percentage point growth to the overall annualised change, medicinal and pharmaceutical product growth contributed a full 3 percentage points in growth to overall exports. In a sense, this fully counteracted the decline in transport, tourism and travel exports whose near decimation acted to drop overall exports by only 3 per cent in value terms.

This relative performance-concentration argument can be more clearly seen in Figure 15, which presents a scatter plot covering all the product and service categories with the year-on-year growth rate in Q2 2020 (vertical axis) and the share of total exports in 2019 (horizontal axis). It is very clear that while exports fell dramatically for the vast majority of export items, the overall activity was masked by the relatively benign performance in the largest items (as discussed above).

**FIGURE 15 SCATTERPLOT OF EXPORT SHARE (2019) (X-AXIS) AGAINST Q2 2020 YEAR-ON-YEAR CHANGE (Y-AXIS)**



Source: ESRI Analysis of CSO data.

<sup>12</sup> For example, the overall percentage change in total exports in value terms on a year-on-year basis to Q2 2020 is shared amongst the relative contributions of each individual item to that overall change.

## 5. CONCLUSIONS

This Research Note explores the macroeconomic performance of the Irish economy over the lockdown period in the first half of 2020 in a cross-country context. The main aim of the Note is to highlight the duality of the performance across sectors and to provide insight into how, despite one of the strictest lockdowns in terms of public health restrictions, the economic impacts on the overall macroeconomy were relatively benign.

The research shows that, despite a drop in personal consumption expenditure that is one of the highest across the European countries examined, the concentration of Irish exports in computer services and pharmaceutical and medicinal goods ensured that overall GDP impact was much more muted due to the growth in these export products.

While the impact on the economy of the pharmaceutical and computer services sector is disproportionate to its employment share, many of the companies in big tech and pharma are indeed large employers here in Ireland and do have a real presence on the ground. Growth from exports in this area are not therefore necessarily national accounting distortions from activities without an economic presence in Ireland (such as contract manufacturing activities). The continued strong performance of these export areas is likely to influence the path of Irish GDP which may continue to outperform metrics such as unemployment and consumption which are arguably better measures of changes in national economic welfare.

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