

Economic Considerations for Reinstating Economic Activity



Expenditure and Reform and the Department of Finance.

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1. Executive Summary

1.1 INTRODUCTION AND PURPOSE

This paper developed by the Department of Business, Enterprise and Innovation in conjunction with the Department of Finance and the Department of Public Expenditure and Reform, provides an assessment of the economic impact of the COVID-19 pandemic focusing on those sectors of the economy that have been most heavily impacted. Drawing on this analysis, the paper identifies from an economic perspective some priority issues including in terms of the sequencing of re-opening of economic activity under the *Roadmap for Reopening Society and Business*. It is an initial input only – there would be considerable value in extending the approach for other sectors. The paper is intended to complement other inputs to the Government's consideration of the Roadmap including the public health assessments of NPHET and an analysis of social policy issues.

The paper draws (in Section 2) on international analysis of the impacts of COVID-19 and reviews the stepdown plans and measures adopted by other EU member states and the UK. It also draws on sectoral inputs provided by other Government Departments.

1.2 ECONOMIC OUTLOOK AND SECTOR IMPACTS

An assessment of the macroeconomic outlook based on the *Stability Programme Update* (SPU) published recently by the Department of Finance is set out in Section 3. While there is a huge degree of uncertainty, it is clear that the economy has suffered a severe shock without historical precedent. Under the Department's central scenario, GDP is projected to decline by over 10% in 2020. Some 220,000 jobs will be lost with the unemployment rate exceeding 25% in the second quarter of the year. Based on the analysis in the SPU and a more detailed sectoral and labour market analysis provided by the Department of Public Expenditure and Reform in Section 4, it is clear that as of now the most-heavily impacted sectors ("high impact") are accommodation and food, construction, administrative and support services, wholesale & retail trade, and other personal services. Other sectors where the impacts are significant but somewhat less severe ("medium impact") include the manufacturing sector, and transport and storage. This pattern of sectoral impacts is similar to that observed in other countries; sectors where remote working is not feasible or that require personal contact with consumers are hugely exposed to the necessary travel and other restrictions that containment of the virus requires.

The gravity of the economic impact of COVID-19 on sectors can be summarised as follows:

 Economic lockdown in Ireland has been longer than many other countries, with entry into the lockdown at the early stages of the national COVID-19 disease cycle, longer closure and a conservative approach to phased reopening compared to some countries, with many sectors remaining closed for a long period of time;

- Economic consequences of the lockdown have been grave, with a particularly large negative effect on the labour intensive sectors, some of which have seen almost the entire workforce moving to income supports;
- The cost to the Exchequer of income supports is large and unsustainable. Almost half of those previously in employment are now on COVID-19 related income support payments with the weekly cost of the PUP now at just over €200m and around €840m in payments through the TWSS since March 26th. There are also significant disincentive effects associated with the PUP with 38% of recipients previously earning less than €300 per week.
- Extended closures not only compound the already large fiscal impact, but also reduce the prospects of recovery for significant segments of the enterprise base and may lead to permanent loss of output and employment in some sectors.

Looking further ahead, the international response to the COVID-19 pandemic including possible changes to business models - for example a desire by some countries to onshore production of critical goods and rising protectionist sentiment - could threaten Ireland's attractiveness for foreign direct investment and our economic model generally.

1.3 ASSESSMENT APPROACH AND CRITERIA

In Section 5 of the paper, the analysis focuses in detail on the "high-impact" sectors (as listed above and which we define as sectors where more than half of the workforce is in receipt of the Pandemic Unemployment Payment (PUP) or the Temporary Wage Subsidy Scheme (TWSS) and "medium-impact" sectors (again as listed above) where over a quarter of the workforce is on the PUP or TWSS. Drawing on the preceding analysis in Section 4 as well as inputs from Departments with policy responsibility for the sectors concerned, each of these sectors is considered against a number of economic criteria to inform an economic view as to which sectors should be prioritised for re-opening or an easing of restrictions under the Roadmap. It is understood that other, non-economic factors have to be taken into account, most obviously those relating to public health that will be the subject of assessment by NPHET and important social policy considerations. The criteria used here are as follows:

- The extent to which economic activity in a sector is exposed to permanent damage or output loss if restrictions were to remain in place.
- The economic importance of the sector as measured by Gross Value Added (and employment).
- The regional distribution of employment in the sector measured on the basis of
 the employment by place of work (not residence). The thinking here is that sectors
 where employment is more dispersed (or less concentrated) pose less of a challenge
 from a public health perspective. We measure this criterion by considering the
 shares of employment in the sectors in the Dublin region.
- The fiscal costs of sector restrictions as measured by the number of PUP/TWSS claimants in the sector;
- We have regard to interdependency constraints for each sector to capture the reality that economic activity often depends on the availability of inputs from other

- sectors or on sales to other sectors. So, for example, the construction sector could not function if cement supplies were restricted.
- A final criterion considers sectors from the perspective of their importance to wider
 policy goals as set out in key Government policy strategies including Project Ireland
 2040, Rebuilding Ireland and enterprise policy (as set out in Enterprise 2025 and
 Future Jobs Ireland).

1.4 KEY CONCLUSIONS

It is clear that the current levels of restrictions on private sector activity and the associated fiscal costs of employment and other supports cannot be sustained indefinitely. The Government's Roadmap for Reopening Society and Business charts how the Government intends for restrictions to be unwound on a phased basis subject to public health considerations. Therefore, the conclusions focus in the main on immediate considerations for Phase 1 of the Roadmap while, mindful of the rolling nature of the process, also raising issues that will arise over the course of the Roadmap.

Based on the approach adopted in this report, the immediate economic priorities for an easing of restrictions are the construction sector and those parts of the manufacturing sector falling outside the essential services list. A re-opening of the Construction sector would offer substantial economic benefits given the industry's large size, labour intensity and importance in supplying inputs to downstream industries. Employment in the sector is quite dispersed regionally and the sector is critical to delivery of important national priorities including delivery of critical infrastructure projects under the NDP and housing supply as well as to the delivery of a number of major industry capacity expansion projects that are also crucial for future long-term employment at the locations in question.

The manufacturing sector accounts for 36% of GVA. Productivity levels in the sector are high reflecting Ireland's strong presence in sub-sectors dominated by multi-national firms such as ICT, pharmaceuticals and medtech. Employment in the sector is well dispersed (80% outside Dublin). While much of the sector was classified as an essential service, some areas including in the engineering sub-sector have had to close. The international dimension should be borne in mind as Ireland's economy reopens. Given the global nature of markets and supply chains, the rebuilding of the Irish economy will be dependent on EU and global recovery as well as broader international policy responses to the crisis. The manufacturing sector is heavily exposed to these wider external economic and policy developments as are some parts of the internationally traded services sectors which are deeply integrated with the tourism sector.

Based on estimates from the enterprise development agencies, some 15,000 jobs have been affected by the restrictions - many of these are regional employers and primarily manufacturing, who form a critical part of global supply chains in industries such as automotive and consumer products. These jobs are highly vulnerable to permanent loss given their role in global supply chains and the availability of alternative suppliers in other jurisdictions. The addition of the manufacture of products that form part of important

economic domestic and international supply chains to the essential services list would enable these firms to re-open and remove the risk of significant economic and employment losses at regional level.

Both the construction and manufacturing sectors are also distinctive in terms of controllability of the workplace in that they are not public focused and are in a position to adopt safe work practices in a controlled environment. As with all businesses, these sectors value predictability and certainty. The unwinding of restrictions must be clear and unambiguous.

It will need to be recognised that these sectors have supply chains and interdependencies with other economic actors. For example, construction is dependent on suppliers such as quarries and reliant on a functioning planning system (especially important for some strategic projects underway in the multinational sector) and use real estate services as the route to market. These activities, which are part of other sectors, would need to be active.

An additional priority issue from an economic perspective is to ensure clarity on the Roadmap for the business sector. As currently set out, it is difficult to map economic activity to the economic activity and retail, personal services and commercial activities categories set out at Sections 4 and 5 respectively in the Roadmap. This poses challenges in assessing the impact of relaxation of restrictions across the different phases on travel to work numbers and on implications for take-up of supports such as the PUP and the TWSS. This is a particular problem in the case of the retail sector (see Section 6). Many of these problems could be addressed by the provision of detailed guidelines to accompany the Roadmap. One option would be to amend the list of essential service providers as a living document as decisions are taken on the phases set out in the Roadmap. If required these could be further tailored by the usage of the commonly used business size classifications, e.g., micro, small, medium and large if required.

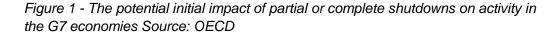
Finally, while the focus of this paper is on sectors based on their size and the criteria used, it is recognised that other economic activities or subsectors have considerable importance for particular regions or rural areas. In one or two areas there is the possibility of significant economic gains accruing from minor changes or clarifications to the Roadmap. A number of issues are set out in Section 6.

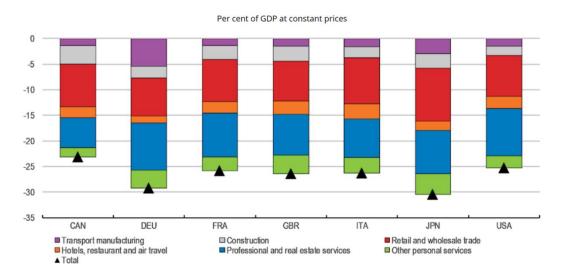
2. International Analysis

Governments globally have introduced unprecedented measures to contain the spread of COVID-19. Confinement measures locked down large parts of the economy, hitting supply chains, shutting down business and triggering significant job losses. The consequences for economies of this shock, which has hit both the supply and demand side, will be substantial and will go significantly beyond the short-term.¹ The OECD note that even once restrictions begin to be eased, "the extent of any subsequent recovery in output will depend on the effectiveness of the policy actions taken to support workers and companies through the downturn and the extent to which confidence returns."²

2.1 SECTORAL IMPACTS

Internationally, sectors differ in terms of their exposure to restrictions and the demand and supply-side impacts. The OECD, in its evaluation of the initial impact of COVID-19 containment measures on economic activity, provide estimates of the initial impact of restrictions on sectoral output across the G7 economies (see figure 1) with retail and wholesale trade, and professional and real estate services being the most impacted.





¹ LSE Blogpost - There is no way back to business as usual in the EU

² OECD, OECD Policy Responses to Coronavirus (COVID-19) - Evaluating the initial impact of COVID-19 containment measures on economic activity, 14 April 2020

Analysis by Copenhagen Economics³ indicates a 27% total reduction in economic activity as a result of the lockdown in the euro area. Looking at this by sector (see Table 1), the three sectors projected to experience the largest reduction activity are Arts, Entertainment and Recreation (84%), Hotels and Restaurants (75%), and Wholesale and Retail Trade (75%).

| Share of total Gross Value-Added (GVA) | | | | | | | | | |
|--|--------------|--|--|--|--|--|--|--|--|
| Sector | Reduction in | | | | | | | | |
| | activity | | | | | | | | |
| Arts, entertainment and recreation | 84% | | | | | | | | |
| Hotels and restaurants | 75% | | | | | | | | |
| Wholesale and retail trade | 75% | | | | | | | | |
| Construction | 50% | | | | | | | | |
| Operational services and knowledge-based | 39% | | | | | | | | |
| activities | | | | | | | | | |
| Manufacturing | 26% | | | | | | | | |
| Transporting | 22% | | | | | | | | |
| Information and communication | 16% | | | | | | | | |
| Utilities | 12% | | | | | | | | |

Table 1 - Indicative current reduction in economic activity as a result of the lockdown in the Euro area - Source: Copenhagen Economics

Analysis by the ECB finds the total initial economic loss from the lockdown is estimated to be around 30% of GVA, though this varies by country.⁴ Again, looking at this by sector (see Table 2), the ECB indicate the most impacted sectors are Retail trade, transport, accommodation, food service activities (60% loss), Industry excluding manufacturing and construction, Manufacturing and Construction (40% loss for each).

| Percentage Gross Value-Added (GVA) | | | | | | | | |
|---|------|--|--|--|--|--|--|--|
| Sector | Loss | | | | | | | |
| Retail trade, transport, accommodation, food service activities | 60% | | | | | | | |
| Construction | 40% | | | | | | | |
| Manufacturing | | | | | | | | |
| Industry (excluding manufacturing and construction) | | | | | | | | |
| Professional, scientific, administrative and technical activities | | | | | | | | |
| Arts, Entertainment, Recreation and other Services | | | | | | | | |
| Real Estate Activities | | | | | | | | |
| Agriculture | 10% | | | | | | | |
| Information, Communication | 10% | | | | | | | |

³ Copenhagen Economics, Economic Consequences of The Covid-19 Pandemic, March 2020

⁴ ECB, Alternative scenarios for the impact of the COVID-19 pandemic on economic activity in the euro area, 1 May 2020

| Percentage Gross Value-Added (GVA) | | | | | | | |
|------------------------------------|------|--|--|--|--|--|--|
| Sector | Loss | | | | | | |
| Financial and Insurance activities | | | | | | | |
| Public Administration | 10% | | | | | | |

Table 2 - Initial sectoral losses due to strict lockdown measures - Source: ECB

Across these three reports the analysis indicates, on the whole, that the sectors most impacted by the restrictions are Accommodation and Food Services, Wholesale and Retail Trade, Construction and Other NACE Services (Arts, Entertainment and Recreation and Other Services).

2.2 STEPDOWN MEASURES

Most countries are approaching their exit strategy in a similar fashion especially in terms of the phases of reopening.

Looking at stepdown measures, in particular approaches to resuming economic activity, in terms of dates, Ireland is behind most other EU Member States. However, it should be noted that our restrictions came into place after many Member States, so this is not surprising. This lag offers us the opportunity to observe the experience of other countries and to avoid problems encountered.

Most EU Member States have 4 to 5 phases in their plans to ease restrictions. For its part, the UK has 3 phases. The phase(s) in which key sectors are hoped to reopen across other Member States and the UK can be summarised as follows:

| Construction | Where construction is specified in stepdown measures it, along with relevant sub-suppliers, is generally reopening in phase 1. |
|---------------------------------|--|
| Accommodation and Food Services | For most countries, restaurants will reopen from phase 3 with outdoor service only and indoor service with strict restrictions from the following phase. |
| | Hotels will reopen in most countries during phase 4 of their stepdown measures again with restrictions in place. |
| | In the UK these sectors will reopen in their final phase where possible no earlier than 4 July. |
| Other NACE Services | Cultural activities, such as museums, will reopen with capacity restrictions from phase 3 in most MS. |

Sporting activities and theatres and cinemas follow in the next phase.

Mass gatherings are not being permitted, in most countries, until at least the end of July (where easing of restrictions began in late April / early May).

Contact professions (e.g. hairdressers, beauticians and barbers) will, with for example the exception of Netherlands and Greece, generally being reopened in phase 2 or 3.

In the UK these sectors will reopen in their final phase where possible but not earlier than 4 July.

Wholesale and retail trade

Small shops (with strict social distancing requirements) are, for the most part, open from phase 1 of MS's stepdown measures onwards. Shops in shopping centres / malls are usually not included here.

Larger retailers generally open in phase 2 or 3 and shopping centres / malls, if not already open, follow suit in the subsequent phase.

In the UK, non-essential retail will re-open on a phased basis from 1 July.

Looking at the phases for easing of restrictions in other EU Member States and the UK, Ireland's Roadmap follows a broadly similar sequence. Ireland would appear to have a more elongated phased opening concerning parts of retail and some personal services. Limited information is available for construction and manufacturing with a small number of European countries having reopened it. A distinction made in most other countries but not in Ireland is to permit the reopening of the outdoor areas of restaurants in advance of the whole restaurant reopening. The other significant difference noted is the reopening of so-called contact professionals takes place much earlier in all other countries than in the Irish Roadmap.

3. Economic Impact of COVID-19 on the Irish Economy

3.1 ECONOMIC OUTLOOK - STABILITY PROGRAMME UPDATE 2020

The policy response to the spread of the COVID-19 virus both domestically and internationally, while necessary from a public health perspective, has resulted in a sharp contraction in global and domestic economic activity, with the size and speed of impact unprecedented in modern times. The COVID-19 pandemic is the greatest challenge facing the Irish economy since the financial crisis.

The COVID-19 shock to the economy is without historical precedent and, as a result, there is a great deal of uncertainty surrounding the magnitude of the economic impact. Given these uncertainties, the Department of Finance took the approach in the Stability Programme Update (SPU) of producing a scenario-based analysis rather than a traditional forecast. The prudent, but not worst case, 'central' scenario underpinning the SPU projections is one in which containment measures are assumed to remain in place for approximately three months, resulting in a very sharp contraction in the latter weeks of the first quarter and most of the second quarter. Thereafter, a very gradual recovery commencing in the third quarter is assumed reflecting a gradual easing of containment measures. Under such a scenario, all sources of economic growth including personal consumer spending, investment, and net trade will decline this year. The only positive contribution to economic growth this year is expected to come from increased public spending consisting of the purchases of goods and services including the expansion of healthcare provision by the general government sector.

Under the 'central' scenario, GDP is projected to decline by 10.5% this year. Modified Domestic Demand, perhaps the best indicator of domestic economic conditions, is projected to fall by 15% this year. To provide some context, at the lowest point of the last crisis Modified Domestic Demand fell by 10% in 2009. Employment is projected to fall substantially, with approximately 220,000 jobs being lost. The unemployment rate is projected to dramatically rise over the first half of the year, with an average rate in the mid-20% range during the second quarter, before falling over the second half of the year, as containment measures are gradually eased.

Consistent with this negative outlook, recent data releases already indicate that both the manufacturing and services sectors have been adversely affected. Manufacturing PMI data shows a further contraction in April, with the reading coming in at 36.0 in April compared to 45.1 in March (<50 = contraction). This is the largest monthly fall in the history of the index. This is supported by recent 'hard' data, which showed that industrial production in the mainly indigenous 'traditional sector' fell by 4.8% on an annual basis in March. However, it is likely that services will be more adversely affected than manufacturing. The services PMI data show a dramatic decline in April, with readings coming in at 13.9 in April compared to 32.4 in March. This is the lowest reading in the 20-year history of the index. The construction PMI data show an unprecedented fall in construction activity in April, with readings coming in at

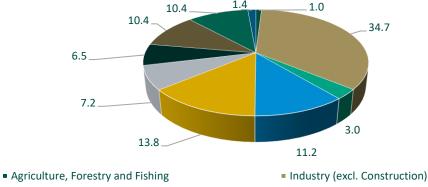
4.5 in April compared to 28.9. The reading for April is substantially worse than that recorded at the lowest point of the last crisis.

The impact of COVID-19 restrictions on consumer spending has also already been borne out in recent data releases. The volume of retail sales declined by 12.7% on a monthly basis in March. This represented the largest monthly decrease since January 2009. The sectors with the largest monthly declines were Bars (-53%) and Textiles, Clothing and Footwear (-49%) and Motor Trades (-31%). Private cars (new and used/imported) licensed for the first time decreased by 88.2% in April 2020 on an annual basis, with private cars down 90.3%. Consumer sentiment in April showed the largest monthly decline in the twenty-four-year history of the survey as a result of COVID-19.

The economic impact of COVID-19 is perhaps best seen through the prism of the labour market. The latest data (as of May 8th) show just over 214,700 persons on the Live Register, 456,200 employees in receipt of income support through their employer via the Revenue Temporary Wage Subsidy Scheme, and 589,000 recipients of the Pandemic Unemployment Payment from DEASP. This implies a total of over 1.2 million people who are currently receiving some form of income support from the State. While the standard measure of Monthly Unemployment was 5.4% in April 2020, up from 5.3% in March, a new COVID-19 Adjusted Measure of Unemployment could indicate a rate as high as 28% if all claimants of the Pandemic Unemployment Payment were classified as unemployed.

3.2 SECTORAL ANALYSIS

Figure 1 presents the share of output accounted for by each sector in the economy. Industry is the largest sector producing approximately 35% of economic output in 2019. Information and communication is the second largest with almost 14% followed by distribution, transport, hotels and restaurants at 11%.



- Construction
- Information and Communication
- Real Estate Activities
- Public Admin, Education and Health
- Distribution, Transport, Hotels and Restaurants
- Financial and Insurance Activities
- Professional, Admin and Support Services
- Arts, Entertainment and Other Services

Figure 2: Sectoral Share of Output in 2019, %

Source: CSO Quarterly National Accounts.

The containment measures put in place to restrict the spread of the virus has meant that economic activity in many sectors of the economy has been significantly reduced. The OECD (2020)⁵ recently estimated that 21% of Irish economic activity (i.e. GDP) takes place in sectors most likely to be directly affected by the containment measures introduced. However, this figure is affected by globalisation-related issues, which inflate Ireland's GDP and have limited impact on Irish living standards. The share increases to 32% when expressed as a percentage of modified GNI and to almost 37% when expressed as a percentage of 'domestic' gross valued added.



Figure 3: 'Directly Affected Sectors' as a share of output across countries, % of GDP

Source: OECD (2020) and Department of Finance calculations.

Note: Affected sectors are as per OECD (2020). These include manufacturing of transport equipment, construction, wholesale and retail trade, air transport, accommodation and food services, real estate services excluding imputed rent, professional service activities, arts, entertainment and recreation, and other service activities. The OECD calculations assume an economy-wide output shutdown, rather than a shutdown confined to particular regions only. Sectors presented as a % of GDP at constant prices. IE represents the affected sectors as a share of GDP; IE_GNI represents the affected sectors as a share of modified GNI or GNI*; IE_DGVA represents the affected sectors as a share of Domestic Gross Value Added.

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⁵ OECD. (2020). "Evaluating the Initial Impact of Covid-19 Containment Measures on Economic Activity".

In an effort to estimate the loss in economic output as a result of containment measures, activity is grouped into the 10 high-level NACE sectors and, for each quarter this year, an assumption was made regarding the extent to which output would decline in each sector. The economic impact of the pandemic is assumed to be most significant in the second quarter, with the containment measures being gradually relaxed over the second half of the year. The size of the sectoral output shock relies on available evidence regarding the exposure of individual sectors to containment measures as well as, inevitably, assumptions and judgement (figure 3). The exact results of this 'output approach' should therefore be treated as indicative (though the overall impact matches the projected GDP decline in the SPU).

At this stage it is clear that the economic impact of COVID-19 will not be the same across all sectors of the economy. Activity in the services sector has been significantly reduced in recent weeks. For example, activity in the distribution, transport, hotels and restaurants sector will experience a significant decline. Hotels and restaurants have been effectively closed since mid-March and many forms of travel including by air have been reduced significantly. Many non-food retailers have also closed. Activity in the arts and entertainment sector has stopped. Other services sectors such as administration and support activities, which includes rental/leasing activities and travel agency, and real estate activities will be significantly reduced. We assume that finance and service activities and information and communication technology will be the least affected service sectors primarily on the basis that they rely less on direct contact between consumers and service providers while the activity in those sectors should be able to be completed from home.

The direct impact of containment measures on manufacturing sectors is likely to be smaller than that of the services sector. This is primarily due to the fact the many manufacturing industries are considered as essential while they are less labour intensive which would allow for more effective social distancing in the workplace. Though activity is expected to decline in manufacturing, the fall in output will be limited given that pharmaceutical and other medical devices account for the majority of output. Activity in the pharmaceutical sector has largely continued. However, production in the mainly indigenous sector is expected to be adversely affected – reflected in an annual decline in manufacturing production in the traditional sector in February and March this year. Construction is also expected to fall given that non-essential construction work has been reduced due to containment measures. The Construction PMI fell from 28.9 in March to 4.5 in April, surpassing the previous low level of 25.7 reached at the lowest point of the global financial crisis, reflecting the dramatic fall in construction activity as a result of site closures.

In summary and as illustrated below, the losses of economic output vary widely from sector-to-sector, with services activities tending to be more adversely affected than manufacturing activities. In particular, it is assumed that the loss of output will be greatest in the distribution, transport, hotels and restaurants sector and the arts and entertainment sector. There will also be a substantial decline in professional administrative and support activities, real estate activities and in construction.

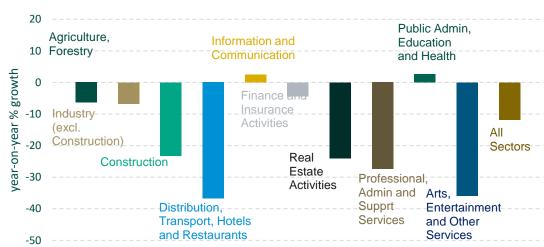


Figure 4: Output approach to calculation of GDP in 2020, year-on-year % change

Source: CSO, Department of Finance.

4. Sectoral Impact Analysis

4.1 SECTORAL IMPACTS OF COVID-19 AND FUTURE PROSPECTS

The significant economic impact of COVID-19 has been felt across Ireland in terms of both regions and sectors. Restrictions that have been put in place have curtailed many economic and social activities with different sectors of the economy impacted to varying degrees. The Roadmap for Reopening Society & Business sets out a phased easing of restrictions and while this will allow for the resumption of economic activity in stages, it does not imply an immediate return to pre-COVID-19 levels of activity. Many of the affected sectors will continue to face challenges and viability concerns due to the extended closure, imposed public health guidelines and requirements, changed consumer behaviour and lower demand, with permanent losses of employment and output likely in some sectors.

Detailed impact on the six sectors that have been most affected by COVID-19 to date are outlined below.

Accommodation and Food (e.g. hotels, pubs, and restaurants) is the worst affected sector, being in near complete shutdown since mid-March (96% of employees in the sector have moved to income supports). Under the current roadmap, major reopening is not scheduled until phases 4 and 5. This will limit the capacity of enterprises to recoup losses from closures earlier in the year. Compounding this, many enterprises in the sector rely on seasonal demand (particularly regionally) and the reopening times will occur near the end of the high season. Extended closures and continued public health guidelines will threaten viability within subsectors and could have enduring impacts on activity well into the long-term. Noting the variation in the impact of the pandemic by country, some countries differ in their approach to the timing of lifting restrictions for restaurants, with some (e.g. Switzerland, Austria) easing restrictions in the initial phases of their reopening. Given education profile, average pay and share of part-time employment, the challenge of labour market activation in the reopening and recovery stages is of particular concern for this sector.

While accounting for 2% of GVA, this sector is labour intensive and employs around 8% (180,000) of the national workforce. The sector has almost 130,000 on PUP, the highest of all sectors in absolute and relative terms, at a weekly cost to the Exchequer of €45m. In addition, 28% of the 19,200 enterprises in this sector are using the TWSS. The sector is an important employer outside of Dublin, particularly in the South East, South West and Border where it employs over 9% of the workforce. It is also highly interlinked with other sectors: downstream, the shutdown of the accommodation and food sector has negatively impacted the demand for agricultural produce (e.g. seafood, steak cuts etc.); upstream, the sector is heavily dependent on the resumption of activity in other sectors (transport, entertainment etc.).

Construction (e.g. residential developments, civil engineering) has seen a very significant level of disruption as a result of COVID-19 and currently has the second highest proportion of workers on income support measures at an estimated 86%. The reliance of the sector on foreign-national labour means there is potential for labour supply shortages after restrictions are lifted if a share of the workforce has left Ireland during the work restrictions. In recent years there has been a supply shortage of construction outputs, as demanded by residential and state development projects. Any ongoing closures will exacerbate this limited supply. There is international evidence that Irish construction closures have been more extreme than in other countries. For instance, some countries (e.g. Germany) did not cease construction activity at all. On May 18th there will be a phased return of outdoor workers including construction workers. Due to already existent supply shortages in output, the construction sector stands out as one of the sectors that could see a speedy return to activity if the necessary labour supply is available. The sector relies heavily on material inputs such as concrete, steel and other building materials and as such it will be important that supply chain issues (e.g. manufacturing, mining/quarrying, freight transport) do not prevent projects going forward.

79,000 construction workers are now on PUP which equates to a weekly cost of around €28 million. In terms of economic impact, the construction sector accounts for a large proportion of enterprises in Ireland (57,255 or 21%) and the majority of these are small in size (83% in firms with less than 50 employees). The sector also accounts for 3% of GVA and 6% of the total workforce (147,100 people employed). Reducing the level of activity in the construction sector also implies wider costs across the economy with a reduced level of development in areas such as housing and infrastructure.

Administrative and Support Service (e.g. recruitment, office administration, and travel companies) have been widely shut down with 65% of those employed in receipt of income support (around 63% on PUP, 37% on TWSS). The recovery of this sector will be staggered across the reopening phases, in line with the resumption of activity in related sectors. Cleaning of buildings, employment activities, security services, business support and leasing of air transport equipment are reliant on businesses in other sectors of the economy being open and the level of activity within these sectors. The longer the duration of closures across these related sectors, the larger will be the impact on the Admin and Support Services sector. Some of these related sectors, such as tourism and aviation, may have longer term challenges in terms of the levels of demand needed to sustain their business model and some potential permanent loss of activity. Some elements of the sector, such as landscaping, may be able to get back to work in phase one; while others such as travel tour operators are going to be restricted until the latter phases of the reopening.

The current value of the PUP may act as a disincentive to work for lower paid and part time elements of the sector. The sector accounts for 6% of GVA, and 5% (112,100) of the national workforce. The aircraft leasing element of the sector is a large contributor in terms of GVA for this sector. The sector accounts for 7% (18,700) of the national enterprise base. An estimated 34% of eligible employers in this sector are using the TWSS and the PUP is

estimated to cost around €16m a week for those previously employed in the sector. The sector is highly integrated with other sectors in the economy, for example through building services, employment activities, security services and business support. As such, the sector is heavily reliant on activity across various sectors in the economy.

Wholesale and Retail (e.g. food, all other retail goods) accounts for 8% of GVA and is the largest employer across all sectors, with 310,200 employed. Despite some retail activities (e.g. grocery) remaining open in the lockdown and experiencing an increase in demand, the sector as a whole has been badly affected, with 64% of workforce having moved to income supports. In most countries, the retail sector has been one of the first to reopen. In Ireland, this is spread over the first 3 phases, with large shopping centres set to open in a limited capacity in phase 5. Continued strict public health guidelines and an associated drop in footfall will threaten the viability of some enterprises in the sector. While many firms will be able to adopt new modes of operation (online, contactless etc.), others such as the motor trade cannot and an irreparable loss of activity is likely. The restriction measures are likely to have sped the ongoing shift of consumer-demand into online purchasing, permanently reducing the demand for labour supply in the retail professions (the largest occupation in the sector).

The sector has a wide regional significance; 16% of employment in the Midlands and 12% in Dublin, with similar levels of employment across all other regions. Almost 90,000 persons from this sector are in receipt of PUP at a cost of €31m per week. In addition, 37% of 48,500 enterprises in this sector are in the TWSS. The sector (especially its large SME base) is reliant on wider demand in the economy, which is likely to be suppressed for some time, with employment and income levels set to recover to pre-COVID-19 levels over a longer period of time. There is high interdependency between the performance of the retail sector and the opening of the transport, tourism, and art/entertainment/events sectors. Given education profile, average pay and share of part-time employment, the challenge of labour market activation in the reopening and recovery stages is of particular concern for this sector.

Entertainment, Sports Activities, Beauty and other NACE services - 63% of workers in this sector have moved to income support. A return to activities that allow largescale revenues to be generated are suspended until later phases of the roadmap to recovery plan. While some easing of restrictions in phase 1-3 will have a positive economic impact, it will not be until events can facilitate large gatherings that a sectoral recovery can be expected to begin. The interaction between this sector of the economy with the accommodation and food sector is vital. Ongoing closures, prolonged social distancing measures and wider economic effects (e.g. reduced household income) may significantly reduce the productivity of the sector in the long-term. The duration of any closures will exacerbate this impact. Longer term recovery of the sector is wholly dependent on resurgence of consumer demand and the requirement for social distancing. Noting the variation in the impact of the pandemic by country, some countries have allowed personal services (e.g. hairdressing) to open with precautionary measures in earlier phases of their reopening plans than in Ireland.

The sector accounts for a relatively small share of economic output at 1.4% of GVA, although it does represent a significant proportion of employment with just under 120,000 people employed (5% of total). There are over 30,000 firms that operate in this sector. They are typically small in nature with 3 out of every 4 persons employed in these sectors working in firms with less than 50 employees. It is also of note that a high proportion of people employed in the sector are part-time (41%) and average weekly wages are lower than the national average (€517 vs €783). The current weekly cost of the PUP is €8m.

Transportation and Storage (e.g. distribution, haulage, air travel, personal transport) has seen significant disruption with 44% employed in the sector now on income support (38% of these on PUP, 62% on TWSS). For PUP, this amounts to almost 18,000 recipients within the sector and €6m per week to the exchequer. Disruption to the transport sector, particularly passenger transport, has ramifications for wider sectors of the economy (tourism, retail sector, the arts and entertainment sector and the commuting workforce across all sectors of the economy) and a reopening of passenger transport services is vital for recovery in these sectors. At present, air transport, aside from freight, is largely grounded. Passenger travel by air, sea, rail, bus and taxi are all restricted. The coherence of the transport sector with all other facets of the economy is essential for recovery across wider sectors, but social distancing measures in public transport infrastructure is likely to present a significant challenge. In phase 4 there will be a progressive decrease in the restriction of numbers travelling in major urban centres. This is necessary to support other sectors that have reopened such as tourist attractions, sporting events, cafés/restaurants, hotels and retail outlets. Prospects for passenger air travel recovery is linked to the tourism industry which as mentioned above, is forecast to decline substantially in 2020. 75% shutdown in air transport across all economies during the height of the containment phase (OECD). Road freight, rail freight and warehousing are still operating as part of the supply chain.

The majority of employment in the sector is on a full-time basis (88%). 5% of the state enterprise base is transport/storage firms (108,000). 34% of eligible firms are availing of the TWSS. There is an even split between SME and larger enterprises in the sector, with 1 in 2 staff employed by firms with less than 50 employees. Overall, while the sector accounts for 2.5% of national GVA, it represents 5% of total employment (103,900).

Industry (e.g. food, chemical, equipment, computer, and other manufacturing) has seen a partial shutdown in activity with 37% of employment in receipt of income support payments (37% on PUP, 63% on TWSS). Essential manufacturing, including pharmaceuticals and medical devices has been allowed to remain open under the public health guidelines. Large elements of the industry sector rely on international trade-flows for punctual supply of manufacturing inputs and to service the sector's largely export driven demand. Disruptions to global supply chains may cause problems for the sector. There may also be a longer-term risk of countries seeking to repatriate their supply chains to avoid the risk of future pandemic related disruption. Domestically the food services market and construction sector are important links in the downstream supply chain and the prospects for those sectors will have knock-on impacts. Much of the work in this sector cannot be carried

out remotely. From phase two, non-essential manufacturing where employers can operate social distancing requirements will be able to resume. It should be noted that enterprises in the sector may be negatively impacted by public health requirements, although social distancing and staggered shifts have been used in essential manufacturing to adapt and continue operation.

The sector accounts for 36% of GVA (although this is impacted by national accounting issues), and 12% (286,300) of the national workforce. It is by far the largest contributing sector to GVA and is also one of the most foreign owned sectors. Excluding agriculture and the public sector, industry represents a much larger share of employment outside Dublin and the Mid-East than in those regions. The current weekly cost of the PUP in this sector is €14m.

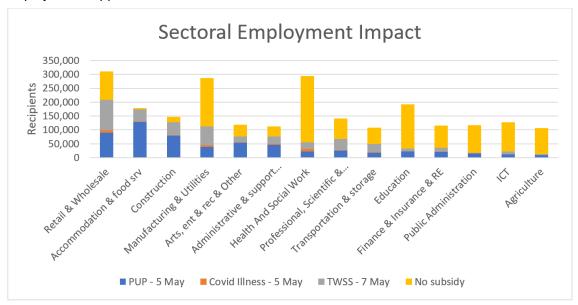
A summary of key statistics is at Appendix A.

5. Assessment of Most Impacted Sectors

5.1 HIGH & MEDIUM IMPACT SECTORS

The focus of this paper is on high or medium impact sectors. We define "high impact" sectors as those where the numbers in receipt of the Pandemic Unemployment Payment (PUP) or Temporary Wage Subsidy Scheme (TWSS) exceeds 50% of employment in the sector as of end 2019 while "medium impact" refers to those sectors where the PUP/TWSS proportion is between 25 and 50%.

The chart below demonstrates the level to which each sector is being supported in terms of employment support schemes.



Looking at the pre-COVID-19 employment figures for all sectors the following sectors are be considered high impact on the basis that in excess of 50% of their workforces (as of Q4 2019) are now registered under PUP or TWSS:

| High Impact Sectors | % of Q4 2019 workforce now on PUP / TWSS | | | | |
|---|---|--|--|--|--|
| Construction | 86% | | | | |
| Accommodation and Food | 96% | | | | |
| Administrative and Support services | 65% | | | | |
| Wholesale and retail trade | 64% | | | | |
| Other NACE services (incl. Arts, Entertainment & Recreation, personal services incl hairdressing) | 63% | | | | |

The following sectors are considered medium impact on the basis that 25% -50% of their workforces (as of Q4 2019) are now registered under PUP or TWSS:

| % of Q4 2019 workforce now on PUP / TWSS | | | | |
|---|--|--|--|--|
| 37% | | | | |
| 44% | | | | |
| | | | | |

We consider each of these sectors against a number of economic criteria. These criteria are used to inform an economic view as to which sectors should be prioritised for re-opening or an easing of restrictions under the Roadmap. It is understood that other, non-economic factors have to be taken into account most obviously those relating to public health which will be the subject of assessment by NPHET. The criteria used here are as follows:

- The extent to which economic activity in a sector is exposed to permanent damage or output loss if restrictions were to remain in place.
- The economic importance of the sector as measured by Gross Value Added (and employment).
- The regional distribution of employment in the sector. This criterion is measured on the basis of the employment by place of work not residence. The thinking here is that sectors where employment is more dispersed (or less concentrated) pose less of a challenge from a public health perspective. We measure this criterion by considering the shares of employment in the sectors in the Dublin region.

- The fiscal costs of sector restrictions as measured by the number of PUP/TWSS claimants in the sector;
- We have regard to interdependency constraints for each sector to capture the reality that economic activity often depends on the availability of inputs from other sectors or on sales to other sectors. So, for example, the construction sector could not function if cement supplies were restricted.
- A final criterion considers sectors from the perspective of their importance to wider policy goals as set out in key Government policy strategies including Project Ireland 2040, Rebuilding Ireland and enterprise policy (as set out in Enterprise 2025 and Future Jobs Ireland).

For the first four criteria, we use the indicators below to inform the assessment while the criteria relating to interdependency and contribution to policy goals are assessed on a qualitative basis.

| | Vulnerability to damage or o | - | Economic | : importance | Regional spread | Fiscal costs of sector restrictions | |
|--|---------------------------------|--|---------------------|-----------------------|-----------------------------|--|--|
| | | Exports as a % Sales Agency Clients | % Total GVA 2018 | % Total employment | % Employment outside Dublin | PUP or TWSS as % of Q4 2019 Employment * | |
| Construction | high | 37% | 3% | 6% | 64% | 86% | |
| Accommodation & Food | high | | 2% | 8% | 69% | 96% | |
| Other NACE (R&S) | medium | | 1% | 5% | 66% | 63% | |
| Industry (manufacturing) | high | 86% | 36% | 12% | 80% | 37% | |
| Administrative and Support services | medium | | 6% | 5% | 55% | 65% | |
| Wholesale & Retail Trade | medium | | 7% | 13% | 69% | 64% | |
| Transport & Storage | medium | | 2% | 5% | 47% | 44% | |

5.2 SECTORAL ANALYSIS

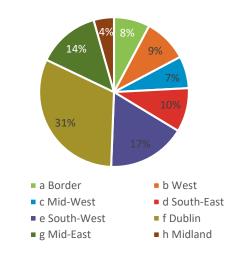
Accommodation and Food

Prior to the COVID-19 pandemic over 179,000 people were employed in the sector representing 8% of total employment. The sector supports employment in many regional and rural communities with 69% of jobs in the sector outside Dublin. The sector contributed 2% to Gross Value Added in 2018. The vast majority of businesses in the sector are currently closed and 96% of the workforce is supported by PUP or TWSS with one of the highest cost to the exchequer. The sector faces significant vulnerability to potential permanent job losses. ⁶

Public health restrictions even during phased reopening of cafes and restaurants, hotels and other accommodation, pubs, associated impacts on food services as well as the curtailment of private and public events, will continue to have severe economic impact. Many businesses will not be able to operate effective social distancing and will therefore be unviable and remain closed.

The Accommodation and Food Sector is highly dependent on domestic and international custom. Tourism plays a pivotal role in this sector particularly in regional and rural Ireland. All tourism activity has come to a halt and reinstatement will be dependent on developments on international travel. Tourism

Accommodation & Food Employment (location of place of work classified by NUTS3 region) Source: CSO LFS Q4 2019



Revenue is projected to fall by €5bn in 2020 compared to 2019. While domestic tourism may recover more quickly, there is likely to be a longer lasting decrease in international tourism. The prospects for passenger air travel and passenger ferry travel recovery are largely linked to consumer sentiment with regard to overseas travel for tourism purposes.

Other challenges will arise as the Irish and international economy reopens, including changing consumer preference and behaviours and overall impact of COVID-19 on tourism volumes. Any prolonged social distancing measures and wider economic effects (e.g. reduced incomes) will limit a return to pre-COVID-19 levels of activity for an as yet unknown period of time.

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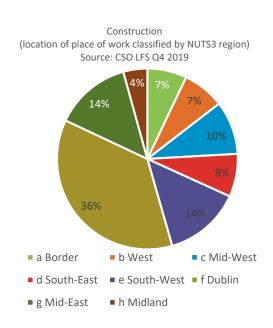
⁶ Restaurants Association of Ireland

The majority of tourism businesses are due to open in Phase 4 under the Roadmap. It should be noted that re-opening alone will not be sufficient to generate benefits given a) the scale of the demand-side shock; and b) the nature of the virus and adaptation/ mitigation measures required. Furthermore, in terms of costs/negative consequences, any delay to the planned commencement of Phase 4/reopening of tourism businesses means the summer season 2020 will essentially be lost and many businesses will not open again until spring 2021. In line with the indicative timeline for the phased reopening, 20 July may be too late as it gives only one-month peak season and 1-2 months shoulder season which, for many businesses, will not provide sufficient economic activity/profitability to carry them over the winter season.

Construction

The Construction sector is highly labour intensive with a diverse range of occupations and has a high multiplier effect. Prior to the pandemic it employed over 147,000 representing 6% total employment. The sector is also highly dispersed, providing employment and economic growth in communities across Ireland with 64% of jobs outside Dublin. 86% of employment is now reliant on PUP or TWSS.

The construction sector has a dual economic role - both as a sector in its own right, and in the context of the wider public policy agenda providing the housing and infrastructure required to sustain economic growth and competitiveness and attract FDI. There are significant interdependencies with the Lifesciences sectors, internet services, electronics and where there are large construction projects planned or underway to increase capacity in the medium term. These are important economic activities in themselves, employing thousands of workers but are also important for the future of the essential industries they are being built for in Ireland.



The shutdown of construction impacted on over 150 private sites, involving 17,300 homes (IHBA), and 325 social housing sites involving some 6,500 homes. In addition, over 20% of overall annual housing production relates to single houses, mainly in rural locations, which have also stalled. The return of construction will have a rural and regional impact and will enable projects that support rural regeneration and development as part of Project Ireland 2040 to recommence or proceed and support local employment. It will also enable the

deployment of *broadband services* under the NBP, including the early connection of c. 300 Broadband Connection Points in some of the most remote parts of the country.

Resumption of public sector engineering and construction projects, including road rehabilitation works and new road construction works can aid recovery across other sectors e.g. in the Transport and Storage Sector. Protocols developed for the safe return to work of the construction sector are an important underpinning in the further return to work of construction workers through the phases of the roadmap.

Certain other subsectors are a critical part of the construction ecosystem. Sub-supply activities would need to recommence e.g. quarries. Domestic and commercial real estate agencies will need to recommence. The reopening of construction will support other sectors also such as forestry.

Consideration will need to be given to the approach on unwinding of the adaptations to the planning service. The Department of Housing, Planning and Local Government and the local government sector are working on protocols to facilitate operation of the planning services in the new environment in line with the Roadmap, on the basis that the current Order under Section 251A of the Planning and Development Acts, will expire on 23 May and public participation can recommence, in line with the unwinding of restrictions in line with the Roadmap. This is of importance to large scale investments including those arising from FDI. The immediate restart of local authority planning processes to enable IDA clients to progress with existing investment projects is critical as further delays can lead to projects not proceeding. This is also impacting on IDA's Regional building programme delivery which is central to winning regional investments. Consideration will also need to be given to the early return of statutory safety training in the sector to enable the recruitment of new employees to re-commence.

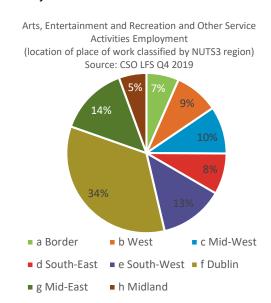
Construction is set to recommence from phase 1. The roadmap suggests a gradual reopening of sites with a focus in Phase 1 on site preparation and outdoor work with indoor work accommodated in Phase 2. This distinction may be difficult to put into effect in practice due to the nature of construction projects. A re-opening of the Construction sector at Phase 1 would offer substantial economic benefits given the industry's large size, labour intensity and importance in supplying inputs to downstream industries.

Other NACE Services

This encompasses a range of heterogenous economic activities including creative arts, entertainment and recreation activities including libraries, museums and other cultural activities, sports activities and amusement and recreation activities; activities of membership organisations, Repair of computers and personal and household goods and other personal

service activities e.g. hairdressing. The Arts, Entertainment and Recreation and Other service activities sectors are also employment intensive, employing over 118,000 and representing 5% total employment at the end of 2019. 66% of jobs are located outside Dublin. 63% of employment is currently supported by PUP or TWSS.

Culture and entertainment venues have had no income since the introduction of measures and will struggle with liquidity. All film production has ceased with impacts for the entire audio-visual sector. The sector is vulnerable to potential large-scale permanent closures. It is expected that a proportion of venue and ancillary services e.g. promoters will not survive this period. Mitigation measures will be required to ensure that key national cultural infrastructure survives and can contribute to the recovery phase.



The arts/culture sector is likely to be amongst the last to recover when this crisis is over given the huge uncertainty around the recovery of both participant and audience confidence. While physical distancing remains in place, it will be extremely difficult to predict a return to normality with any certainty. Estimates from the sector indicate that observing 2m physical distancing will reduce seated venue capacity by up to 90%, severely undermining the viability of live performance. The earliest that live film production might recommence would be Phase 3, subject to approval and may be limited by insurance and international travel issues. It is not envisaged that museums and galleries will reopen before Phase 4 and multi-functional venues until Phase 5.

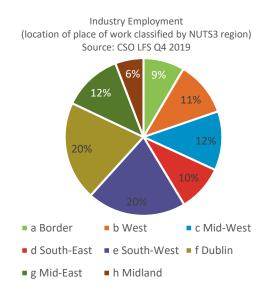
At the same time, well-being is a cornerstone of the Government's current response to the crisis and will be critical to the recovery phase. The Department of Culture, Heritage and the Gaeltacht is already contributing actively to this phase through re-purposing of funding to the Arts Council and through the Creative Ireland and Culture Ireland programmes, and other measures. The Department anticipates a need to intensify this type of activity, which will have the dual benefit of tangibly contributing to the Government's commitment to sustaining our personal and collective wellbeing at this time, while also providing critical supports to the sector. In terms of public libraries, it may not be possible for each Local Authority to bring all of its branches on stream in the relevant phase.

Manufacturing (Industry)

The manufacturing sector is the largest sectoral contributor to output representing 36% of Gross Value Added and accounts for 12% of total employment. The sector includes a number of high productivity sub-sectors dominated by multinational firms. It is also an important sector regionally with some 80% of manufacturing jobs located outside Dublin.

While the vast majority of manufacturing and engineering sectors and supply chains have remained open as essential service providers during the crisis, significant components of the sector are impacted as a result of closures or reductions in capacity due to COVID-19 restrictions. Reduced demand has also had a significant impact on the sector. 37% of employment is now reliant on PUP or TWSS.

Even within essential service sectors such as Medtech and Biopharma impact has been non uniform with products targeting respiratory



conditions for example being in high demand but a significant slowdown globally in elective procedures.

Manufacturing is a central pillar of Ireland's enterprise policy. Ireland has successfully established a global reputation in manufacturing and there is a broad range of manufacturing and engineering companies, in terms of size, scale and product, across both Irish and foreign owned firms, based throughout the regions in Ireland.

Enterprise Ireland reports that clients in the engineering sub-supply sector and prepared consumer food manufacturers that rely to a substantial extent on food service or hospitality outlets, are operating at a fraction of normal output. In the Foreign Direct Investment sector, the IDA report that clients most impacted are those in manufacturing, particularly in automotive sub-supply and supplying travel / leisure markets as well as those that are adjacent to these sectors.

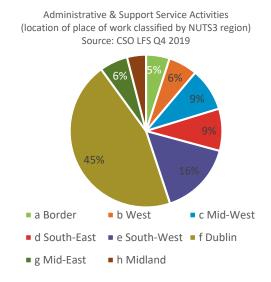
These companies have seen significant impact on employment and are at risk of losing orders and market share to other sites and jurisdictions with earlier re-opening of their manufacturing sector. If large orders are lost and investments made in plants elsewhere, it is unlikely they will be regained, and some sites may face permanent closure or significant job losses. 86% of total sales in the sector are exported making the sector particularly vulnerable to loss of customers as a result of delayed reopening.

The Roadmap is unclear on manufacturing. It could be interpreted that the remaining parts of manufacturing will recommence under phase 4. While the percentage of employment in the sector currently supported by PUP or TWSS employment is lower than other highly impacted sectors, these jobs are typically high value and regionally significant. Given the export intensity of the sector, employment in those parts of the sector not captured by the essential services list are highly vulnerable to permanent loss unless firms can re-open very soon. From an economic perspective, it is critical that the remaining manufacturing companies can recommence in phase 1.

Administrative and Support Services

This sector includes a range of activities including administrative and support service activities in rental and leasing, employment, travel, security, buildings and landscape and office and other business support activities. Employment across these activities was over 112,000 at the end of 2019, representing 5% of total employment. Just over half of employment in these activities is located outside Dublin, and 65% of employment is supported by PUP or TWSS. The sector represented 6% of GVA in 2018. The activity range is broad in this sector grouping and vulnerability to permanent damage or output loss (if not re-opened) is assessed as medium.

The sector includes several areas of strategic importance for Ireland including aircraft leasing and Intellectual Property leasing. Both strategic policy importance and inter-dependencies and with other sectors is high, given Ireland's position in the pharmaceutical and technology sectors and as a global hub for aircraft leasing. Aircraft lessors are caught in the fallout from the COVID-19 crisis, along with the rest of global aviation. Coronavirus has largely grounded airlines, cutting off their revenues, raising the risk that they will have difficulty meeting their commitments to lessors. Strength in the aircraft leasing sector is



interdependent with financial services sector and supports and is enabled by a strong Maintenance, Repair and Overhaul sector. Reopening aviation is dependent on the duration of the pandemic. Local administrative functions can be performed remotely.

Wholesale and Retail Trade

Wholesale and Retail trade is an employment intensive regionally dispersed sector providing over 310,000 jobs and representing 13% of national employment. The sector plays a vital

role in the national, regional and local economies economy with almost 70% employment outside Dublin. 64% of employment is currently supported by PUP or TWSS.

The sector is a strong economic contributor representing 7% of GVA, €22,599m in2018. Public health restrictions have had a significant impact on non-essential retail, leaving many businesses closed with no revenue stream. In some sub-sectors seasonal or perishable stock will accentuate the losses being incurred. For retail outlets that are open, social distancing requirements have led to efficiency declines in terms of volume of customers that can be served, and in logistics operations. Fixed costs, such as commercial rates, commercial rents, insurance and other costs, continue to accumulate without corresponding revenues. Rates relief, grants and liquidity supports are an important step in addressing the cashflow crisis but measures to address the issue of commercial rent liabilities are also needed.

Availability of inputs, supplier relationships, and cost and delays to freight transportation are all impacting the sector. The sector is highly dependent manufacturing sectors and logistics and is also vulnerable to consumer confidence and spending appetite. Streamlining of products by large retailers, for supply chain management, has had impacts on suppliers / producers.

Prior to the pandemic the sector was facing challenges with upward cost pressures and the increasing impact

Source: CSO LFS Q4 2019

6%
8%
10%
9%
8%
16%

a Border
b West
c Mid-West
d South-East
e South-West
f Dublin
g Mid-East
h Midland

(location of place of work classified by NUTS3 region)

of technology. COVID-19 may serve to accelerate structural changes in the sector, including the move to digital and online. Changes in the sector may have ripple effects in local economies. Impacts on independent retail and small-scale business, when combined with a likely prolonged restriction on cafes, pubs, restaurants and hotels, as well as the curtailment of private and public events, will disproportionately affect city and town centres, particularly in regional and rural Ireland, with the risk of accelerated urban dereliction and vacancy.

The multifaceted nature of the retail sector will mean that the recovery trajectory will not be uniform. Those who can resume trading may incur significant costs to meet public health restrictions. Retail workers will also need to have confidence in terms of safety in the workplace prior to returning. A targeted stimulus package could be considered for example in the form of one-off vouchers.

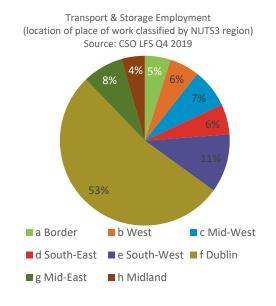
The phased re-opening of Retail and Services is welcome and important to support local employment in urban and rural areas, including jobs in the supply chain. Re-opening retail and services will also boost consumer confidence and help to revive towns and villages throughout the country, while respecting social distancing guidelines. However, the roadmap for the phased reopening of the economy will leave many retailers closed for several further weeks and it would be important to keep the roadmap under constant review and accelerate reopening if public health objectives are met within in a shorter timeframe.

Transport and Storage

Transport services underpins economic activity across almost all sectors through the ability for workers to move around and to move goods and people onto and off the island. The Transport and Storage sector accounted for 2% GVA in 2018 and 5% of total employment, approximately half of which is located outside Dublin. 44% of pre-pandemic employment is currently supported by PUP and TWSS.

Shrinkage in volume of goods moving across Europe and wider has placed the commercial road haulage sector under pressure. Financial viability of haulage businesses or cash flow problems, due to overall drop in freight volumes and closure of end chain businesses has seen some transport operators closing.

Nationwide, passenger demand for public transport has fallen steeply and now stands at approximately 10% of equivalent 2019 levels across all operators. This has implications for the level of Exchequer subvention required in order to ensure continued operation during the current crisis and beyond.



Air passenger services, airports, travel trade, etc. revenue has "gone off a cliff", with the exception of the small dedicated cargo sector. Associated services are challenged with a high likelihood of collapse of travel agents. Semi states are looking at significant losses.

Air transport, aside from freight, has been significantly impacted by the crisis. The air transport sector in Ireland supports over 140,000 jobs and accounted for c.6.8% of GDP in 2018. Aviation is crucial to Ireland's connectivity, competitiveness and economic recovery. Airlines are reporting significant emerging liquidity issues and have made significant job cuts. Several other EU Member States have acted swiftly to ensure the long-term stability of their airlines.

Maritime freight represents almost 90% in volume of Ireland's international trade. There is a significant downturn in maritime Roll on-Roll-off freight volumes— between 30 / 40% - on the maritime channels to GB and Continental Europe with passenger numbers down by 95% on figures last year. A continued decline in freight and passenger numbers is clearly impacting on the sustainability of existing services serving the international maritime supply chain. Work is ongoing to assess how the horizontal economic support measures in place can be better aligned with the needs of the sector. In response to a near collapse in ferry passenger numbers, Government approved the temporary designation of five strategic maritime routes as PSO routes for a period of up to three months and at a cost of up to €15m.

Public Transport services have continued to operate and will form the key underpinning of the Roadmap to recovery subject to challenges around capacity and compliance being successfully addressed. Revenues have been severely impacted with consequent pressures on PSO funding and also on non-subvented, commercial operators. Nationwide, passenger demand has fallen steeply and now stands at approximately 10% of equivalent 2019 levels across all operators. This has implications for the level of Exchequer subvention (PSO) required in order to ensure continued operation during the current crisis and beyond. The Department of Pubic Expenditure and Reform confirmed that the current 2020 PSO allocation (€288m) can be utilised to fund the revenue shortfall arising but the 2020 allocation will only last to end May.

The Roadmap presents a challenge for public transport, due to capacity constraints on the fleet, because of the need to observe social distancing. The NTA advises that current levels of service should facilitate the expected increase in passenger numbers, principally workers in the construction sector, in Phase 1 and extra capacity can be provided if required for Phase 2. Ongoing challenges include maintenance of social distancing guidelines which restrict passenger numbers and further financial impact on PSO funding. A public transport plan in response to the Government's roadmap for the easing of restrictions will be published shortly.

The prospects for passenger air travel and passenger ferry travel recovery are largely linked to consumer sentiment with regard to overseas travel for tourism purposes. While the timing of the restart remains uncertain for Aviation, conditions that might underpin this restart are currently being examined with stakeholders with a view to considering practicable measures to safeguard public health while allowing air travel to take place. Measures announced by the EU Commission on 13 May are an essential input to planning across the aviation sector.

For Maritime Transport, Tourism demand is critical to roll-on/roll-off passenger routes and may require targeted investment. Re-emergence of tourism will be gradual and phased based which will create a high degree of uncertainty in terms of scheduling and service offering. The initial assessment is that the existing supports are not suited to the sector as many operators are not registered in Ireland.

Road rehabilitation works and new road construction works will recommence on the 18th May and resumption of public sector engineering and construction projects can begin.

The recovery of the Small Public Service Vehicle (SPSSV) industry is linked to recovery in the hospitality and tourism industries. The re-opening of the hospitality sector in Phase 5 will likely lead to a significant increase in demand for SPSV services and a consequent drop in the number of drivers availing of measures such as the PUP.

6. Conclusions

All the sectors reviewed here have been significantly curtailed as a result of restrictions and / or a drop in domestic and international demand. The most highly impacted sectors in terms of employment are Construction, Accommodation and Food, Administrative and Support Services, Wholesale & Retail Trade, and other services including Arts, Entertainment and Recreation and Personal Services. The sectors experiencing a medium impact are Industry (manufacturing), and Transport and Storage.

6.1 ROADMAP

Construction and Manufacturing

The cases of the construction and manufacturing sectors are worthy of particular attention for a number of reasons, including, the size and economic significance of these sectors, their economic spread and importance across the regions, and the strategic value of these sectors nationally in terms of national economic strategies in the areas of enterprise development and national infrastructure.

Manufacturing also has a significant vulnerability in terms of mobility – as manufacturers return to production internationally, the risk increases in terms of market competition and for multinationals, intra-corporate competition. Should Irish firms remain shut beyond the opening of their international customers, those foreign customers may seek substitute goods from alternative suppliers. This issue could also affect MNC subsidiaries who are supplying goods intra corporation.

The two sectors are also distinctive in terms of controllability of the workplace in that they are not public focused and can adopt safe work practices in a controlled environment. Indeed, the majority of the manufacturing sector remained active, albeit at reduced levels, throughout the restrictions. This also points to the fact that remaining manufacturing (predominantly in the automotive and engineering areas) will only reintroduce modest numbers of employees back to workplaces (with Enterprise Ireland and IDA estimating to be circa 15,000 for their clients).

These sectors, as with all businesses, value predictability and certainty. The unwinding of restrictions must be clear and unambiguous.

Finally, it will need to be recognized that these sectors have supply chains and interdependencies with other economic actors for example, construction is dependent on suppliers and quarries, are reliant on a functioning planning system (especially important for some strategic projects underway in the multinational sector) and use real estate services as the primary route to market. These activities, which are components of other sectors, would need to be active.

Accommodation and Food

The Accommodation and Food sector is varied with a high dependency on social engagement. The are some differences in how international approaches have disaggregated the sector according to the differing social dependencies concerning activities and the setting in which they arise. Bearing in mind the Roadmap's usage of criterions such as 'outdoor' there could be scope, through the summer season, to phase in re-openings sooner in an outdoor setting. Certain parts of the sector may be able to advance e.g. accommodation presuming demand. Some subsectors such as short term lets are important for other sectors of the economy especially those with a significant FDI presence. It should be noted that the sector is not uniform in terms of its reliance on tourism therefore county and regional variations will arise with some areas being less susceptible to the likely longer-term drop in tourism.

Other NACE Services

This heading also captures diverse activities many of which have high levels of social interaction and personal contact. The sector includes hairdressing, libraries, museums, galleries, gardens as well as other activities including sport.

The Roadmap is generally in line with international approaches with some nuances concerning personal services if they can be adapted to reduce risk for employees and customers. An issue of concern relates to the timeframe for the reopening of the horse racing and breeding sector. The Department of Agriculture, Food and the Marine points out that horse racing has continued throughout the pandemic in a number of major racing countries and racing has resumed in a number of European countries. The breeding industry is integrated with racing and is particularly seasonal with an estimated annual value of Irish sales of nearly €440m.

This Other NACE services also includes "Repair of computers and personal and household goods" i.e. repair of computers, communication equipment, personal and household goods, consumer electronics, household appliances, home and garden equipment, footwear and leather goods, furniture, watches, clocks and jewelry etc. Many of these services are offered by self-employed and sole-traders in settings where little social interactions arise.

Administrative and Support services

The sector is diverse and includes rental activities, employment placements, call centres, office work, cleaning security, building maintenance, and travel operators. Parts of this sector are considered essential services or are permitted if supporting essential services. Large parts of it can avail of remote working as set out in the Roadmap. Some parts of the

sector will be permitted in Phase 1 as they are outdoor (e.g. landscaping) other activities are less clear e.g. building maintenance.

Wholesale and Retail Trade

Parts of the Retail and Wholesale sector remained open throughout the pandemic if considered to be an Essential Retail Outlet. The sector also saw an increase in online retail. However, the sector has generally closed with some notable permanent closures. The sector continues to cite growing debt overhangs arising from fixed costs such as rents, insurance, rates etc.

The Roadmap devotes a specific section to Retail envisaging it reopening under various phases commencing in Phase 1. While the approach mirrors the approach internationally, it creates difficulties in interpretation and analysis. It is not possible to accurately forecast or measure the employment impact as the Roadmap disaggregates retail using bases for which there is little data available. For example, outlets which are 'primarily outdoor', small outlets with small number of staff, retail outlets at street level. This categorisation will also create difficulties in considering effective options, if necessary, for reintroducing restrictions.

DAFM points out that there is scope for accelerating, safely and in compliance with distancing and other requirements, the expanded reopening of farmers' marts which is currently in Phase 2 (June 8th).

Transport and Storage

Transport services will underpin the return to Economic Activity as it provides the ability for workers to move around and to move goods and people onto and off the island.

Aviation is crucial to Ireland's connectivity, competitiveness and economic recovery. The air transport sector in Ireland supports over 140,000 jobs and accounted for c.6.8% of GDP in 2018. Air transport, aside from freight, has been significantly impacted by the crisis and has strong interdependencies with the tourism sector. There is a significant downturn in maritime Roll on-Roll-off freight volumes— between 30 / 40% - on the maritime channels to GB and Continental Europe with passenger numbers down by 95% on figures last year.

Public Transport services have continued to operate and will form the key underpinning of the Roadmap to recovery subject to challenges around capacity (given social distancing guidelines) and compliance being successfully addressed. The NTA advises that operators are in a position to provide extra capacity, including a return to the normal Monday to Friday schedule and mobilisation of additional vehicles at any particular pinch points in the network, should more capacity be required in Phase 2. As we move through the phases of the Roadmap ongoing challenges including the maintenance of social distancing guidelines which restrict passenger numbers on a double-deck bus to 19 and on a 60-seater coach to 12, in addition to restricted numbers on Dart, Luas and rail.

Revenues have been severely impacted with consequent pressures on PSO funding.

A functioning and safe transport system will be crucial to enabling workers return to work. Indeed, unlike many other sectors, this sector was largely considered essential. Therefore,

the prospects for this sector will be determined by the pace of, and extent to which, economic and social activity returns as well as by the supports necessary to sustain it.

Other Sectors

The analysis, in the time available, could not and did not capture subsectors within other sectors which may have significant employment impact and be strategically important. Further analysis would be required, with input from Departments, to distinguish such subsectors and consider their applicability in terms of the Roadmap and identify possible appropriate adjustments.

Nevertheless, it is important to point out that, along with Transport, the **Education** and **Childcare** sectors are a vital supporting foundation across the economy without which workers will be reluctant and unable to return to work.

The Department of Children and Youth Affairs (DCYA) is developing and costing proposals for the phased reopening of childcare services. The cost of delivering childcare may be substantially higher in a phased and restricted reopening process. Therefore, changes may be necessary to the traditional approach to funding childcare services during the transition to full-service delivery. Consideration will be required as to how any additional cost would be met. It may also be necessary to ration places and/or enable services to expand capacity on a temporary basis, e.g. through sessional-only services extending to full-day provision or extended opening hours to serve two different groups of children to offset any restrictions introduced by continued social distancing measures.

DCYA is completing detailed analysis and planning for phased re-opening and has established an Advisory Group with representatives from the childcare sector to inform this work.

6.2 CLARITY FOR STAKEHOLDERS

It is difficult to map economic activities onto the Roadmap. This has implications for estimating in advance the economic impacts for each phase. Data concerning sectors is largely based on the Nomenclature of Economic Activities (NACE codes), the European statistical classification of economic activities. It is not currently possible, without further dialogue, to overlay the activities as laid out in the Roadmap to sectoral NACE codes.

Without further guidance and clarification, the Roadmap presents a number of challenges:

- From a public health perspective, it is difficult to assess in advance what impact the relaxation of restrictions might have on the numbers of people who are travelling to and from places of work.
- 2. It is difficult to assess how many people may return to work as we move through phases, which means we cannot predict the impact on the take-up of State Supports.
- 3. Assessments of the relaxation of retail measures are particularly challenging, it would be difficult to assess the breakdown of retail employment between 'street level' outlets and those within shopping centres. The Roadmap also mentions that

'Tier 2' outlets may re-open in Phase 1, that does not appear to refer to any previously defined term.

In conclusion, businesses do not have clarity as to where they fit on the roadmap, which prevents them taking required actions to prepare to resume activity in a timely fashion. This is especially true for sub-sectors, for example, there is no clarity for sub-suppliers.

Many of these problems could be addressed by the provision of detailed guidelines to accompany the Roadmap. One option would be to amend the list of essential service providers as a living document as decisions are taken on the phases set out in the Roadmap. If required these could be further tailored by the usage of the commonly used business size classifications, micro, small, medium and large if required.

Such a process could also assess Departmental requests for earlier relaxations for businesses who have taken all required precautions and who can make a clear case that their resumption is essential in order to maintain ongoing activity, especially in sectors and subsectors of high strategic value-based factors including GVA and employment.

The process could also contribute to identifying gaps relating to supporting guidance and safe workplace and practices advice to business as well as informing Government on an ongoing basis as it decides on next steps over the course of the Roadmap and beyond.

Appendix A - Sectoral Overview of Economic Impact – Some Indicators

| Sector | Enterprises (2017) | % Enterprises (2017) | Employed (Q4 2019) | % Total Empl. (Q4 2019) | % of Employees in Firms < 50 | GVA €m (2018) | % Total GVA (2018) | Average Weekly Gross Earnings | PUP Recipients as % of Q4 | TWSS Recipients as % of Q4 | PUP or TWSS as % of Q4 2019 | Weekly cost of PUP* |
|---|-----------------------|-------------------------|-----------------------|----------------------------|------------------------------------|------------------|-----------------------|-------------------------------------|---------------------------------|----------------------------------|-----------------------------------|------------------------|
| Agriculture | N/A | N/A | 106,900 | 5% | N/A | 3,645 | 1% | N/A | 8% | 4% | 12% | €3m |
| Industry | 18,817 | 7% | 286,300 | 12% | 28% | 109,985 | 36% | €920 | 14% | 24% | 37% | €14m |
| Construction | 57,255 | 21% | 147,100 | 6% | 83% | 8,578 | 3% | €822 | 54% | 32% | 86% | €28m |
| Wholesale and Retail Trade | 48,598 | 18% | 310,200 | 13% | 54% | 22,599 | 7% | €604 | 29% | 35% | 64% | €32m |
| Transportation and Storage | 25,736 | 10% | 108,000 | 5% | 51% | 7,567 | 2% | €810 | 17% | 27% | 44% | €6m |
| Accommodation and Food | 19,205 | 7% | 179,200 | 8% | 56% | 5,391 | 2% | €382 | 72% | 25% | 96% | €45m |
| Information and Communication | 15,953 | 6% | 127,600 | 5% | 38% | 36,765 | 12% | €1,241 | 9% | 7% | 17% | €4m |
| Financial, Insurance and Real Estate | 23,299 | 9% | 115,100 | 5% | 32% | 40,976 | 14% | €1,115 | 18% | 11% | 29% | €7m |
| Professional, Scientific and Technical | 43,587 | 16% | 141,100 | 6% | 66% | 12,555 | 4% | €973 | 18% | 30% | 47% | €9m |

Appendix A - Sectoral Overview of Economic Impact – Some Indicators

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|---------------------------------------|-----------------------|-------------------------|-----------------------|----------------------------|------------------------------------|------------------|-----------------------|-------------------------------------|---------------------------------|----------------------------------|---|------------------------|
| Sector | Enterprises (2017) | % Enterprises (2017) | Employed (Q4 2019) | % Total Empl. (Q4 2019) | % of Employees in Firms < 50 | GVA €m (2018) | % Total GVA (2018) | Average Weekly Gross Earnings | PUP Recipients as % of Q4 | TWSS Recipients as % of Q4 | PUP or TWSS as % of Q4 2019 | Weekly cost of PUP* |
| Administrative and Support Service | 18,716 | 7% | 112,100 | 5% | 30% | 18,734 | 6% | €617 | 41% | 24% | 65% | €16m |
| Public Administration and Defence | N/A | N/A | 117,000 | 5% | N/A | 8,832 | 3% | €972 | 12% | 2% | 14% | €5m |
| Education | 14,440 | 5% | 191,600 | 8% | 24% | 9,055 | 3% | €874 | 11% | 6% | 17% | €8m |
| Health and Social Work | 20,989 | 8% | 294,300 | 12% | 35% | 14,058 | 5% | €758 | 8% | 8% | 16% | €8m |
| Other NACE Services | 32,134 | 12% | 118,700 | 5% | 77% | 4,318 | 1% | €517 | 45% | 18% | 63% | €19m |

Source: Enterprises – CSO Business Demography, Employment – CSO LFS Q4, GVA – CSO National Accounts, Average Earnings – CSO EHECS Survey. TWSS – Revenue Statistics (As of 7th May 2020), PUP – DEASP (As of 11th May 2020). Note: % of employees on PUP/TWSS estimated based on latest admin data for the schemes and Q4 2019 CSO LFS data. This should be treated with caution given the changing level of recipients over time. TWSS data refers to all employees who have received a payment. Weekly cost of PUP calculated by multiplying PUP recipients from latest data by €350

Department of Business, Enterprise and Innovation, 15th May, 2020

Department of Business, Enterprise and Innovation

Department of Public Expenditure and Reform

Department of Finance

Irish Government Economic and Evaluation Service

