



Rialtas na hÉireann
Government of Ireland

The Firm-Level Impact of Brexit On Most Exposed Sectors

Findings and Insights

Prepared by the Department of
Business, Enterprise and Innovation

[Gov.ie](https://www.gov.ie)

Table of Contents

A.	Introduction	5
B.	Summary of Research Findings	8
C.	Detailed Results	9
D.	Goods and Services Sectors – differing concerns	14
E.	Sector Specific Insights	18
F.	Firm Specific Insights	22
G.	Conclusions	23

Sector Profiles

Chemical and Pharmaceutical	29
Dairy	32
Beverages	35
Fish	38
Construction, Energy, Water and Waste	41
Retail and Wholesale	44
Financial and Insurance Services	47
Wood, Wood Products, Paper and Printing	50
Other Manufacturing	53
Computer, Electronic and Optical Products	56
Meat	59
Computer Facilities Management / Computer Consulting	62
Transport Service	65
Computer Programming	68
Rental and Leasing	71

A. Introduction

In advance of, and subsequent to, the United Kingdom's (UK) decision to leave the European Union (EU), research and analysis has been undertaken by the Irish Government to better understand and prepare for the implications of Brexit for Ireland. An important element of that research involves investigating the impact of the UK being outside of the EU Single Market and the Customs Union at firm-level on our most exposed enterprise sectors. The Department of Business, Enterprise, and Innovation (DBEI) undertook this research to inform national enterprise policy, negotiation positions and strategy. Over 160 regionally-dispersed firms¹ in fifteen sectors were asked to report their level of concern regarding the impact Brexit could have on their operations. The sectors were identified based on an analysis of their exposure to Brexit in terms of trading patterns (Box 1).

Potential impacts of Brexit were presented to firms in the form of a list of twenty assessment factors (Box 2). These encompass a range of practical implications that negative changes to the existing freedom of movement of goods, services, capital and labour, and the 'level playing field' currently afforded by the EU Single Market and the Customs Union, could have. *Based on a hard Brexit scenario*, firms were asked to rate their level of concern for each factor on a scale from 'Little Concern' to 'Moderate Concern' to 'Critical Concern'. Firms were also asked to provide comments and context from the point of view of their organisation so as to give a richer picture of how they understood and evaluated the risks presented.

While the research provides some quantitative analysis of the responses provided, it is important to note that these do not draw from a representative sample. Rather this serves to aggregate the views of the firms engaged and provide insights as to the patterns of concern observable. The meaningful contribution of this research is primarily the qualitative, firm-level perspectives on the complexities of Brexit as understood by the firms, the impacts foreseen for their businesses and their assessments of 'pinch-points' or substantial issues that may arise for their business or sector.

Box 1: Sectors Analysed in the Research

1. Meat
2. Fisheries
3. Dairy
4. Beverages
5. Retail / Wholesale
6. Chemicals and Pharmaceuticals
7. Wood, Wood Products, Paper and Printing
8. Computer, electronic and optical products
9. Other manufacturing (Petroleum, Furniture, Textiles, Clothing, Footwear, and Leather)
10. Computer Programming
11. Computer Facilities Management / Computer Consulting
12. Rental and Leasing
13. Transport Services
14. Financial and Insurance Services
15. Construction, Energy, Water, and Waste Services

¹ 75 small, 37 medium, and 57 large enterprises

Such firm level insights complement the range of macro-economic analyses and findings from representative surveys undertaken over the past year².

As the results show, the impacts are multi-faceted, complex and vary across the different enterprise sectors. By its nature, the information collected and presented here is a point-in-time analysis – firm responses were collected between February and August 2017. The detailed comments provided by participating firms demonstrates an engaged business community, evidencing a reasonable core understanding of the issues that may arise, although with evidence of less understanding on aspects relating to movement of capital and a ‘level playing field’. From other engagement with enterprise, we are aware that the understanding of businesses is evolving as the Brexit negotiations continue.

This firm-level analysis that draws on the perspectives of individual businesses represents a rich data source which, in conjunction with the results of other analyses, will be drawn on to better understand the many consequences for Irish based business that will arise from Brexit and used to inform the responses of enterprise policy.

² Including Modelling the Medium to Long Term Potential Macroeconomic Impact of Brexit on Ireland, Working Paper NO 548, ESRI, November 2016; Annual Business Survey of Economic Impact and Annual Business Review, Department of Business, Enterprise and Innovation, January 2018; Cross-border trade and supply chain linkages, Intertrade Ireland and ESRI, March 2018; Intertrade Ireland Quarterly Business Monitor, Q3 2017; Brexit, the Views of Irish SME survey Results, Behaviour and Attitudes for the Department of Business, Enterprise and Innovation, January 2018; Ireland and the impacts of Brexit, Strategic Implications for Ireland arising from Changing EU-UK Trading Relations, Copenhagen Economics for the Department of Business, Enterprise and Innovation, February 2018

Box 2: Brexit Impact Assessment Factors

Goods Services Capital Labour Level playing field

1. Imposition of trade tariffs
2. Imposition of rules of origin
3. Re-establishment of physical UK border
4. Absence of customs union and other common areas (including fisheries)
5. Unilateral imposition by the UK of new/different product standards, in areas such as health, public safety, quality, and the environment
6. No mutual recognition of specifications or agreed technical specifications between the UK and the Republic of Ireland/EU
7. Restrictions on providing/receiving a service in/from the UK
8. No agreed rights for Irish service recipients (from the UK) and vice-versa
9. Restrictions on establishing a company in the UK
10. Restrictions on investing in, and owning, companies in the UK
11. Restrictions on taking an active part in the management companies in the UK
12. Restrictions on Irish enterprise on real estate investments or purchases, securities investments (e.g. in shares, and bonds), granting of loans and credits, and other financial operations in the UK (e.g. limitations on raising cheaper money in the UK)
13. Removal / change in reciprocal Ireland/UK entitlement to look for a job, work without needing a work permit, reside for that purpose, stay even after employment has finished, and enjoy equal treatment with nationals in access to employment, working conditions and all other social and tax advantages
14. Inability of people working in some occupations in Ireland to have their professional qualifications recognised in the UK, and vice versa
15. No requirement on the UK to meet minimum harmonised public procurement rules
16. Removal of application to UK of existing EU Intellectual Property, or data regulation/protection regime rules
17. Increased, though lawful, anti-competitive behaviour by UK enterprises or indeed by the UK government in the areas of State Aid, anti-trust and cartels, and mergers
18. Removal of application of current EU competition instruments to the UK
19. Dilution or removal of the right for consumers and businesses in Ireland to get damage compensation when they are victims of anti-competitive conduct in the UK
20. Removal of UK from jurisdiction of EU State Aid investigation procedures

B. Summary of Research Findings

In terms of the four freedoms afforded by membership of the EU, the **fears about changes to the free movement of goods** generate the highest level of concern across sectors followed by reduced freedom to trade in services and then, an end to free movement of labour. Finally, firms expressed least concern about changes to the free movement of capital and the level playing field provided by the *status quo*.

In terms of the impact assessment factors:

1. **The possible imposition of tariffs on trade creates the greatest concern:** Taken together, firms are most concerned about Brexit resulting in new tariffs on trade with the UK followed by the imposition of a physical border in Northern Ireland and then, the end of a shared common area with the UK (customs, fisheries etc.).
2. **Firms in goods and services sectors rank Brexit concerns differently but with some areas common to both:** Tariffs, borders, customs/common areas, mutual recognition and standards generate the greatest concern – in that order - in the goods sectors. Firms in the services sectors also cite possible tariffs as the area of most concern, followed by - in order - freedom to provide/receive services, borders, customs/common areas, and restrictions on the movement of people.
3. **There is variation between sectors as to the level of concern:** Of the fifteen sectors analysed, the chemicals/pharmaceuticals sector expressed the highest levels of concern about the impact of Brexit on their business (although this results reflects the fact that the enterprises in this sector provided responses in respect of all 20 impact factors). Firms in the rental/leasing sector expresses the least aggregate concern about the potential impact of Brexit on firms. Such variation might be expected given the known different levels of exposure that individual sectors have to Brexit, while company scale may also be a factor.
4. **The level of concern about Brexit also varies significantly within sectors:** Less expectedly, firms within the same sector demonstrate a wide variation in levels of concern about the potential for Brexit to harm their operations. This variation is explained by several factors which are detailed in the next section.
5. **Firms across sectors did not appear to be systematically taking action to mitigate the potential impact of Brexit:** Only half of the fifteen sectors were active in this regard, undertaking scenario planning, investigating alternative sources of inputs, reviewing product mix, assessing legal entity status changes, and establishing UK companies. The other sectors reported few significant preparatory steps at this point.

Box 3: Top 5 Most Concerning Brexit Impacts for Firms

1. Imposition of trade tariffs
2. Re-establishment of physical UK border
3. Absence of common areas (including customs, fisheries etc.)
4. Restrictions on providing / receiving a service in the UK
5. No mutual recognition / agreed technical specifications

Box 4: Levels of Concern about Firm-Level Impact of Brexit

Above average level of concern	Average level of concern	Below average level of concern
Chemicals and Pharmaceuticals Dairy Beverages Fisheries Construction, Energy, Water, and Waste Services Retail / Wholesale Financial and Insurance Services Wood, Wood Products, Paper and Printing	Other manufacturing* Computer, electronic and optical products Meat	Computer Facilities Management / Computer Consulting Transport Services Computer Programming Rental and Leasing

*Includes Petroleum, Furniture, Textiles, Clothing, Footwear, and Leather

C. Detailed Results

This section provides further insights over and above the summary set out in Section B.

As stated above, overall, **firms believe they will be impacted most by changes to the right to move goods freely**. This is followed by changes in relation to services, trade, restrictions on the movement of people, and finally by changes to the freedom of movement of capital and the level playing field.

Taking both goods and services sectors together, the **potential imposition of tariffs** on trade is the number one concern for firms (Figure 1). Some 45% of firms viewed the imposition of tariffs as a critical concern for their business. Firms are concerned that tariffs could reduce their margins, distort existing patterns of trade, increase the cost of inputs, add to costs for consumers and thus

“Over 50% of our business is export[s] to the UK so any tariffs imposed on UK destined sales will have a big impact on our business.”

Firm in the Computer Electronics and Optical Products Sector

reduce demand, make them uncompetitive in third countries vis-à-vis UK-based suppliers (as the UK will be free to agree better trade terms), and fragment

the single energy market. The concern that tariffs will ultimately increase the final cost to consumer is a central point, though the impact on input costs – with materials and finished goods crossing between Ireland, the UK, and mainland EU – is also an important consideration. Firms expect these additional costs to have serious consequences for their pricing and competitiveness, particularly in case of low margin products.

Firms who import their products from outside of the EU into Ireland for sale in the UK currently pay a tariff but are concerned that future sales to the UK could attract another tariff. As a result, some indicate they are considering establishing a UK company to import directly from outside of the EU into the UK. It was also noted that some firms sell to clients on the basis of contracts where prices are fixed for up to, say, five years (e.g. public procurement contracts), meaning that tariff costs

would have to be carried by the firm, eroding profit margins. Firms are also concerned about the knock-on impact that tariffs could have on the efficient operation of ports and airports.

The **prospect of a physical border**

between Ireland and the UK ranks second among the issues causing concern for firms. 39% of firms viewed the re-establishment of the UK physical border as a critical concern for their business. The reasons cited by firms include the impact on turnaround/delivery times (particularly for short shelf-life goods), the attendant impacts on demand and costs, the need to divert transport from shortest route via designated crossing points (fuel and emissions costs) and the associated paperwork. Firms in the pharma sector are concerned that a border could delay the supply of their products needed for urgent medical procedures in export markets. Firms with production processes in Northern Ireland fear delays in moving materials back and forth across a border.

“Any delay in transporting products across the border in both directions adds unnecessary time and costs to our business, which customers will have to bear through increased costs.”

Firm in the Pharmaceuticals / Chemicals Sector

“We will look to investigate the possibility of increased warehouse/cross dock capacity to offset the potential risk [of delays]. We may also have to hold additional stock at store level increasing our inventory holding costs.”

Firm in the Retail/Wholesale and Sector

Companies are acutely aware that for both imports and exports, borders impose a significant time and administrative burden which will increase their costs and reduce their profitability. A post-Brexit border will, it is feared, impact firms’ ability to deliver on their “next day delivery promise” to their customers across all channels, and increase inventory levels (on location, or in storage) to deliver on that promise. In addition, firms noted that

borders historically generate distortions which increase smuggling activity with consequent damage to legitimate businesses.

The **absence of a customs union and other common EU areas** was viewed by two-thirds of firms as either a moderate or critical concern for their business, and ranks as the third most concerning aspect of Brexit. Firms anticipate that this aspect of Brexit would add significant complexity and administrative burden to cross-border trading. It is feared that the end of the current customs union arrangement could precipitate: the imposition of UK import tariffs and Tariff Rate Quotas (TRQs) on exports, a hard border, with associated customs declaration and clearance processes and paperwork. It is also feared that such a development would lead to increased competition from third countries in the UK, as the UK may provide greater access to non-EU nations (e.g. Irish produce to potentially compete with cheaper imports from Oceania). An end to common areas

“UK leaving customs union could have significant impact on our business from affecting sales to a large increase in administration in terms of inward and outward movement of goods and people.”

Firm in the Construction, Energy and Water Sector

generates concerns about regulatory and standards divergence, reverting to WTO (World Trade Organisation) country of origin based trade rules, new health and veterinary certification processes, and the potential segregation of certain Northern Irish products from the Irish supply pool (e.g. milk). In the fisheries sector, it is feared that the absence of common fishing grounds, rules and policies will afford UK fishing fleets an unfair advantage as they could set their own regulations. Businesses in the energy sector believe that an end to current common areas could even potentially mean an end to the all-island energy market which is the basis on which the current SEM ('Single Energy Market') and the new iSEM (Integrated Single Electricity Market) energy market are predicated.

The fourth most concerning aspect of Brexit – taking all firms and sectors together – is the potential **for restrictions on providing or receiving a service** in/from the UK. Over one-quarter of firms rated this as a critical concern for their operations. Companies fear a loss of freedom of establishment and freedom of service will necessitate a regulated UK presence - branch or

“We are in receipt of some services from the UK but these can be [procured] elsewhere ... Any changes in banking services would be critical to our business.”

Firm in the Financial Services Sector

subsidiary - and will increase cost. Irish service providers report that they depend to a significant extent both on UK clients and UK suppliers, and any restrictions by the UK on

the provision of services could have serious implications for their operations and employees in Ireland. Some companies in the goods sectors use capital equipment that is currently supported only by UK-based service providers.

Companies also note that restrictions on providing or receiving a service could reduce competition for the services they purchase, thereby increasing costs. Finally, Irish firms are conscious that existing subsidiaries or suppliers in the UK may face some restrictions in supplying into the EU marketplace, and are considering different corporate structures or supply chain options to mitigate these potential restrictions.

Fifth in the ranking of impacts generating concern is the prospect of **no mutual recognition or agreed technical specifications** post-Brexit. Irish companies fear the additional costs of agreeing different specifications for both exports to the UK and imports from the UK, and fear the potential for standards to become a non-tariff barrier to trade altogether. Enterprises are concerned that divergence could seriously impact on their ability to compete with UK-based competitors, as the development of less stringent rules (or application of rules) in the UK could place them in a significantly weaker competitive position when serving global markets.

“This will certainly result in higher internal costs if we try to satisfy two very different specification regimes.”

Firm in the Beverages Sector



Figure 1: Concern Generated by Brexit Impact, All Sectors



The numbers in the centre represent the rank of each assessment factor from most critical (1) to least critical (20).

Firms indicate that, should EU standards no longer be recognised in the UK, there may be a long UK standards procedure to go through. Irish enterprises see common technical and safety standards as vital to facilitating trade and maintaining mutual trust in each other's products, processes and systems. For some sectors, such as food and beverages, agreed technical specification is critical to success as it mitigates the risk of low cost or low quality 'impersonations'. Irish manufacturers state that adhering to two separate or distinct specifications will likely mean two separate regulatory authorities auditing and issuing requirements that might not be compatible or workable for testing, storage or transport for example. Furthermore, if the UK is the land-bridge for Ireland-EU-Ireland trade, firms question whether transiting product which does not meet the new UK regulations or specifications may get delayed or quarantined.

Some Irish manufacturers highlight that where a product manufactured in the UK, with servicing and maintenance also conducted there, is used in Ireland, the product could become uncertifiable where mandatory servicing or maintenance cannot be completed or validated. This could mean that specialist equipment would increase in price to the end user or would no longer be a cost-effective option for manufacturers in Ireland.

Some service firms ensure customers compliance with EU legislation as part of their service-level offering for example in financial services or data management. Such firms may face additional administration, cost and uncertainty in relation to goods and services traded with the UK following Brexit. The imposition of new standards on their activities could mean the basis on which they compete

“We have a centralised shared services finance function based in [the] UK. This includes invoice processing, bank and cash reconciliation, internal audit, Group tax, etc. for which we are cross-charged internally. These services could potentially cost more in the future.”

Firm in the Retail/Wholesale and Sector

differs in one jurisdiction from another. For those involved in energy-related services a divergence in standards could undermine the basis on which a single or all-island market rests.

Companies are also concerned about customers who have UK and Irish products or services running 'side-by-side' (e.g. financial software), for whom absence of mutual recognition would be disruptive. For importers, operating in Ireland as a member of the EU, divergence may make it difficult to get new UK standards accepted for this market.

D. Goods and Services Sectors – differing concerns

When we consider firms in the goods sectors as distinct from firms in the services sectors many of the same Brexit factors are generating concern across both, albeit in a somewhat different order³. However, there are also a few notable exceptions.

Firms in both goods and services sectors share concerns about the re-emergence of a physical border in Northern Ireland, the absence of a customs union (or other common areas) between the UK and the EU as well as any change to mutual recognition of specifications or shared technical standards.

Perhaps surprisingly, the imposition of tariffs is the top concern for firms in services sectors. This can be explained in part by the designation of the wholesale and retail sector as a services activity, and the risk posed to such firms from tariffs on goods is clear and likely

“Where the tariffs are significant, this would result in a reduction of choice for the Irish consumer as demand decreases and makes it uneconomic for multinational suppliers to supply this market.”

Firm in the Retail/Wholesale Sector

to be significant. Similarly, the transport services sector includes services firms that import high volumes of vehicles. In addition, services firms often provide their services to firms who trade in goods, and the services firms are concerned about the impact of tariffs on their customers’ operations. We see that firms in the services sector who depend on services export sales to the UK are concerned about the impact of trade tariffs on the UK economy more generally fearing that tariffs will dampen UK growth and hence the demand for their services.

Where concerns do differ between goods and services sectors, there are identifiable reasons why these concerns may affect one and not the other.

For example, the fifth highest concern for firms in the **goods sector** is the risk of unilateral imposition by the UK of new/different product standards, in areas such as health, public safety, quality, and the environment.

“This may result in products that are traded in the UK will need to undergo separate testing to prove that they meet the UK test standards.”

Firm in the Pharmaceuticals and Chemicals Sector

This impact causes particular concern for firms involved in goods activity because they believe divergent standards could:

- create significant additional costs;
- create a major competitive disadvantage;
- result in products requiring separate testing to prove that they meet UK test;
- see established supply lines no longer qualify under EU rules; and

³ The 15 sectors analysed comprise sectors which provide goods (Chemical /Pharmaceuticals, Dairy, Beverages, Fish, Wood / Paper, Other Manufacturing, Computer / Electronic / Optical and Meat); and sectors which provide services (Computer Programming, Construction / Energy / Water /Waste, Computer Facilities Management / Computer Consulting, Financial Services, Rental / Leasing, Transport Services and Retail / Wholesale).

- mean higher complexity and cost across similar products sold in different jurisdictions.

The imposition of new or different product standards will simply impose additional financial costs on firms to identify, implement and maintain different sets of standards to those which apply in the EU.

Unsurprisingly, firms in **service sectors** disproportionately identified restrictions on providing or receiving services in the UK as a critical concern. While all participants were focussed on tariffs and physical constraints on trade, firms in the services sector also contend with less obvious restrictions such as licensing,

intellectual property rights, industry authorisation bodies and professional qualification recognition. Firms in the services sector also told us that the imposition of a border, and any restrictions on freedom of movement are also key concerns for them, as their employees and clients regularly

“Any change in this agreement would limit the possible pool of talent that we can recruit from in the future. UK citizens are the second largest nationality in our workforce after Irish citizens currently.”

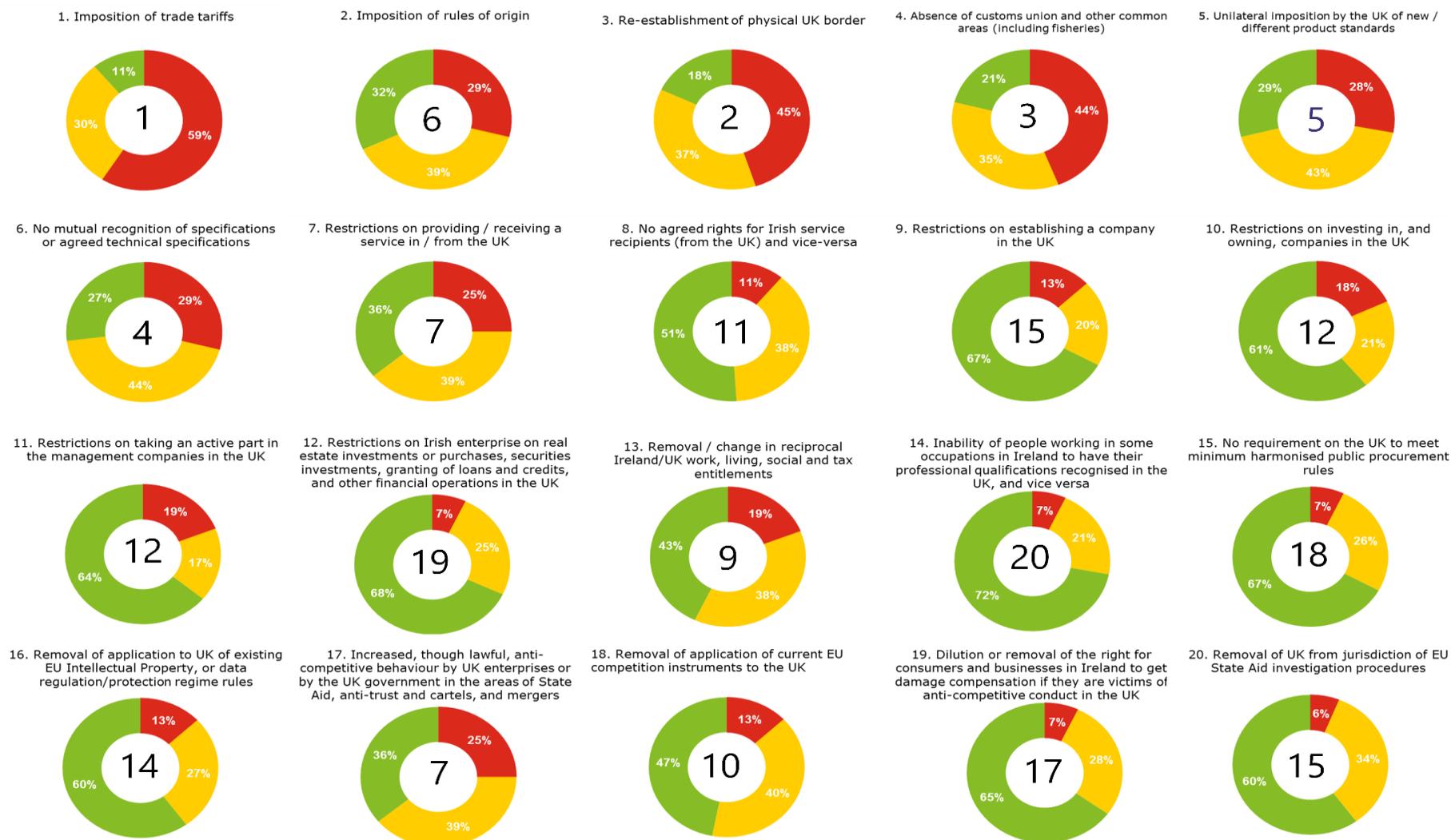
Firm in the Pharmaceuticals and Chemicals Sector

travel across the Ireland-UK border in the course of their business. Firms considered the free movement of labour, such as transferrable work visas and an ability to access a wide talent pool across the EU, as their 5th highest concern, significantly above where firms in the goods sector rank it as a concern. This is unsurprising given the focus on attracting ‘talent’ in many of the knowledge intensive areas in the services sector.

Finally, similar to those in the goods sector, services firms ranked the lack of a customs union or common area as one of their most significant concerns. This highlights that the customs union also has an important role to play in removing non-tariff barriers to trade, such as employee rights, some service standards and mutual recognition of certain qualifications, many of which could be significant to a services firm accessing clients or employees in other jurisdictions.



Figure 2: Concern Generated by Brexit Impact, Goods Sectors



The numbers in the centre represent the rank of each assessment factor from most critical (1) to least critical (20).



Figure 3: Concern Generated by Brexit Impact, Services Sectors



The numbers in the centre represent the rank of each assessment factor from most critical (1) to least critical (20).

E. Sector Specific Insights

Individual sector profiles are set out as an appendix to this paper and provide some sector specific insights. The aggregate level of concern varies *between* sectors which is unsurprising given that some sectors have greater exposure to the UK than others. Some insights that emerge include:

- Comments from firms in the chemical and pharmaceuticals sectors focus on the desire to access the largest potential talent pool, concerns around restrictions on providing goods and services into the UK and the potential administrative costs that would arise in the event of divergent regulation and/or product standards between the UK and the EU.

“Any change in this agreement would limit the possible pool of talent that we can recruit from in the future. UK citizens are the second largest nationality in our workforce after Irish citizens currently.”

Firm in the Pharmaceuticals and Chemicals Sector

- Firms in the dairy sector commented on the fact that, as a sector that operates on tight margins, even small additional costs would affect their competitiveness.

- The principal concern raised by firms in the construction, energy, water and waste sectors relates to the potential imposition of a hard border between Ireland and Northern Ireland, with many explaining that this would have implications for their supply chains including access to equipment, raw materials and particular services.

- The financial services and insurance sectors’ core concerns relate to the ability to own or invest in companies, property or securities across these jurisdictions and the flexibility to move their workforce between locations in Ireland, Europe and the UK.

“The financial services industry relies on ready access to finance professionals both for staffing and consulting. In that case, anything that will drive up costs of doing business with London will be bad for Irish financial services companies.”

Firm in the Financial Services Sector

- For computer facilities enterprises, access to a skilled pool of talent remains paramount, as is the ability to move employees around to different projects without restriction on where they can work and on what customers they can serve.

- Firms in the computer programming sector express a relatively low level of concern based on an assumption that trade in online services or software is unlikely to face significant disruption in the event of Brexit. However, firms also noted that if there was to be substantial regulatory divergence in the area of IP (Intellectual Property) rights or data protection, this would cause concern.

There is a range in the level of concern expressed across sectors, and as shown in **Box 5**, overleaf, eight of the fifteen sectors displayed above average levels of concern (column highlighted red), three were at average levels (column highlighted amber), and four displayed below average levels (column highlighted green). The table presents the weighted average concern ‘scores’ across each

sector, along with the maximum and minimum firm scores in each sector⁴. The spread of scores between the maximum and minimum scores presented demonstrates the considerable range within each sector which serves to highlight the firm-specific nature of the responses received (See Section F).

Box 5: Level of Concern by Sector (Max possible score = 60)

Sector	Average	Min	Max
All sectors	33	20	55
Chemical & Pharma	41	32	54
Dairy	37	24	51
Beverages	37	20	53
Fish	36	25	55
Construction / Energy / Water / Waste	35	20	54
Retail / Wholesale	35	29	43
Financial & Insurance services	34	20	50
Wood, Wood Products, Paper, and Printing	34	22	55
Other manufacturing (Petroleum, Furniture, Textiles, Clothing, Footwear, Leather)	33	20	45
Computer / Electronics / Optical	33	20	49
Meat	33	25	43
Computer Facilities Mgmt. / Consulting	32	23	42
Transport	31	20	45
Computer Programming	28	20	34
Rental & Leasing	26	20	32

⁴ The 'scores' presented are calculated using a weighted average methodology. Each response provided by a firm in response to each Brexit factor was given a ranking as follows: Critical = 3, Moderate = 2, and, Little = 1. The weighted total is the sum of the percentage of firms that responded for each level of impact, multiplied by the ranking each was given. This resulted in a weighted total which is what is presented in the 'Average' column on Box 5. The Minimum and Maximum scores represent the total scores across all Brexit factors (and therefore a total score of 60) provided by the specific firms responding in each sector with the lowest and highest total

Rather than a ranking of sectors, the averages presented in **Box 5** should be interpreted as assessing the ‘breadth’ of concern within each sector across the range of twenty Brexit factors they were prompted to consider. It is worth noting, for example, that firms in the Pharmaceuticals and Chemicals sector did not register proportionally higher levels of concern on any single factor, rather the diversity within the sector is reflected by different firms expressing different levels of concern across a broad range of factors. This results in a high average score for this sector under the quantitative aspect of this research, in which concern expressed across each Brexit factor is measured cumulatively.

It is notable that potential negative changes to certain important benefits relating to free movement of capital and/or level playing field have not generated the same level of concerns among firms as is the case with those relating to free movement of goods, services or labour. This pattern is evident

“As a relatively small operator in the UK, we appreciate the protections that a strong anti-trust and competition regime affords to us in the UK. Any diminution of that protection is likely to have a negative impact on us.”

Firm in the Beverages Sector

in Figure 4⁵. The level of concern decreases ‘left-to-right’ as each sectors’ aggregate level of concern declines, but concern also decreases ‘top-to-bottom’, as it is the potential for changes to the freedom of movement of goods (Factors 1-6) which firms view to be more impactful than, say, changes to the level playing field (Factors 15 – 20). An exception to this is the Financial and Insurances Services sector, where concern is relatively high in relation to changes in the free movement of capital (Factors 7 - 12), and a very

small number of firms, such as one in the Beverages sector quoted here, with a strong awareness of ‘level playing field’ type protections.

In short, **where sectors report lower levels of concern about Brexit, it tends to be because they are less concerned about changes to the free movement of capital and an end to the level playing field**, or, perhaps, are less aware of the impact of these types of changes.

⁵ Figure 4 is a heatmap infographic, which shows the level of concern generated by each Brexit impact factor, by Sector. Each response, to each Brexit factor, was given a ranking as follows: Critical = 3, Moderate = 2, and, Little = 1. This was averaged for each assessment factor in each sector. The higher this number the more this sector felt that it would be effected by this impact factor. These weighted scores were converted into colours to give the heatmap. A dark red colour represents a high level of concern. A bright green colour represents a low level of concern.

Figure 4: Level of Concern Generated by Brexit Impact, by Sector (sorted by most critical to least critical)

Impact Assessment Factor	Chemical & Pharma	Dairy	Beverages	Fish	Construction / Energy / Water / Waste	Retail / Wholesale	Financial & Insurance Services	Wood / Printing	Other Manufacturing	Computer / Electronics / Optical	Meat	Computer Facilities Mgmt. / Consulting	Transport	Computer Prog.	Rental & Leasing
1 Imposition of trade tariffs	Orange	Red	Orange	Red	Orange	Red	Yellow	Orange	Orange	Orange	Orange	Yellow	Orange	Yellow	Orange
2 Imposition of rules of origin	Yellow	Orange	Orange	Yellow	Yellow	Red	Yellow	Yellow	Orange	Yellow	Orange	Green	Yellow	Green	Green
3 Re-establishment of physical UK border	Orange	Orange	Orange	Orange	Orange	Red	Yellow	Orange	Orange	Orange	Orange	Green	Orange	Yellow	Orange
4 Absence of customs union and other common areas	Orange	Orange	Orange	Orange	Orange	Red	Yellow	Orange	Orange	Orange	Orange	Green	Orange	Yellow	Yellow
5 Unilateral imposition by the UK of new/different product standards	Orange	Orange	Orange	Yellow	Orange	Orange	Yellow	Yellow	Orange	Orange	Orange	Yellow	Orange	Green	Green
6 No mutual recognition of specifications or agreed technical specifications	Orange	Orange	Orange	Yellow	Orange	Orange	Yellow	Yellow	Orange	Orange	Orange	Yellow	Orange	Yellow	Yellow
7 Restrictions on providing/receiving a service in/from the UK	Orange	Yellow	Orange	Yellow	Orange	Yellow	Orange	Orange	Orange	Orange	Yellow	Orange	Orange	Orange	Orange
8 No agreed rights for Irish service recipients (from the UK) and vice-versa	Orange	Yellow	Orange	Yellow	Orange	Orange	Orange	Yellow	Orange	Orange	Yellow	Orange	Orange	Yellow	Yellow
9 Restrictions on establishing a company in the UK,	Orange	Green	Green	Green	Green	Green	Orange	Yellow	Yellow	Yellow	Yellow	Orange	Green	Yellow	Green
10 Restrictions on investing in, and owning, companies in the UK	Orange	Yellow	Orange	Yellow	Orange	Green	Orange	Yellow	Yellow	Yellow	Yellow	Orange	Green	Yellow	Green
11 Restrictions on taking an active part in the management companies in the UK	Orange	Yellow	Orange	Green	Orange	Green	Orange	Yellow	Yellow	Yellow	Yellow	Orange	Green	Yellow	Green
12 Restrictions on Irish enterprise on investments	Yellow	Yellow	Orange	Yellow	Orange	Green	Orange	Green	Green	Green	Green	Green	Green	Green	Green
13 Changes to free movement of labour.	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Yellow	Yellow	Yellow	Yellow	Orange	Yellow	Yellow	Yellow
14 Inability to recognise professional qualifications	Yellow	Yellow	Orange	Yellow	Orange	Green	Orange	Green	Green	Green	Green	Yellow	Green	Green	Green
15 No requirement on the UK to meet minimum harmonised public procurement rules	Yellow	Green	Green	Yellow	Orange	Green	Green	Yellow	Yellow	Yellow	Green	Yellow	Green	Yellow	Green
16 Removal of application to UK of existing EU Intellectual Property, or data regulation/protection regime rules	Orange	Yellow	Orange	Yellow	Orange	Green	Orange	Green	Yellow	Orange	Green	Orange	Green	Orange	Green
17 Increased, though lawful, anti-competitive behaviour in the areas of State Aid, anti-trust and cartels, and mergers	Orange	Orange	Orange	Orange	Orange	Green	Orange	Orange	Orange	Orange	Orange	Orange	Yellow	Green	Green
18 Removal of application of current EU competition instruments to the UK	Orange	Yellow	Orange	Orange	Orange	Yellow	Orange	Yellow	Orange	Orange	Yellow	Yellow	Green	Yellow	Green
19 Dilution or removal of the right for consumers and businesses in Ireland to get damage compensation	Yellow	Yellow	Orange	Yellow	Orange	Green	Orange	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Yellow	Green
20 Removal of UK from jurisdiction of EU State Aid investigation procedures	Yellow	Yellow	Orange	Yellow	Orange	Green	Orange	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Green	Green
Weighted Average level of concern (out of a possible score of 60)	41	37	37	36	35	35	34	33	33	33	32	32	31	28	26

F. Firm Specific Insights

The research, as detailed so far, demonstrates that we can identify themes and trends in each sector, the areas in which firms express concern and the levels at which they express concern. However, the central finding of this research has been the nuanced, firm-specific opinions and observations as expressed by responding enterprises. Naturally, firms are approaching Brexit and its potential implications with their own organisation, markets and operations to the forefront of their considerations.

While Figure 4 demonstrates the spread of concern levels across sectors, it also gives an insight into the wide of variation of concern *within* sectors, which might not have been as anticipated in advance. Significant variation *within* a sector is less intuitive. Albeit based on a relatively small number of firms, the research suggests that such variation in concern amongst firms in the same sector can be explained by a number of influencing phenomena. These include:

- The nature of firms' operations (e.g. the extent to which firm is trading locally or beyond the UK);
- Firms' assumptions (e.g. that agreement on the Common Travel Area is both a certainty and will address issues around the free movement of labour such as recognition of qualifications);
- How firms assess risk (e.g. focussing on a perceived low probability of a change rather than the high impact, say, to rules protecting the firm from anti-competitive practices in the UK); and
- Behavioural bias/heuristic thinking (e.g. equating 'risk' of an impact to the salience of that impact in discourse/media; succumbing to availability bias where risk is assessed on the basis of current operations and practices, rather than necessary or desirable future practices).

Much of the media coverage and broad discourse to date of the impact of Brexit on the economy has focussed on the potential imposition of trade tariffs, the emergence of a physical UK border, the impact of the UK leaving the customs union, the potential for divergence in standards and an end to free movement of labour.

“I would have liked to see a ‘Don't know!’ option on all of the above”

Firm in the Financial Services Sector

In contrast, other equally likely impacts have not featured as prominently (e.g. removal of the right to get damage compensation when the victim of anti-competitive conduct or removal of the UK from State Aid investigation procedures. Prominent media coverage and discourse increases the *salience* of some potential impacts, and much academic research suggests that increased salience alters risk-assessment, creating a tendency to elevate levels of concern about more salient factors. This is known as the *availability heuristic*, which was evident in some responses:

“Not 100% sure what this [WTO ‘country of origin’ rules] involves but sounds like more paper work.”

Firm in the Other Manufacturing Sector

- A number of firms were somewhat less concerned about restrictions on establishing a company in the UK because they already have a number of UK-based subsidiaries;
- Some firms had little concern about restrictions on providing or receiving a service because they currently have no reliance on any service from the UK;
- One firm stated that changes regarding the recognition of professional qualifications were of little concern as this would not currently be an issue for any of their staff, while another similarly said that their business is not dependent in any significant way on this factor at present;
- A firm reported that concern was low about the absence of any requirement on the UK to meet minimum harmonised public procurement rules because they do not currently supply into any UK State bodies. Another said that it currently had no significant public procurement involvement;
- One firm stated restrictions on certain financial operations were of little concern as they currently source finance locally.

“[Brexit is of] Little concern for our business although we believe the alignment in standards between the Ireland and the UK is generally of benefit... Anything that could negatively impact the Irish economy is a concern for us.”

Firm in the Rental and Leasing Sector

G. Conclusions

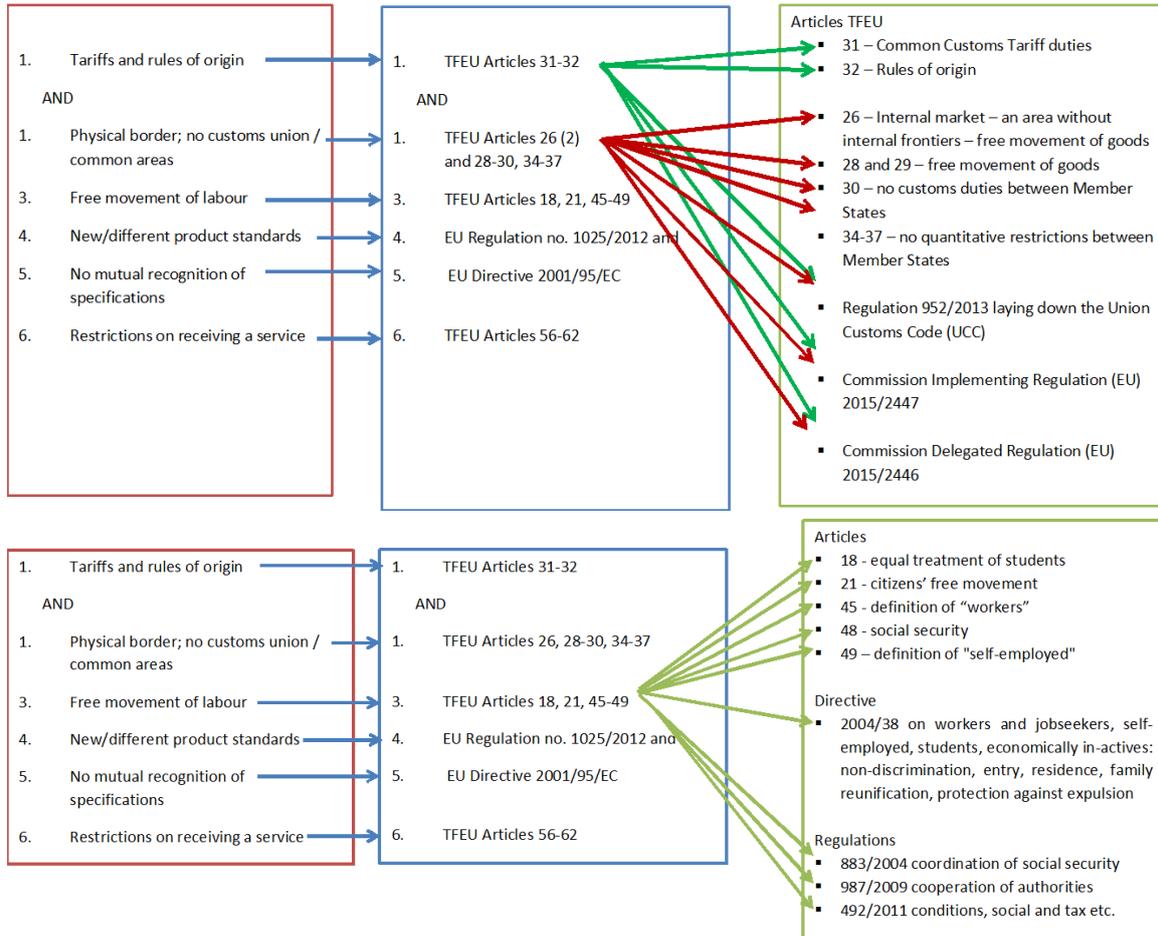
The findings of this research have several implications.

Firstly, it is clear that Irish businesses will face significant disruption from Brexit and would favour a Brexit outcome that to the greatest extent possible protects their rights to sell and purchase products and services from the UK with limited or no restrictions within a transparent and fair regulatory environment, with mutual recognition of technical specifications and equivalent operational standards. An outcome from the Brexit negotiations between the UK and the EU that preserves the greatest possible freedom to trade across the jurisdictions of the UK and Europe would be optimal for Irish businesses. Notwithstanding that Brexit may offer some opportunities to attract business areas in certain sectors, the research supports the findings of other analyses that make clear that Brexit EU will have negative implications for many Irish businesses. It is Ireland’s government policy to influence negotiations to mitigate these challenges to the fullest extent achievable.

This research demonstrates effectively the complexities that arise in the Brexit negotiations. At sector-level and at firm-level, the variety and multi-faceted nature of implications raised by respondents highlights the nuanced, and often highly technical, implications that EU Directives and Regulations have on the business environment for Irish firms.

To take the example of the retail and wholesale sector, **Box 6** demonstrates how the principal concerns raised by respondents are embedded across dozens of separate EU agreements, all of which will have to be considered as part of negotiating a new trade arrangement between the EU

Box 6: Example of Retail Sector Concerns and related EU Agreements



and UK. Nationally, Departments and agencies are continuing to undertake extensive analysis to develop an adaptive whole-of -Government contingency plan and to inform ongoing negotiations⁶.

This research also brings further emphasis to the need for a relentless focus on competitiveness in Irish enterprises. Brexit is likely to shift the competitive environment in a number of sectors, in ways that are not necessarily predictable. A sustained focus across Government is required to ensure that Ireland remains competitive and takes action to address issues that are within its control. The analysis and recommendations of the National Competitiveness Council is key to highlighting areas of concern in this regard⁷. Enterprise policy aims to support firms to be resilient, to innovate and enhance their competitiveness and to think strategically about their responses to changes in their sector or markets.

⁶ See Action Plan for Jobs, 2018, Government of Ireland Action 1 and Building Stronger Business, responding to Brexit by competing, innovating and trading, DBEI, November 2017

⁷ Ireland's Competitiveness Challenge 2017, National Competitiveness Council, December 2017, and Costs of Doing Business in Ireland 2017, National Competitiveness Council, May 2017

An important finding of this research was that firms across sectors did not appear to be systematically taking action to mitigate the potential impact of Brexit: only half of the sectors were active in this regard, undertaking scenario planning, investigating alternative sources of inputs, reviewing product mix, assessing legal entity status changes and establishing UK companies. The remaining sectors reported few significant preparatory steps at this point.

The Brexit SME Scorecard is an interactive on-line platform which is available to all Irish companies to self-assess their exposure to Brexit

www.prepareforBrexit.ie

Developed by Enterprise Ireland

This research is perhaps most valuable for the richness of the firm-level analysis and perspectives on the potential consequences for each of their own businesses. This granular approach highlights the diverse levels of concern, understanding and preparation underway in businesses across Ireland and provides a useful pool of knowledge to be utilised by DBEI when developing its approach to supporting the ambitions of a diverse but integrated business environment.

All of this points to the value of tailored awareness campaigns and/or firm-level interventions. The Government and relevant agencies continue to provide flexible and tailored supports for businesses in their response to Brexit⁸. As set out in 'Building Stronger Business' the focus of the Department of Business, Enterprise and Innovation remains:

- Helping firms to compete – working across Government to create the best environment for business to grow, export and create jobs, ensuring firms have access to finance, that our tax regime and our capital investments promote national competitiveness;
- Enabling firms to innovate – targeting R&D funding through the enterprise development agencies to support innovation in products and processes, enabling enterprises to compete and grow;
- Supporting firms to trade – through Enterprise Ireland to assist enterprises to start exporting, to grow their exports in existing markets and to diversify into new markets and regions. IDA Ireland continues to attract overseas investment. DBEI continues to work with EU partners to expand the portfolio of Free Trade Agreements; and
- Negotiating for the best possible outcome – working across government to ensure that the best outcome possible for business from Brexit negotiations is achieved.

This research and analysis, and ongoing work by DBEI and its agencies and other relevant departments, helps to deepen understanding of how Brexit is likely to impact on business here in Ireland. This research helps to ensure that our policy responses and supports across government meet the needs of enterprise as the negotiations evolve

⁸ Refer to Building Stronger Business, Responding to Brexit by Competing, Innovating and Trading, Department of Business, Enterprise and Innovation, November 2017; The Action Plan for Jobs, 2018, Government of Ireland, March 2018, Enterprise 2025 Renewed, Department of Business, Enterprise and Innovation, March 2018,

Individual Sector Profiles

Chemical and Pharmaceutical Sectors

Note: The responses of each sector as presented here should not be interpreted as a representative sample of the sector in Ireland. They are an aggregation of the qualitative and quantitative responses provided by individual firms as part of this research. The findings for each sector should be interpreted in the context of the report as a whole.

- The Chemical and Pharmaceuticals sectors reported an **above average** level of concern about the impact of Brexit. Firms provided responses to all of the 20 impact assessment factors with only two factors where no firm raised a 'Critical concern'.
- Participant firms operate in a variety of activities including pharmaceutical manufacturing, laboratory research and development, chemicals manufacturing and pharmaceutical component production.
- The wide variety of activities carried out by firms in the sector leads to concern arising over a range of different factors posed by a post-Brexit WTO trade arrangement scenario. It is worth noting that firms in this sector **did not register proportionally higher levels of concern on any single factor**, rather the diversity within the sector is reflected by different firms expressing different levels of concern across a broad range of factors.
- The five impacts of Brexit generating greatest concern in the sector, in order, are:
 1. **Removal or change of reciprocal work, living, social and tax arrangements between Ireland and the UK.** 67% of firms deem this to be a critical factor. *Example of firm reaction:* Firms currently employing UK citizens in Ireland expressed concern that the pool of talent from which they can recruit in future could be restricted. Firms also identified that they regularly place employees of their Irish company, from all over the world, in projects both in Ireland and internationally. The ability to have transferable contracts is seen as important.
 2. **Restrictions on providing or receiving a service from or to the UK.** 56% of firms deem this to be a critical factor. *Example of firm reaction:* Firms in this sector expressed a need for contracting UK suppliers with a low administrative burden, including critical parts of their supply chain. Any restrictions on the purchase of such services would lead to re-assessment of supplier sourcing.
 3. **Imposition of trade tariffs.** 56% of firms deem this to be a critical factor. *Example of firm reaction:* One firm detailed that it purchases many millions of euro worth of raw materials from the UK and also exports many millions of euro worth of final goods to the UK, a trade tariff on products between the two jurisdictions on these products would place them in a difficult competitive position. Another firm in the

pharmaceuticals sector expects that their trade would fall under duty free status under a 3rd country trade agreement and therefore do not predict a significant impact.

4. **No mutual recognition of specifications or agreed technical specifications.** 44% of firms deem this to be a critical factor. *Example of firm reaction:* Firms reported that a UK deviation from European standards for pharmaceuticals could significantly increase compliance administration and expense.

5. **Unilateral imposition by the UK of new or different product standards.** 44% of firms deem this to be a critical factor. *Example of firm reaction:* One firm expressed concern that products that are traded in the UK may need separate testing and quality assurance regimes.

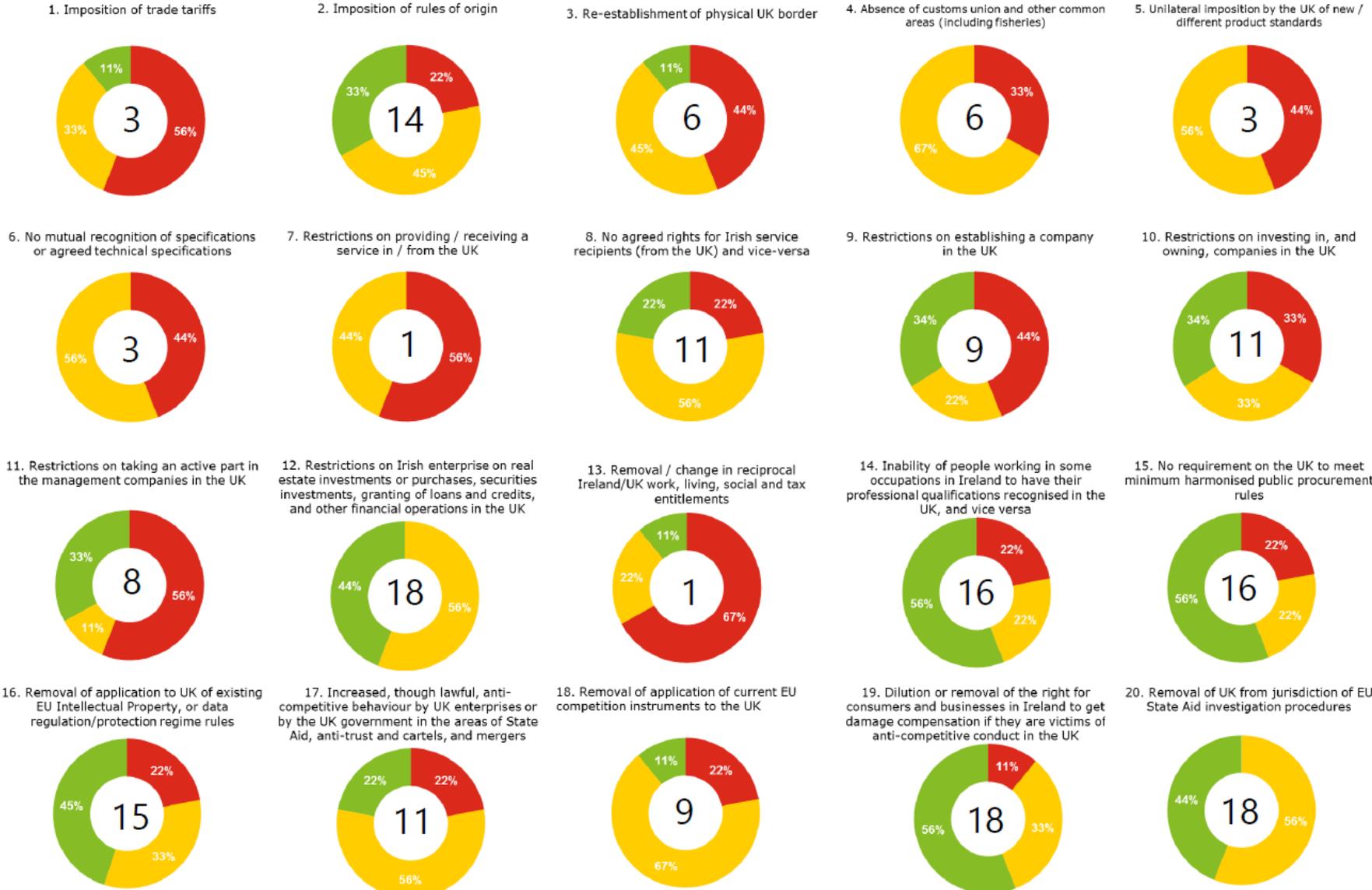
- A wide range in the level of concern was reported by firms in this sector, however there were a number on which they agreed, **there were 4 impact assessment factors identified by all firms within this sector as being of critical or moderate concern to their business:** i) Absence of customs union ii) Unilateral imposition by the UK of new/different product standards, iii) No mutual recognition or agreed technical specifications between the UK and the Republic of Ireland/EU and iv) Restrictions on providing/receiving a service in/from the UK. Only one firm did not identify any areas of 'Critical concern'.
- Firms in this sector did not identify any specific mitigating actions that they were undertaking. One firm commented "Our company buys products and services from the UK and NI, we would need to know about possible restrictions and increased tariffs before proper assessment can be made." This highlights that further impact assessments by some firms in this sector is needed in order for them to make informed business decisions.

Ireland is the world's seventh largest exporter of pharma, biopharma and chemistry produce, representing a market of €33.3 billion. Ireland's regulatory track record in biotech and sterile manufacturing is a key competitive advantage. The sector is increasingly involved in the production of higher-value end-products. The CSO reports that in terms of production, the chemicals and pharmaceutical sectors have seen a large increase in net selling value (NSV) in recent years. In 2015 the chemical and pharmaceutical sector accounted for 51% of total NSV in the country.

Key

- **Critical Concern**
- **Moderate Concern**
- **Little Concern**

Key findings – Chemical and Pharmaceutical



Note: The numbers in the centre of each graph represent the range of each assessment factor from most critical (1) to least critical (20) for the sector. Where overall concern 'scores' for a factor are equal, these are presented as tied in ranking.

Dairy Sector

Note: The responses of each sector as presented here should not be interpreted as a representative sample of the sector in Ireland. They are an aggregation of the qualitative and quantitative responses provided by individual firms as part of this research. The findings for each sector should be interpreted in the context of the report as a whole.

- The Dairy sector reported an **above average** level of concern about the impact of Brexit.
- Participant firms operate in a variety of activities including dairy co-operatives, dairy product manufacturers and cheese producers.
- The similar and specific nature of the activities carried out by firms in the sector, as well as an export focus on the UK market for most enterprises operating in the sector, is reflected in the consistency in the responses. While there were varying degrees of concern regarding, factors relating to the free movement of people, or level playing field, there was more uniformity in relation to the free movement of goods as being of high importance.
- The five impacts of Brexit generating greatest concern in the sector, in order, are:
 1. **Imposition of trade tariffs.** 75% of firms deem this to be a critical factor. *Example of firm reaction:* “EU import tariffs on dairy products are very high...and will have a market distorting effect if replicated by the UK on dairy imports from Ireland”, many firms identified the level of EU tariffs on products such as milk, cheese in a WTO rules context and anticipated that if the UK were to impose tariffs they would be reciprocal reducing the competitiveness of Irish dairy exports in the UK market.
 2. **Absence of custom union and other common areas.** 67% of firms deem this to be a critical factor. *Example of firm reaction:* One firm noted the consequences of removing Northern Ireland from the Common Agricultural Policy, suggesting that it would have a detrimental impact on milk production on Northern Ireland and knock-on consequences for the all-island milk market, as well as divergent product and operational standards. Other firms suggested it could lead to the segregation of Northern Ireland milk producers from the Irish manufacturing pool.
 3. **Re-establishment of physical UK border.** 58% of firms deem this to be a critical factor. *Example of firm reaction:* Firms expressed concern about the administrative and logistical cost implications on the cross-border movement of dairy products in raw and final product forms. Firms also raised the prospect of supply chain inefficiencies and higher risk of product perishability.

4. **Imposition of rules of Origin.** 50% of firms deem this to be a critical factor. *Example of firm reaction:* In the case of an imposition of a rules of origin regime, such as under the WTO, some firms believe they will face increased competition from cheaper non-EU imports to the UK or perhaps campaigns to support indigenous UK production. Other firms identified that Northern Irish milk production would not be competitive importing product to the Republic of Ireland if unable to do so under 'EU origin' terms.

5. **No mutual recognition of specifications or agreed technical specifications.** 25% of firms deem this to be a critical factor and the remaining 75% identified it as being of moderate concern. *Example of firm reaction:* A number of firms identified that divergent SPS (Sanitary and Phytosanitary) standards in the UK would be costly for Irish exporters, other firms considered that there may be different packaging and labelling requirements in different jurisdictions, increasing costs.

- There were variations in the *level* of concern reported by firms in this sector. For example, one firm deemed eleven of the twenty Brexit impacts to be a source of critical concern for their operations, while another only identified one of the twenty Brexit impacts to be critical in nature. There were 2 impact assessment factors identified by all firms within this sector as being of critical or moderate concern to their business: i) Imposition of tariffs; and ii) No mutual recognition of technical specifications between the UK and the Republic of Ireland/EU.
- Firms in this sector were less concerned about changes in free movement of labour, the inability of people in the sector to have their qualifications recognised in the UK, public procurement, IP rules and removal of the UK from the jurisdiction of the EU State Aid investigation procedures.
- Firms in this sector identified a large number and variety of mitigating factors that they would undertake ahead of the UK leaving the EU, these included assessments of potential Market and Product Diversification options, engagement with the Bord Bia Brexit barometer, scenario planning and quantification of 'worst case' scenarios.

According to Bord Bia, Dairy products account for approximately 37% of total Irish food and drink exports.

In 2016, 34% of Ireland's dairy exports went to the UK, representing 53% of cheese exports, 29% of butter and 12% of SMP (skim milk powder).

The UK is Ireland's largest export market for cheese. Exports of cheddar cheese were 78,000 tonnes, representing 82% of all cheddar imported by the UK in 2016. Ireland is the only significant exporter of cheddar to the UK market and the UK market is the only market of significance for Irish cheddar.

Key

- Critical Concern
- Moderate Concern
- Little Concern

Key findings – Dairy



Note: The numbers in the centre of each graph represent the range of each assessment factor from most critical (1) to least critical (20) for the sector. Where overall concern 'scores' for a factor are equal, these are presented as tied in ranking.

Beverages Sector

Note: The responses of each sector as presented here should not be interpreted as a representative sample of the sector in Ireland. They are an aggregation of the qualitative and quantitative responses provided by individual firms as part of this research. The findings for each sector should be interpreted in the context of the report as a whole.

- The beverages sector reported an **above average** level of concern about the impact of Brexit.
- Participant firms operate in a variety of activities including juice producers, bottlers, brewers, distillers, distribution and wholesale activities.
- The five impacts of Brexit generating greatest concern in the sector, in order, are:
 1. **Imposition of trade tariffs.** 60% of firms deem this to be a critical factor. *Example of firm reaction:* A number of firms identify that the UK is a critical export market for their businesses, advising that any additional tariffs on their products in the UK would ultimately reduce their profitability. Firms also described UK raw materials supplier relationships as critical to their business.
 2. **Re-establishment of a physical UK border.** 50% of firms deem this to be a critical factor. *Example of firm reaction:* An increase in time and administrative burden is identified by firms as a likely consequence of any re-establishment of a physical border, both related to product exports and receiving raw materials, with Northern Ireland being an important supplier for a number of firms surveyed.
 3. **Imposition of rules of origin.** 50% of firms deem this to be a critical factor. *Example of firm reaction:* One of the firms identified that a significant portion of their production takes place in the UK, and may face restrictions or tariffs on exports from this operation if WTO standard 'country of origin' rules were to come into effect on trade between the UK and the EU.
 4. **Absence of a customs union and other common areas.** 50% of firms deem this to be a critical factor. *Example of firm reaction:* Firms identified that this could cause administrative cost increases, or potentially require changes to company structure, depending on the relationship between the UK and the customs union.
 5. **Restrictions providing/receiving a service in/from the UK.** 30% of firms deem this to be a critical factor, while a further 60% identified it as being of moderate concern. *Example of firm reaction:* Particular firms identified key services to their business which come from the UK while others described it as reducing the competition for the services they purchase more broadly, thereby increasing likely costs.

- A wide range in the level of concern was reported by firms in this sector. For example, one firm identified all factors as being of critical (13) or moderate concern, while another firm identified all factors as being of little concern for their business. The nature of the firm's supply chain and whether or not they are export oriented influences the level of concern expressed by firms surveyed.
- Firms in this sector were not as concerned about a lack of recognition of professional qualifications, lack of harmonised public procurement rules or restrictions on taking an active part in the management of UK companies as those in other sectors.
- Firms in this sector indicated that they would keep abreast of compliance standards in all jurisdictions and examine alternative supplier options and pricing differentials as potential mitigating actions. Another firm commented: "It is difficult to plan for mitigation at the moment as there is so much uncertainty. Implementing mitigation plans requires investments and resources for a situation that may not arise. At the moment, we are researching options and preparing at this level before we decide to commit resources."

According to Bord Bia Irish Beverages exports were worth €1.4 billion in 2016. This is an increase of 4% compared to the previous year.

Whiskey continue to drive exports with 8% growth recorded in 2016 to reach €505 million. Irish whiskey is the fastest growing spirit in the world, global sales have increased by 300% over the last decade.

27% of Beverages exports in 2016 were to the UK. This equates to a value of €378 million.

50% of total beverages exports are to international (non-EU) markets.

Key

- Critical Concern
- Moderate Concern
- Little Concern

Key findings – Beverages



Note: The numbers in the centre of each graph represent the range of each assessment factor from most critical (1) to least critical (20) for the sector. Where overall concern 'scores' for a factor are equal, these are presented as a tied in ranking.

Fisheries & Seafood Sector

Note: The responses of each sector as presented here should not be interpreted as a representative sample of the sector in Ireland. They are an aggregation of the qualitative and quantitative responses provided by individual firms as part of this research. The findings for each sector should be interpreted in the context of the report as a whole.

- The Fisheries & Seafood sector reported an **above average** level of concern about the impact of Brexit.
- Participant firms operate in a variety of activities including fishing, storage, distribution and retail.
- The nature of activities carried out by firms in the sector is reflected in the strong focus on factors related to the free movement of goods. A large majority of firms identified the imposition of trade tariffs as being of critical concern to their business.
- The five impacts of Brexit generating greatest concern in the sector, in order, are:
 1. **Imposition of trade tariffs.** 87% of firms deem this to be a critical factor. *Example of firm reaction:* Many firms commented that the low margins on their products would become unsustainable if there were substantial tariffs imposed on exports to the UK, as they would need to be priced uncompetitively. Firms also commented that they compete directly with UK firms in third country markets, and would be at a disadvantage if the UK firms were competing on preferential terms.
 2. **Re-establishment of a physical border with the UK.** 62% of firms deem this to be a critical factor. *Example of firm reaction:* The supply times of product delivery is the principal comment made on any re-establishment of a border with Northern Ireland, certain firms also commented that cross-border supply chains would potentially be disrupted.
 3. **The Absence of customs union or other common areas (including fisheries) with the UK.** 62% of firms deem this to be a critical factor. *Example of firm reaction:* Firms commented that the UK leaving the Common Fisheries Policy will have an impact in terms of doing business, selling produce and also may raise issues around the rights to fishing in UK waters.
 4. **Increased, though lawful, anti-competitive behaviour by UK enterprises or by the UK government in the areas of state aid, anti-trust and cartels, and mergers.** 38% of firms deem this to be a critical factor. *Example of firm reaction:* A number of comments from firms surveyed suggested that certain state aid to UK fishing sectors or anti-competitive behaviour in the industry may disadvantage Irish firms and increase competitive pressures in export markets.

5. **The removal of application of current EU competition instruments to the UK.** 38% of firms deem this to be a critical factor. *Example of firm reaction:* Firms commented that firms in the UK may be able to gain a competitive advantage over Irish suppliers.

- A wide range in the level of concern reported by firms was evident in this sector. While two firms indicated that all factors were of critical or moderate concern to their businesses, two others identified only one area of critical concern and three areas of moderate concern. While 87% of firms in this sector identified that the imposition of tariffs would be a critical concern for their business, only 13% of firms in this sector identified that the imposition of rules of origin would be a critical concern for their business.
- Firms in this sector were less concerned about changes to free movement of labour, the inability of people in the sector to have their qualifications recognised in the UK, public procurement, Intellectual Property rules and removal of the UK from the jurisdiction of the EU State Aid investigation procedure.
- Firms in this sector did not identify any mitigating actions that they would take before the arrangements for the UK to leave the EU are finalised.

Bord Iascaigh Mhara reported that Irish fish exports totalled €556 million in 2016. Of this total amount, exports to the UK totalled €76 million. European markets, specifically France, Spain, Italy and Germany, continue to dominate Irish seafood exports and showed strong signs of recovery in 2016, accounting for an estimated 65% of total export values, worth approx. €365 million.

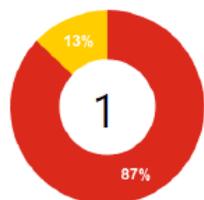
Ireland imported €276 million worth of seafood in 2016, with the UK providing €186 million (67%) of these imports.

Key

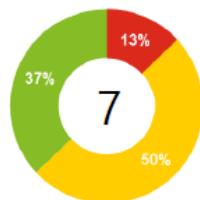
- **Critical Concern**
- **Moderate Concern**
- **Little Concern**

Key findings – Fisheries & Seafood

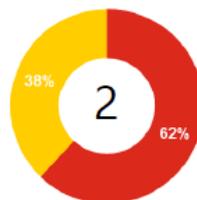
1. Imposition of trade tariffs



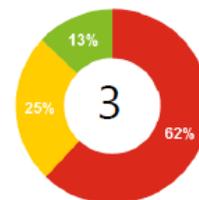
2. Imposition of rules of origin



3. Re-establishment of physical UK border



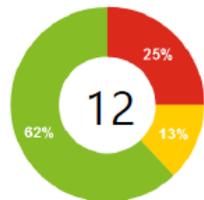
4. Absence of customs union and other common areas (including fisheries)



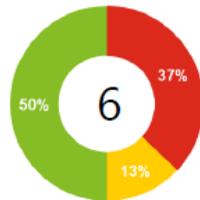
5. Unilateral imposition by the UK of new / different product standards



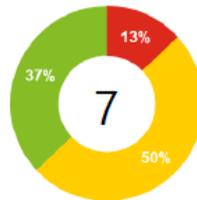
6. No mutual recognition of specifications or agreed technical specifications



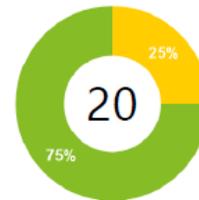
7. Restrictions on providing / receiving a service in / from the UK



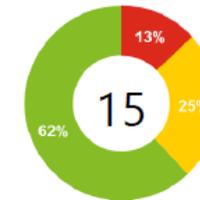
8. No agreed rights for Irish service recipients (from the UK) and vice-versa



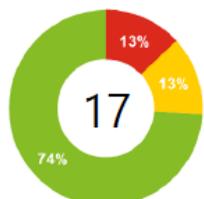
9. Restrictions on establishing a company in the UK



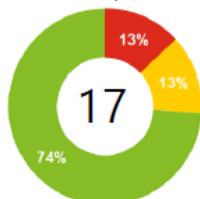
10. Restrictions on investing in, and owning, companies in the UK



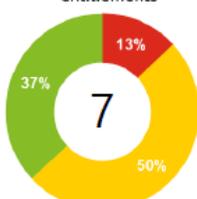
11. Restrictions on taking an active part in the management companies in the UK



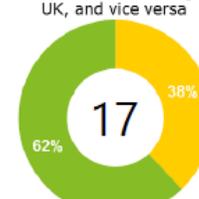
12. Restrictions on Irish enterprise on real estate investments or purchases, securities investments, granting of loans and credits, and other financial operations in the UK



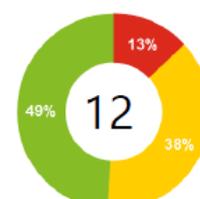
13. Removal / change in reciprocal Ireland/UK work, living, social and tax entitlements



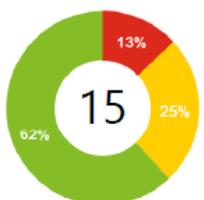
14. Inability of people working in some occupations in Ireland to have their professional qualifications recognised in the UK, and vice versa



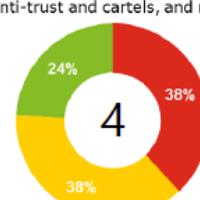
15. No requirement on the UK to meet minimum harmonised public procurement rules



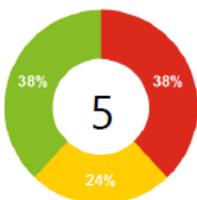
16. Removal of application to UK of existing EU Intellectual Property, or data regulation/protection regime rules



17. Increased, though lawful, anti-competitive behaviour by UK enterprises or by the UK government in the areas of State Aid, anti-trust and cartels, and mergers



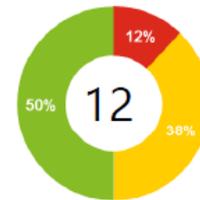
18. Removal of application of current EU competition instruments to the UK



19. Dilution or removal of the right for consumers and businesses in Ireland to get damage compensation if they are victims of anti-competitive conduct in the UK



20. Removal of UK from jurisdiction of EU State Aid investigation procedures



Note: The numbers in the centre of each graph represent the range of each assessment factor from most critical (1) to least critical (20) for the sector. Where overall concern 'scores' for a factor are equal, these are presented as tied in ranking.

Construction, Energy, Water and Waste Sectors

Note: The responses of each sector as presented here should not be interpreted as a representative sample of the sector in Ireland. They are an aggregation of the qualitative and quantitative responses provided by individual firms as part of this research. The findings for each sector should be interpreted in the context of the report as a whole.

- The construction, energy, water and waste sectors reported an **average** level of concern about the impact of Brexit.
- Participant firms operate in a variety of activities including contractors, engineering firms, fuel producers, equipment manufacturers and service providers.
- The variety of activities carried out by firms in the sector is reflected in the broad range of factors deemed to be of concern by this sector, as well as significant variation between firms on the level of concern expressed.
- The five impacts of Brexit generating greatest concern in the sector, in order, are:
 1. **Re-establishment of a physical UK border.** 55% of firms deem this to be a critical factor. *Example of firm reaction:* An increase in journey times, delays in the transportation of goods and administrative burden would all have direct cost implications and therefore impact competitiveness according to firms in this sector.
 2. **Imposition of trade tariffs.** 45% of firms deem this to be a critical factor. *Example of firm reaction:* Firms described that tariffs would directly add to costs and impact negatively on cash-flow, alternatively substitution to EU based suppliers would also impose upfront costs.
 3. **No mutual recognition of specifications or agreed technical specifications.** 40% of firms deem this to be a critical factor. *Example of firm reaction:* European fabrication standards are the norm across a range of engineering materials and products, “if these were no longer recognised in the UK there may be a long UK standards procedure to go through”. Firms in the energy sector described that a divergence in standards in production could give certain firms a competitive advantage.
 4. **Absence of customs union and other common areas.** 40% of firms deem this to be a critical factor. *Example of firm reaction:* Firms raised concerns about the continuation of the all-island energy market, “the basis on which SEM (Single Energy Market) and iSEM

(Integrated Single Electricity Market) energy markets are built”, in the absence of a common energy market between the EU and UK. Others express concern on inconsistent materials pricing depending on tariff regimes.

5. **Unilateral imposition by the UK of new / different product standards.** 30% of firms deem this to be a critical factor. *Example of firm reaction:* Firms expressed concern about differing regulatory standards, one firm explained that “Standards and Regulations covering multiple areas across energy efficiency, controls, safety, quality etc. have significant impact on our commercial, technical and operational activities.”

- A wide range in the level of concern was reported by firms in this sector. For example, two firms identify over ten factors which they regard as being of ‘critical concern’ while five other firms highlight no areas of critical concern. Given the diversity of activities captured within this sector, it can be expected that firms would differ in the extent they trade in or with the UK, or to which they are in a highly-regulated sector which may face competition from UK firms.
- Firms in this sector were less concerned about the inability of people in the sector to have their qualifications recognised in the UK, public procurement, IP rules and the rights for Irish businesses to get damage compensation for anti-competitive conduct in the UK.
- Firms in this sector did not identify any mitigating actions that they would take before the arrangements for the UK to leave the EU are finalised.

The construction industry had exports valued at €368 million in 2015. This is 0.3% of the total national exports.

According to the SEAI, the cost of all energy imports to Ireland in 2015 was €4.6 billion. The CSO's press release on Brexit outlines that Ireland imported €1.9 billion of 'Petroleum, petroleum products & related materials' and €1.1 billion of 'Gas, natural & manufactured' in 2015.

Key

- Critical Concern
- Moderate Concern
- Little Concern

Key findings – Construction, Energy, Water and Waste



Note: The numbers in the centre of each graph represent the range of each assessment factor from most critical (1) to least critical (20) for the sector. Where overall concern 'scores' for a factor are equal, these are presented as tied in ranking.

Retail and Wholesale Sectors

Note: The responses of each sector as presented here should not be interpreted as a representative sample of the sector in Ireland. They are an aggregation of the qualitative and quantitative responses provided by individual firms as part of this research. The findings for each sector should be interpreted in the context of the report as a whole.

- The retail and wholesale sectors reported an **average** level of concern about the impact of Brexit.
- Participant firms operate in retailing and wholesaling activities, including distribution.
- The nature of activities carried out by firms in the sector is reflected in the consistent responses to the survey by firms, which focus strongly on the freedom of movement of goods as the area of most concern to this sector.
- The five impacts of Brexit generating greatest concern in the sector, in order, are:
 1. **Imposition of trade tariffs.** 100% of firms deem this to be a critical factor. *Example of firm reaction:* Firms expressed a high level of concern for the cost increases their businesses could face from any new tariff regime, one commented “Ireland and the UK are one, integrated market for wholesale and retail. Tariffs/admin and rules of origin limitations could increase cost of goods sold and reduce operating margins.” Others pointed out that in some cases, where there is a lack of alternative supply, firms would have little choice but to absorb increase costs.
 2. **Imposition of rules of origin.** 100% of firms deem this to be a critical factor. *Example of firm reaction:* Firms expressed concern that defaulting to World Trade Organisation ‘rules of origin’ would impose tariffs on both the import and export of products, and in particular food products. One firm commented “Food products (where sourced in UK) may be more expensive for the consumer. We may be at a disadvantage compared with competitors who may source more local food produce.”
 3. **Re-establishment of a physical border with the UK.** 100% of firms deem this to be a critical factor. *Example of firm reaction:* Firms expressed concern with logistical arrangements and delays as a result of border controls between Ireland and Northern Ireland, one firm commented: “The border will impact on our ‘next day delivery promise’ made to customers across all channels including online.”
 4. **Absence of a customs union and other common areas (including fisheries).** 100% of firms deem this to be a critical factor. *Example of firm reaction:* Firms identified additional costs and constraints on their operations as a result of having to operate outside a free-trade

area in the UK. In the event of a 'hard' Brexit, one firm noted that differing customs arrangements “historically generate distortions which increase smuggling activity, with consequent damage to legitimate retail businesses.”

5. **Removal or change in reciprocal Ireland/UK work, living, social and tax entitlements.** 33% of firms deem this to be a critical factor, with the remaining 67% considering it to be a factor for moderate concern. *Example of firm reaction:* Firms expressed concern about their ability to move Irish staff to UK operations, some also expressed concern about their ability to attract talent. One firm responded that “UK nationals often come to work here (sometimes with experience or a skill set which we find difficult to source in Ireland).”

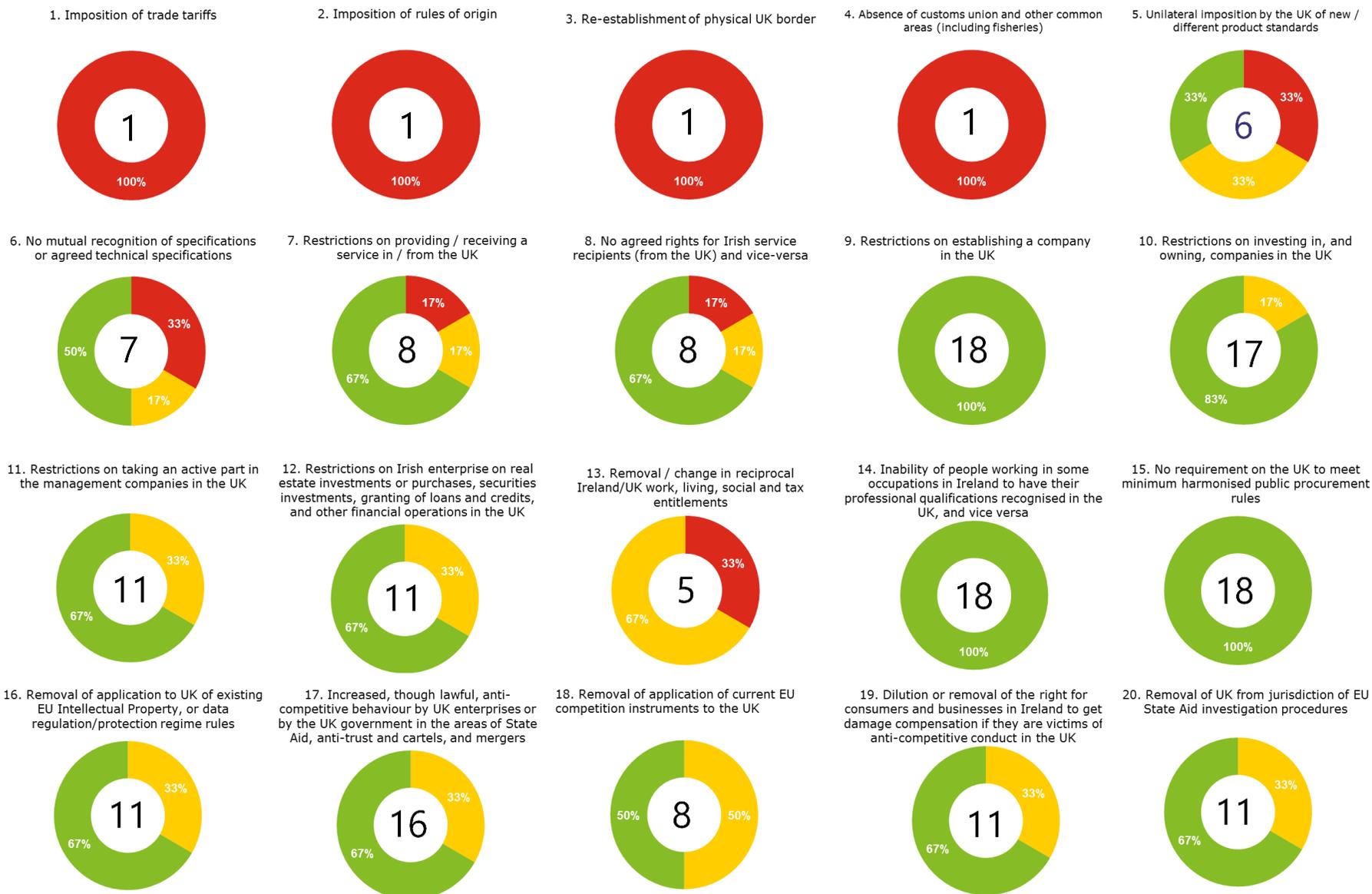
- The factors identified as critical in this sector were remarkably consistent across firms when compared to other sectors. All firms surveyed identified the same four factors as being of critical importance for them. This sector also demonstrated an above average level of factors where the majority of firms deemed them to be ‘of little concern’.
- Firms in this sector were less concerned about the inability of people in the sector to have their qualifications recognised in the UK, restrictions on establishing a UK company, public procurement, Intellectual Property rules and removal of the UK from the jurisdiction of the EU State Aid investigation procedure.
- Firms in this sector did not identify any mitigating actions that they would take before the arrangements for the UK to leave the EU are finalised.

According to Retail Ireland, the Retail and Wholesale sector is Ireland’s largest industry and largest private sector employer. There are 42,000 retail and wholesale businesses operating in Ireland employing almost 275,000 people. Employment in the sector is regionally dispersed with approximately 50% employed outside Dublin.

Key

- Critical Concern
- Moderate Concern
- Little Concern

Key findings – Retail and Wholesale



Note: The numbers in the centre of each graph represent the range of each assessment factor from most critical (1) to least critical (20) for the sector. Where overall concern 'scores' for a factor are equal, these are presented as tied in ranking.

Financial and Insurance Services

Note: The responses of each sector as presented here should not be interpreted as a representative sample of the sector in Ireland. They are an aggregation of the qualitative and quantitative responses provided by individual firms as part of this research. The findings for each sector should be interpreted in the context of the report as a whole.

- The Financial and Insurance Services sector reported an **above average** level of concern about the impact of Brexit.
- Participant firms operate in a variety of activities including retail banking, insurance and reinsurance, financial outsourcing / asset management, investment fund management, pension fund management, insurance-related investment product providers and ePayment services.
- The wide variety of activities carried out by firms in the sector is reflected also in the wide range in the level of concern reported by individual firms (between 20 and 50), and significant variation across firms in the factors identified.
- The five impacts of Brexit generating greatest concern in the sector, in order, are:
 1. **Restrictions on providing/receiving a service in/from the UK.** 52% of firms deem this to be a critical factor. *Example of firm reaction:* Firms highlighted that the loss of this freedom may mean establishing a regulated UK presence, and will increase cost and administration. Similarly, existing UK business will require alternative access into the EU marketplace. Companies note the distributed nature of their businesses, with – for example - UK operations supporting the wider EU business, and operations elsewhere supporting UK financial services activity.
 2. **Restrictions on real estate investments or purchases, securities investments (e.g. in shares, and bonds).** 35% of firms deem this to be a critical factor. *Example of firm reaction:* Any restrictions on being able to facilitate intercompany loans from the EU into the UK are regarded by firms as having serious consequence on the capability and willingness to do business in the UK. The reason is not necessarily the rules themselves, but the added layer of complexity in managing activities.
 3. **Restrictions on taking an active part in the management of companies in the UK.** 29% of firms deem this to be a critical factor. *Example of firm reaction:* One firm commented that “our business is distributed across the EU, with key management based in different locations. Restrictions would have a disproportionate impact on us.”

4. **Restrictions on investing in, and owning, companies in the UK.** 24% of firms deem this to be a critical factor, and another 35% deem it to be a moderate concern. *Example of firm reaction:* Free movement of capital is described as a fundamental cornerstone of the model for this sector. Many clients of financial services firms are domiciled in Ireland, and invest in UK companies. Irish financial services firms facilitate intercompany loans that are often used for acquiring other companies; firms highlighted that restrictions on owning or directing companies may alter this activity with a knock-on effect for business.
 5. **Removal / change in reciprocal Ireland/UK entitlement to look for a job, work without needing a work permit etc.** 18% of firms deem this to be a critical factor, and another 47% deem it to be a moderate concern. *Example of firm reaction:* Companies in the financial services sectors have staff placed across the UK and Ireland, with many 'UK staff' working in Ireland, and vice versa, and express concern about any change to these arrangements that might restrict the free movement of labour.
- A wide range in the level of concern was reported by firms in this sector. For example, one firm deemed eleven of the twenty Brexit impacts to be a source of critical concern for their operations in Ireland, while three of the participating firms did not describe *any* of the twenty Brexit impacts to be critical in nature. The sector's top concern overall (restrictions on services trade with the UK) prompted little concern at all for a minority of surveyed firms.
 - Firms in this sector were not as concerned about an imposition of trade tariffs, an imposition of 'rules of origin' or a lack of harmonised public procurement as those in other sectors.
 - Firms in this sector identified that they would conduct a European legal entity review, and evaluate options for a new operating model post-brexit as potential mitigating actions that they would take.

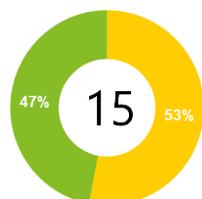
Ireland has a strong financial and insurance services sector with a gross value added in 2015 of €16.3 billion, according to CSO data. Total exports amounted to €11 billion in the financial services sector and €10.3bn in the insurance sector. Total imports were valued at €6.9 billion for financial services and €7.1 billion for insurance services. The UK is a large destination for Irish financial services export. UK exports for financial services were valued at €3.7 billion in 2016 while exports in the insurance industry were €2.5 billion. Imports from the UK in the insurance industry for the same period were €1.6 billion.

Key

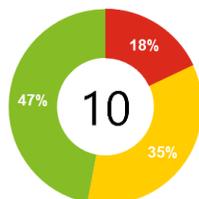
- Critical Concern
- Moderate Concern
- Little Concern

Key findings – Financial and Insurance Services

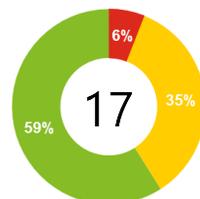
1. Imposition of trade tariffs



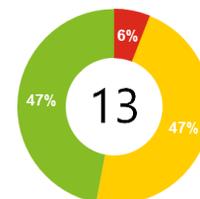
2. Imposition of rules of origin



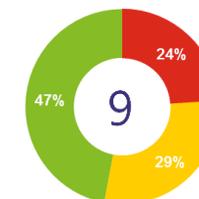
3. Re-establishment of physical UK border



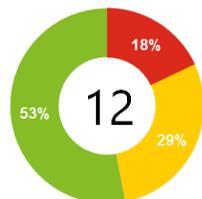
4. Absence of customs union and other common areas (including fisheries)



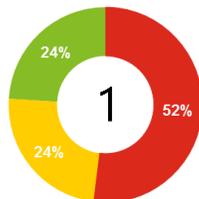
5. Unilateral imposition by the UK of new / different product standards



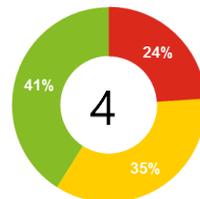
6. No mutual recognition of specifications or agreed technical specifications



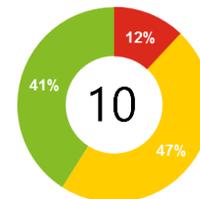
7. Restrictions on providing / receiving a service in / from the UK



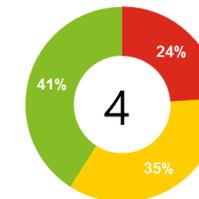
8. No agreed rights for Irish service recipients (from the UK) and vice-versa



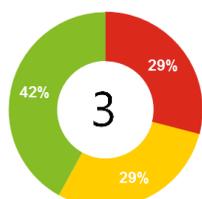
9. Restrictions on establishing a company in the UK



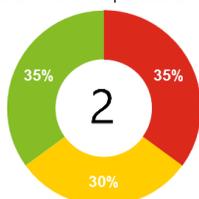
10. Restrictions on investing in, and owning, companies in the UK



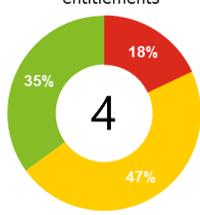
11. Restrictions on taking an active part in the management companies in the UK



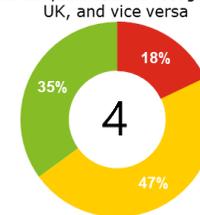
12. Restrictions on Irish enterprise on real estate investments or purchases, securities investments, granting of loans and credits, and other financial operations in the UK



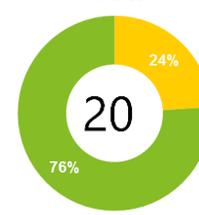
13. Removal / change in reciprocal Ireland/UK work, living, social and tax entitlements



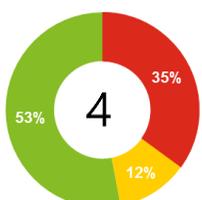
14. Inability of people working in some occupations in Ireland to have their professional qualifications recognised in the UK, and vice versa



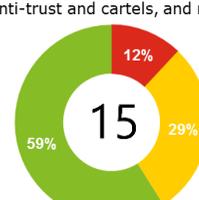
15. No requirement on the UK to meet minimum harmonised public procurement rules



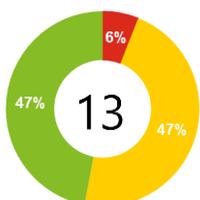
16. Removal of application to UK of existing EU Intellectual Property, or data regulation/protection regime rules



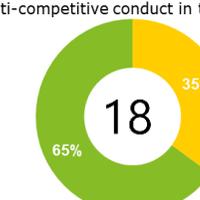
17. Increased, though lawful, anti-competitive behaviour by UK enterprises or by the UK government in the areas of State Aid, anti-trust and cartels, and mergers



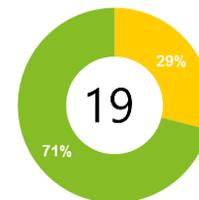
18. Removal of application of current EU competition instruments to the UK



19. Dilution or removal of the right for consumers and businesses in Ireland to get damage compensation if they are victims of anti-competitive conduct in the UK



20. Removal of UK from jurisdiction of EU State Aid investigation procedures



Note: The numbers in the centre of each graph represent the range of each assessment factor from most critical (1) to least critical (20) for the sector. Where overall concern 'scores' for a factor are equal, these are presented as tied in ranking.

Wood, Wood Products, Paper and Printing Sectors

Note: The responses of each sector as presented here should not be interpreted as a representative sample of the sector in Ireland. They are an aggregation of the qualitative and quantitative responses provided by individual firms as part of this research. The findings for each sector should be interpreted in the context of the report as a whole.

- The wood, wood products, paper and printing sectors sector reported **above average** level of concern about the impact of Brexit, it also contains the firm with the highest level of concern in the survey overall.
- Participant firms operate in a variety of activities including forestry, sawmills, packaging, paper & cardboard as well as printing services.
- The variety of activities carried out by firms in the sector is reflected in a significant range in the levels of concern, incorporating the highest overall level as well as amongst the lowest.
- The five impacts of Brexit generating greatest concern in the sector, in order, are:
 1. **Imposition of trade tariffs.** 58% of firms deem this to be a critical factor. *Example of firm reaction:* A number of firms described the imposition of tariffs as restricting their access to their customer base, and making them uncompetitive in export markets.
 2. **Re-establishment of physical UK border.** 42% of firms deem this to be a critical factor. *Example of firm reaction:* Firms who assessed this as a critical factor, identified administrative costs and potential delays as potential issues for their firm. One respondent said “70% of Irish timber is currently exported to the UK, the ability to deliver quick turnaround orders to our end markets is a critical success factor, any delays in this would have a profound impact on the sector.”
 3. **Absence of common customs union and other common areas.** 42% of firms deem this to be a critical factor. *Example of firm reaction:* Firms identified a number of impacts of the UK leaving the single market area that may have detrimental consequences for their operations including variance in regulatory and quality standards.
 4. **Restrictions on providing/receiving services in/from the UK.** 33% of firms deem this to be a critical factor. *Example of firm reaction:* The use of suppliers in the UK, and integrating outsourced activities in the UK into firms supply chains were examples raised by respondents.

5. **Increased, though lawful, anti-competitive behaviour by UK enterprises or by the UK government in the areas of state aid, anti-trust and cartels, and mergers.** 33% of firms deem this to be a critical factor. *Example of firm reaction:* A number of firms expressed concern about competitive pressures as a result of indigenous supports for UK industries, once they are outside the EU. One responder suggested that “In the UK market Irish timber competes primarily with UK home-grown timber rather than other imports. Removal of existing rules could create a competitive advantage for UK homegrown timber or manufactured products.”

- A wide range in the level of concern was reported by firms in this sector. One firm identified 15 factors of critical concern while the remaining 5 factors were of moderate concern, while another identified only two factors of moderate concern while the rest were of 'little concern'. Four of the firms surveyed in this sector did not identify any of the factors as being critical to their business. The extent to which firms in this sector trade with the UK, or are engaged with significant competition for customers with UK firms likely determines much of this variance.
- Firms in this sector were not as concerned about restrictions on Irish enterprise on real estate investments or purchases, securities investments or other financial services; or a removal of application to UK of existing EU Intellectual Property, or data regulation/protection regime rules.
- Firms in this sector identified that they would source raw materials from new markets, and consider establishing an industry forum to focus jointly on areas such as customs, communications and technical specifications initiatives, as potential mitigating actions.

Wood and wood product exports from Ireland totalled €414 million in 2016 while paper exports were €222 million. For the same period, imports for wood and wood products were €417 million while paper imports were €915 million, as per UNECE data.

Key

- Critical Concern
- Moderate Concern
- Little Concern

Key findings – Wood, Wood Products, Paper and Printing



Note: The numbers in the centre of each graph represent the range of each assessment factor from most critical (1) to least critical (20) for the sector. Where overall concern 'scores' for a factor are equal, these are presented as tied in ranking.

Other Manufacturing Sectors

Note: The responses of each sector as presented here should not be interpreted as a representative sample of the sector in Ireland. They are an aggregation of the qualitative and quantitative responses provided by individual firms as part of this research. The findings for each sector should be interpreted in the context of the report as a whole.

- The 'Other Manufacturing' sectors, as defined in this research reported **slightly below average** level of concern about the impact of Brexit.
- Participant firms operate in textiles, wearing apparel, leather and related products; rubber and plastic products; other non-metallic mineral products and furniture. The companies surveyed in this sector were primarily manufacturing firms in clothing, plastics, industrial goods and components.
- The variety of activities carried out by firms in the sector is reflected in the diversity of responses between individual firms. There is a consistency in relation to concerns around the free movement of goods.
- The five impacts of Brexit generating greatest concern in the sector, in order, are:
 1. **Imposition of trade tariffs.** 63% of firms deem this to be a critical factor. *Example of firm reaction:* Many firms responded that tariffs on their imported raw goods and exported products could have significant implications for competitiveness and profitability. One respondent said: "As we import our product from China (outside the EU) into Ireland (EU) we pay a tariff. We then sell our product to the UK. If Ireland (EU) has a trade tariff with the UK, our company could be paying double the amount of tariffs."
 2. **No mutual recognition of specifications or agreed technical specifications.** 44% of firms deem this to be a critical factor. *Example of firm reaction:* A number of firms in this sector responded that divergent regulatory regimes or different materials specifications standards between Ireland and the UK would mean substantial administrative burden or preclude exports/imports. One firm described that "Adhering to two separate or distinct specifications will mean two separate regulatory authorities auditing and issuing requirements that might not be compatible or workable for testing/storage/transport."
 3. **Re-establishment of a physical border with the UK.** 38% of firms deem this to be a critical factor. *Example of firm reaction:* Respondents reported concerns about the movement of goods and staff quickly across any physical border with Northern Ireland. One firm answered that "A physical border would likely add some cost and timing to our process."

4. **Absence of customs union and other common areas (including fisheries).** 38% of firms deem this to be a critical factor. *Example of firm reaction:* Firms identified the difficulties that may arise for company structures – such as having a UK subsidiary – and intra-company transfers in the event that the UK was no longer in a customs union with the EU. Firms also raised concerns about costs arising if product standards or certifications diverged between EU and UK markets.

5. **Imposition of rules of origin.** 31% of firms deem this to be a critical factor. *Example of firm reaction:* A number of firms expressed concern over an increase of paper work and potential tariffs. Other firms responded that they did not fully understand what the implications of this might be.

- The variety in levels of concern expressed across firms in this sector aligns with whether or not the firm has business operations or significant exports to the UK, rather than being a factor for specific sectors or product types. One firm, which manufactures compounds for medical devices, commented that the impact of Brexit is limited as they do very little business with the UK but that if they did more business with the UK that the assessment factors would be more critical to them. While two other firms identified all 20 impact factors as having little impact on their company.
- No firms in these sectors expressed concern about an inability to recognise professional qualifications, a lack of harmonised public procurement rules or a dilution/removal of a right for consumers or businesses to receive damage compensation from UK firms.
- Firms in this sector did not identify any mitigating actions that they would take before the arrangements for the UK to leave the EU are finalised.

According to the CSO statistical release on the Irish Industrial Production by Sector - Textiles, wearing apparel, leather and related products accounted for 0.2%, Rubber and plastic products accounted for 2.0%, Wood and wood products, other non-metallic mineral products and furniture account for 2%, and Other production account for 6.2% of the overall production in this Sector.

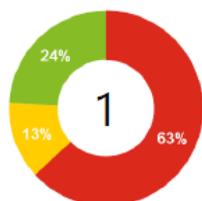
In 2015, there were 4,000 manufacturing enterprises in Ireland with 159,000 employed making it the second largest employer in Ireland.

Key

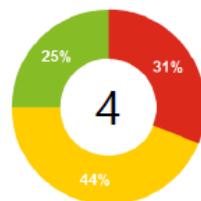
- Critical Concern
- Moderate Concern
- Little Concern

Key findings – Other Manufacturing

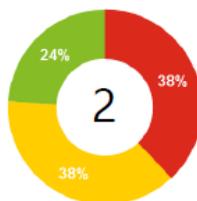
1. Imposition of trade tariffs



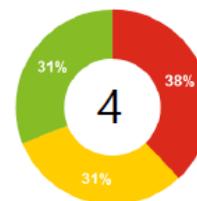
2. Imposition of rules of origin



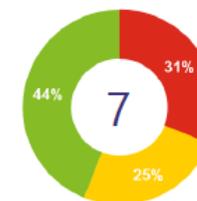
3. Re-establishment of physical UK border



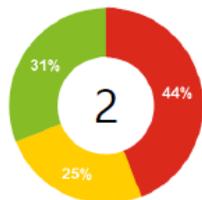
4. Absence of customs union and other common areas (including fisheries)



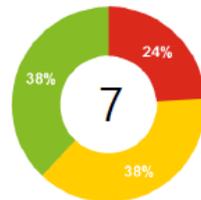
5. Unilateral imposition by the UK of new / different product standards



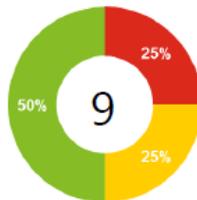
6. No mutual recognition of specifications or agreed technical specifications



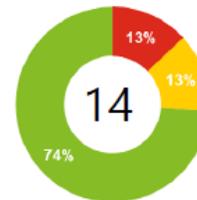
7. Restrictions on providing / receiving a service in / from the UK



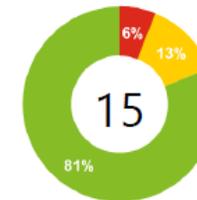
8. No agreed rights for Irish service recipients (from the UK) and vice-versa



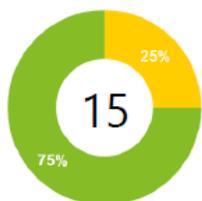
9. Restrictions on establishing a company in the UK



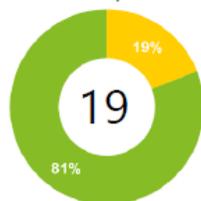
10. Restrictions on investing in, and owning, companies in the UK



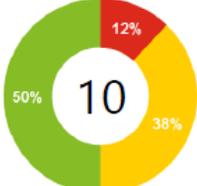
11. Restrictions on taking an active part in the management companies in the UK



12. Restrictions on Irish enterprise on real estate investments or purchases, securities investments, granting of loans and credits, and other financial operations in the UK



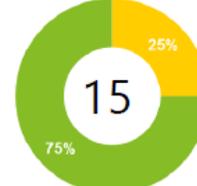
13. Removal / change in reciprocal Ireland/UK work, living, social and tax entitlements



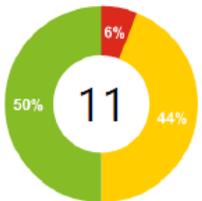
14. Inability of people working in some occupations in Ireland to have their professional qualifications recognised in the UK, and vice versa



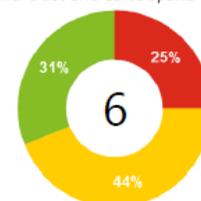
15. No requirement on the UK to meet minimum harmonised public procurement rules



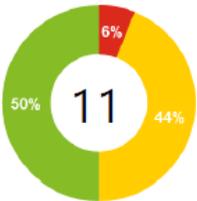
16. Removal of application to UK of existing EU Intellectual Property, or data regulation/protection regime rules



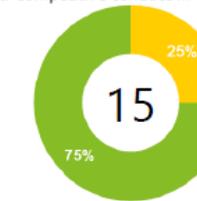
17. Increased, though lawful, anti-competitive behaviour by UK enterprises or by the UK government in the areas of State Aid, anti-trust and cartels, and mergers



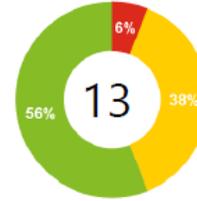
18. Removal of application of current EU competition instruments to the UK



19. Dilution or removal of the right for consumers and businesses in Ireland to get damage compensation if they are victims of anti-competitive conduct in the UK



20. Removal of UK from jurisdiction of EU State Aid investigation procedures



Note: The numbers in the centre of each graph represent the range of each assessment factor from most critical (1) to least critical (20) for the sector. Where overall concern 'scores' for a factor are equal, these are presented as tied in ranking.

Computer, Electronic and Optical Products Sectors

Note: The responses of each sector as presented here should not be interpreted as a representative sample of the sector in Ireland. They are an aggregation of the qualitative and quantitative responses provided by individual firms as part of this research. The findings for each sector should be interpreted in the context of the report as a whole.

- The computer, electronic and optical products sectors reported **slightly below average** level of concern about the impact of Brexit.
- Participant firms operate in a variety of activities including information technology and communications companies, software producers and medical devices/electronics manufacturers.
- The variety of activities carried out by firms in the sector is reflected in the range of factors identified by respondents across factors related to both goods and services. No factor was identified to be of 'critical concern' to more than 30% of firms.
- The five impacts of Brexit generating greatest concern in the sector, in order, are:
 1. **Imposition of trade tariffs.** 26% of firms deem this to be a critical factor with a further 47% identifying it as being of moderate concern. *Example of firm reaction:* Firms expressed concern about the competitiveness and cost implications of any introduction of a tariff regime. One respondent replied that “Over 50% of our business is exports to the UK so any tariffs imposed on UK destined sales will have a big impact on our business”.
 2. **Restrictions on providing or receiving a service from the UK.** 27% of firms deem this to be a critical factor with a further 40% identifying it as being of moderate concern. *Example of firm reaction:* Respondents commented that access to services in the UK and the ability to flexibly service clients in the UK, moving people and resources efficiently is crucial to firms in the technology sector – with any restrictions in this regard likely to impose a financial cost on doing business.
 3. **Re-establishment of a physical UK border.** 27% of firms deem this to be a critical factor with a further 40% identifying it as being of moderate concern. *Example of firm reaction:* Firms raised concerns about time and costs associated with transporting goods across a physical border with a number having supply-chain critical operations in both jurisdictions. One firm commented that “we process multiple deliveries each day to the UK on a next day shipment basis. Any physical border would be a huge concern in terms of slowing up our shipments some of which are [...] sensitive and can only be in transit for a defined period.”

4. **Removal of application to the UK of existing EU intellectual property, or data regulation/protection regime rules.** 27% of firms deem this to be a critical factor with a further 33% believing it to be of moderate concern. *Example of firm reaction:* A number of respondents identified that intellectual property (IP) was crucial to their business and that restrictions on where IP can be held, granted or used would have implications for their operations. Firms also replied that the storage of their data / information systems may be impacted – for example in the use of cloud hosting operations.

5. **Absence of customs union and other common areas.** 27% of firms deem this to be a critical factor with a further 33% believing it to be of moderate concern. *Example of firm reaction:* Firms expressed concern regarding the impact on their supply chains and access to final markets as a result of the UK leaving the customs union. One firm replied that “our global supply chain is designed on knowing how the flow of goods can move geographically [...] With the UK not part of the EU Customs Union this would require additional procedures and costs associated with those procedures.”

- A wide range in the level of concern was reported by firms in this sector. For example, two firms deemed more than half of the factors as being of critical concern whereas the majority of firms in this sector identified all impact assessment factors as either a moderate or of little concern to their business, with the significance of the UK to the business models or markets of specific companies likely to be a determining factor.
- No firms in these sectors expressed concern about an inability to recognise professional qualifications or a dilution/removal of consumers’ or businesses’ rights to receive damage compensation from UK firms.
- Firms in this sector identified that they would undertake a currency hedging programme in response to Brexit as a potential mitigating action that they would take, however most indicated that they would seek greater clarity on the outcome before formulating any strategic or contingency planning.

In 2016 Irish exports across this combined sector were valued at €13.2 billion. Imports for the same period were €7.9 billion. In terms of production, computer, electronic, optical and electrical equipment comprised 11.5% of Net Selling Value in Ireland in 2015, according to the CSO. This compares to 7.8% for the same sector in the EU28.

Key

- Critical Concern
- Moderate Concern
- Little Concern

Key findings – Computer, Electronic and Optical Products



Note: The numbers in the centre of each graph represent the range of each assessment factor from most critical (1) to least critical (20) for the sector. Where overall concern 'scores' for a factor are equal, these are presented as tied in ranking.

Meat Sectors

Note: The responses of each sector as presented here should not be interpreted as a representative sample of the industry in Ireland. They are an aggregation of the qualitative and quantitative responses provided by individual firms as part of this research. The findings for each sector should be interpreted in the context of the report as a whole.

- The Meat sectors reported a **below average** level of concern about the impact of Brexit.
- Participant firms operate in a variety of activities including farming, meat processing, food production and distribution.
- The activities carried out by firms in the sector are focussed on traded produce and the areas most discussed as being of 'critical concern' are dominated by those relating to the free movement of goods.
- The five impacts of Brexit generating greatest concern in the sector, in order, are:
 1. **Imposition of trade tariffs.** 57% of firms deem this to be a critical factor with the remaining 43% identifying it as being of moderate concern. *Example of firm reaction:* Many of the firms responding expressed concern that tariffs would increase the final cost of their product to UK consumers, undermining competitiveness. Others have Northern Ireland operations as part of their supply chain for goods sold in Ireland, and fear they may incur tariffs in both directions.
 2. **Re-establishment of a physical border with the UK.** 50% of firms deem this to be a critical factor. *Example of firm reaction:* Firms were concerned about the administrative burden and time delays that may be incurred with the re-establishment of a physical border check. One firm commented that “a physical barrier will at best delay transport of, raw material in/finished goods out, and cross border workers to and from employment.”
 3. **Absence of customs union and other common areas.** 43% of firms deem this to be a critical factor. *Example of firm reaction:* Responding firms believed that the UK leaving the customs union would impose administrative costs on their businesses, with other potential restrictions such as diverging standards regimes. One responder commented that “the absence of a customs union would restrict our ability to trade with Great Britain and Northern Ireland.”

4. **Imposition of rules of origin.** 43% of firms deem this to be a critical factor. *Example of firm reaction:* Some respondents queried whether they would face restrictions on exports to the UK based on being EU approved suppliers. Others expressed concern that they may be at a disadvantage to UK competitors in non-EU markets.

5. **Unilateral imposition by the UK of new/different product standards.** 29% of firms deem this to be a critical factor with a further 57% identifying it as being of moderate concern. *Example of firm reaction:* Firms expressed concern that a divergence in product standards requirements could put them at a competitive disadvantage in the UK market, while others noted that packaging redesign for the UK market may become an additional cost.

- Firms in this sector were somewhat consistent in their identification of factors of critical concern, with a focus on restrictions on traded goods. While 57% of firms identified the imposition of trade tariffs as being of critical concern, only nine out of the 20 factors were identified as 'critical concerns' by any firms in the sector. It is notable that the relatively low average score is indicative of the fact that several of the firms in the meat sector who responded do not currently export or import to/from the UK, and they have acknowledged that if that were the case, they would be more adversely affected by the impact assessment factors.
- Firms in this sector were not particularly concerned about the recognition of professional qualifications, harmonised public procurement or a removal of UK from common intellectual property or data protection regimes.
- Firms in this sector identified that they would undertake to diversify into new EU markets, as potential Brexit mitigating action that they would take.

Ireland is the fifth largest net exporter of beef in the world. Overall exports of Irish meat and livestock were valued at €3.66 billion in 2016. This represents a fall of €85m compared to 2015. There are an estimated 80,000 to 100,000 employed in the sector.

Key

- Critical Concern
- Moderate Concern
- Little Concern

Key findings – Meat



Note: The numbers in the centre of each graph represent the range of each assessment factor from most critical (1) to least critical (20) for the sector. Where overall concern 'scores' for a factor are equal, these are presented as tied in ranking.

Computer Facilities Management / Computer Consulting Services

Note: The responses of each sector as presented here should not be interpreted as a representative sample of the industry in Ireland. They are an aggregation of the qualitative and quantitative responses provided by individual firms as part of this research. The findings for each sector should be interpreted in the context of the report as a whole.

- The computer facilities management and computer consulting services sectors reported a **below average** level of concern about the impact of Brexit.
- Participant firms operate in a variety of activities including computer services outsourcing firms, software services providers and IT consulting firms.
- The nature of activities carried out by firms in the sector is reflected in the focus of 'critical concern' identified on areas such as the provision of services, access to talent and movement of people, as well as areas relating to intellectual property. A substantial minority (29%) of those surveyed also expressed 'critical concern' regarding the imposition of trade tariffs.
- The five impacts of Brexit generating greatest concern in the sector, in order, are:
 1. **Removal or change in reciprocal work, living, social and tax entitlements between Ireland and the UK.** 43% of firms deem this to be a critical factor, with a further 43% identifying it as an area of moderate concern. *Example of firm reaction:* Many firms identified the movement of labour as of critical importance in this sector, including issues around work visas, moving employees between different locations, using UK based contractors and providing consultancy services in different locations, one firm commented that "We have employees travelling over and back to the UK on a daily basis. Companies use employees/contractors in a manner where they can 'instantly' turn up and work on sites in any EU location".
 2. **Restrictions on providing or receiving a service from the UK.** 14% of firms deem this to be a critical factor, with a further 72% identifying it as an area of moderate concern. *Example of firm reaction:* Firms commented on issues arising if they faced restrictions on establishing contracts, making transactions or readily sharing information in the event of restrictions on where services can be provided from. One respondent commented "Restrictions on receiving a service are a concern because as they could impact on two-way transaction flows and the rebilling process common in service provision."

3. **Removal of application to the UK of existing EU intellectual property or data regulation / protection regime.** 29% of firms deem this to be a critical factor. *Example of firm reaction:* Firms commenting on this factor raised issues such as the potential for regulatory arbitrage between the UK and EU regimes which could give the UK firms lower standards to meet and potentially offer them a competitive advantage. Firms said that an intellectual property regime post-Brexit would be crucial to their business.
4. **No agreed rights for Irish service recipients from the UK (and vice-versa).** 14% of firms deem this to be a critical factor with a further 57% believing it to be of moderate concern. *Example of firm reaction:* Firms commented that if rights for consumers of services were not equivalent across the UK and EU this would lead to potential disadvantages for consumers or potential for competition from UK based firms. One responder commented that “Competitors in the UK no longer having to follow EU rules, is a concern”
5. **Increased lawful anti-competitive behaviour by UK enterprises or by the UK government in areas of State-Aid anti-trust cartels and mergers.** 88% of firms deem this to be a factor of ‘moderate concern’. *Example of firm reaction:* Firms raised this as a concern because of potential benefits to their competitors based in the UK, and challenges to the development of their businesses.

- No firm identified more than six factors of ‘critical concern’ and more than half identified one or none. 86% of the firms in this sector identified changes to free movement of labour as either a critical or moderate concern for their business, while there were 8 factors in which no firm had a ‘critical concern’.
- No firms in this sector identified any of the following as being a critical concern for their business: Imposition of rules of origin; Re-establishment of physical UK border; Unilateral imposition by the UK of new/different product standards; No mutual recognition of technical specifications; Restrictions on Irish enterprise on investments; No minimum harmonised public procurement rules; Increased anti-competitive behaviour in the areas of State Aid, anti-trust and cartels, and mergers; Removal of application of current EU competition regime to the UK.
- Firms in this sector did not identify any mitigating actions that they would take before the arrangements for the UK to leave the EU are finalised. A number commented that further clarity from negotiations was required before action could be taken, while one commented that having an established UK subsidiary should help to mitigate a number of its concerns.

In 2016, computer consultancy activities accounted for 17,814 permanent full time jobs in Ireland per the Department of Business, Enterprise and Innovation’s Annual Employment Survey 2016. This was an increase of 5.8% from the 2015 figure. The sector accounted for €20,666 million worth of exports in 2015, which exhibited a 7.5% increase on the 2014 figure and a 155% increase over the period 2006-2015 according to CSO data.

Key

- Critical Concern
- Moderate Concern
- Little Concern

Key findings – Computer Facilities Management / Computer Consulting



Note: The numbers in the centre of each graph represent the range of each assessment factor from most critical (1) to least critical (20) for the sector. Where overall concern 'scores' for a factor are equal, these are presented as tied in ranking.

Transport Services

Note: The responses of each sector as presented here should not be interpreted as a representative sample of the industry in Ireland. They are an aggregation of the qualitative and quantitative responses provided by individual firms as part of this research. The findings for each sector should be interpreted in the context of the report as a whole.

- The transport services sector reported a **below average** level of concern about the impact of Brexit.
- Participant firms operate in a variety of activities including freight, shipping, logistics, tourism and distribution services.
- The nature of activities carried out by firms in the sector is reflected in concerns focussing on the re-establishment of a border, tariffs on goods and restrictions on the selling of services in the UK. Although the businesses represented are primarily providers of a service, concerns about the movement of goods have been highlighted by respondents.
- The five impacts of Brexit generating greatest concern in the sector, in order, are:
 1. **Re-establishment of physical border with the UK.** 50% of firms deem this to be a critical factor and a further 25% deem it to be a moderate factor. *Example of firm reaction:* Firms responded that a border between Ireland and Northern Ireland would significantly disrupt operations including increasing costs and causing delays to shipments. A number of firms rely on crossing the existing border frequently, for example one tour operator comments that they would likely not include Northern Ireland in future tours if a border was re-instated. Another firm commented, “In our view this would be a disaster, we operate in all the major ports and the imposition of a hard border will create chaos and huge delays in our Irish ports.”
 2. **Imposition of trade tariffs.** 33% of firms deem this to be a critical factor. *Example of firm reaction:* A number of firms responded that trade tariffs will make UK imports more expensive and will change the dynamic of freight flows, perhaps making some of their routes uncompetitive or disadvantaging certain customers. One firm comments “We have a good mix of business at present from the UK and Mainland Europe and whilst we would be very worried about tariffs we feel goods would change from originating in UK to originating in mainland Europe.”
 3. **Restrictions in providing or receiving a service in/from the UK.** 42% of firms deem this to be a critical factor. *Example of firm reaction:* A number of firms raise concerns about Irish operations selling services into the UK, a number of firms advise that a restriction

on UK customers purchasing services from Ireland would have a detrimental effect on their Irish operations. One firm commented, “While we support our service across EMEA, the UK is our biggest market, so any restrictions by the UK [...] could spell disaster for the people employed in Ireland.”

4. **Absence of a customs union and other common areas.** 25% of firms deem this to be a critical factor and a further 33% deem it to be of moderate concern. *Example of firm reaction:* Firms raised concerns about delays, administrative burden, higher costs and potentially diverging product standards as potential concerns that may arise from the UK leaving the EU customs union. One firm responded that this may result in “less reliability in providing lead times if shipments are delayed for inspections etc.” while another suggested that this “will lead to administrative costs increasing and will increase the length of time taken to process paperwork.”

5. **Unilateral imposition by the UK of new/different product standards.** 25% of firms deem this to be a critical factor. *Example of firm reaction:* Firms advised that competitive arbitrage could emerge if firms in the UK and Ireland had different operational standards. One firm comments “Working Time Directives, Tachograph hours and health and safety compliance are huge areas of focus in our business. Any divergence in legislation in these areas will mean that we will take on additional costs to meet different and perhaps contradictory standards in different states”.

- While the areas of most concern are shared across a significant portion of firms surveyed, there are considerable differences by firm across all other areas – influenced by the nature and scale of their business that is directly related to the UK or Northern Irish markets.
- Firms in this sector were not as concerned about restrictions on establishing companies in the UK, the loss of harmonised public procurement rules or a removal of application to the UK of existing intellectual property or data regulation than those in other sectors.
- Firms in this sector identified that they would investigate alternative transport routes, or insource expertise on customs clearance process, as part of potential mitigating actions that they would take.

According to the CSO, as of Q2 2017, there are 95,900 people employed in the transportation and storage sector in Ireland. Total exports in this sector in 2016 were €5.9 billion while total imports were €2.4 billion. Exports to the UK were valued at €4.7 billion while imports from the UK were €603 million.

Key

- Critical Concern
- Moderate Concern
- Little Concern

Key findings – Transport Services



Note: The numbers in the centre of each graph represent the range of each assessment factor from most critical (1) to least critical (20) for the sector. Where overall concern 'scores' for a factor are equal, these are presented as tied in ranking.

Computer Programming Sector

Note: The responses of each sector as presented here should not be interpreted as a representative sample of the industry in Ireland. They are an aggregation of the qualitative and quantitative responses provided by individual firms as part of this research. The findings for each sector should be interpreted in the context of the report as a whole.

- The computer programming sector reported **below average** level of concern about the impact of Brexit.
- Participant firms operate in a variety of activities including software development, website design and network solutions.
- The variety of activities carried out by firms in this sector are characterised as services within the knowledge economy. For some, trade in physical goods is relevant as part of a systems solution. While there is an expected focus on restrictions on traded services, overall, firms in this sector show a low level of concern relative to other sectors.
- The five impacts of Brexit generating greatest concern in the sector, in order, are:
 1. **Restrictions on providing or receiving a service in/from the UK.** 25% of firms deem this to be a critical factor and a further 58% of firms deem it a factor of moderate concern. *Example of firm reaction:* Firms in this sector both purchase and sell services to the UK, and comment that it would depend on the nature of restrictions applied as to whether this would have implications for their businesses. A typical comment is, “As we service UK customers from Ireland, this would be a moderate concern.”
 2. **EU intellectual property, or Data security/protection regimes being no longer applicable to the UK.** 17% of firms deem this to be a critical factor with a further 58% deeming it to be of moderate concern. *Example of firm reaction:* Firms responded that Intellectual Property rights, and GDPR (General Data Protection Regulation) are relevant to many of their operations. Diverging standards in the EU and UK could impose additional costs, administrative burden or even competitive arbitrage for attracting customers.
 3. **Imposition of trade tariffs.** 8% of firms deem this to be a critical factor and 67% of firms deem this to be a moderate factor. *Example of firm reaction:* Firms who engage in traded goods comment that tariffs would reduce their competitiveness. One firm describes that “Our largest customer is UK based. This could disrupt our business or cause us to redo our tax structure.”

4. **No agreed rights for Irish service recipients (from the UK) and vice-versa.** 8% of firms deem this to be a critical factor and 42% of firms deem this to be a moderate factor. *Example of firm reaction:* A number of firms indicate that as they service UK customers from Irish operations, divergent customer rights regimes could become problematic if the divergence was significant.
 5. **No mutual recognition of specifications or agreed technical specifications.** 8% of firms deem this to be a critical factor and 34% of firms deem this to be a moderate factor. *Example of firm reaction:* Firms comment that data protection regimes and security are differentiating factors for their business, one firm commented, “This may impact the perception of the quality and standards of the services we provide and may give rise to additional certification overheads.”
- A reasonably consistent range in the level of concern across impact factors was reported by firms in this sector. Only 7 out of 20 impact assessment factors were identified as critical concerns for firms in this sector, while many of the impact assessment factors were identified as being of little concern – more than a quarter of firms indicated no areas of critical concern.
 - Firms in this sector were not as concerned about a unilateral imposition by the UK of new/different product standards, restrictions on Irish enterprise on real estate or other investments as well as other financial operations in the UK or the removal of UK from jurisdiction of EU State Aid investigation procedures, when compared to those in other sectors.
 - One firm in this sector identified that they would undertake to explore new markets outside the UK as a potential mitigating action that they would take.

Computer Programming in Ireland employs 27,399 people in both foreign and Irish owned firms, according to the Department of Business, Enterprise and Innovation’s Annual Employment Survey. Computer services at €64 billion remains the largest export category and accounted for approximately 46% of total service exports in 2016.

Key

- Critical Concern
- Moderate Concern
- Little Concern

Key findings – Computer Programming



Note: The numbers in the centre of each graph represent the range of each assessment factor from most critical (1) to least critical (20) for the sector. Where overall concern 'scores' for a factor are equal, these are presented as tied in ranking.

Rental and Leasing Sector

Note: The responses of each sector as presented here should not be interpreted as a representative sample of the industry in Ireland. They are an aggregation of the qualitative and quantitative responses provided by individual firms as part of this research. The findings for each sector should be interpreted in the context of the report as a whole.

- The rental and leasing sector reported the **lowest average** level of concern about the impact of Brexit, across all assessed impact factors
- Participant firms operate in a variety of activities including equipment and property rental firms, plant hire, and aircraft leasing.
- The variety of activities carried out by firms in the sector is reflected in the range of concerns expressed. While the principal focus is on restrictions in movement of goods and services between the EU and UK, concerns are also raised in relation to mutual recognition of technical specifications and reciprocal working and visa arrangements related to the free movement of labour.
- The five impacts of Brexit generating greatest concern in the sector, in order, are:
 1. **Imposition of trade tariffs.** 33% of firms deem this to be a critical factor, with a further 56% describing it as being of moderate concern. *Example of firm reaction:* Participants expressed concerns about the impact of any tariffs on their competitiveness and as a general disincentive to trade. One firm commented “The UK is a key source of equipment for our hire fleet [...] Tariffs will increase our capital cost and we may not be able to recover this additional cost from our own customers. It will be difficult to increase our rates in an extremely competitive market.”
 2. **Re-establishment of a physical border with the UK.** 34% of firms deem this to be a critical factor. *Example of firm reaction:* Firms commented on the possibility of delays, inconvenience and administrative burden, and suggested that where possible they would avoid trade with Northern Ireland as a result. One firm replied that “Our fleet of HGVs travel to North of Ireland to obtain parts and to collect purchased goods. Imposition of physical border would result in avoidance if possible with trade in the North due to the inconvenience and time spent.”
 3. **Restrictions on providing or receiving services from/in the UK.** 33% of firms deem this to be a critical factor. *Example of firm reaction:* Firms raised concerns about access to critical suppliers or equipment servicers in Northern Ireland and the UK which may be more difficult in the event of restrictions on services trade between the two jurisdictions.

4. **No mutual recognition of specifications or agreed technical specifications.** 11% of firms deem this to be a critical factor, with a further 33% describing it as a moderate factor. *Example of firm reaction:* Firms raised issues regarding the import and export of equipment from the UK and having its standards recognised. Another noted that “Standards in Western Europe and other developed countries pretty much align with CE marking which the UK also observe at present. The UK have been early adopters on new EU standards in our sector and have shown leadership in implementing new initiatives. That leadership would be missed.”
5. **No agreed rights for Irish service recipients from UK firms, and vice-versa.** 11% of firms deem this to be a critical factor, with a further 33% describing it as a moderate factor. *Example of firm reaction:* Firms commented on difficulty of assuring UK customer of their standards and quality, while some also expressed concern if their rights as purchasers from UK suppliers changed. One firm commented: “Plant machinery engineers are sometimes based in the North of Ireland and therefore [this] could have an effect on service at our disposal.”

- The range in the level of concern reported by firms in this sector was relatively low in most assessed factors. Only 6 out of 20 impact assessment factors were identified as critical concerns for firms while many were identified as being of little concern. No firm identified more than 4 areas of critical concern while nearly half identified none.
- Firms in this sector were not as concerned about restrictions on establishing a company in the UK, restrictions on investing in or owning a company in the UK or a removal of the UK from current EU competition instruments, as those in other sectors.
- Firms in this sector did not identify any mitigating actions that they would take before the arrangements for the UK to leave the EU are finalised. A number commented that further clarity from negotiations was required before action could be taken.

According to the CSO operational leasing (i.e. non-finance leases) exports were valued at €11.7 billion in 2016 while operational leasing imports were €770 million. For the same period, operational leasing exports to the UK were €812 million with imports valued €280 million.

Key

- Critical Concern
- Moderate Concern
- Little Concern

Key findings – Rental and Leasing



Note: The numbers in the centre of each graph represent the range of each assessment factor from most critical (1) to least critical (20) for the sector. Where overall concern 'scores' for a factor are equal, these are presented as tied in ranking.

