THE “RED TAPE” COST OF BREXIT
Brexit outcomes remain uncertain with a wide range of future trading relationships between the EU27\(^1\) and UK still possible. Most firms remain unsure of the impact Brexit will have on their businesses. Our analysis begins to fill that gap in understanding. In our first report in this series, we have not tried to calculate the full economic impact of Brexit on the UK and EU27 economies. Rather, we have focused on the direct impacts that will result from new tariff and non-tariff barriers that could be imposed on trade between the UK and EU27 (see note on methodology).

Understanding this initial set of “red tape” costs is essential for firms in their contingency and broader strategic planning. We have partnered with Clifford Chance to estimate these “red tape” costs across every sector of the economy where the EU27 and UK revert to a World Trade Organization (WTO) trading relationship with one another. We have chosen this scenario based on client feedback that this is a useful case for businesses to understand in greater depth. Our modelling assumes sufficient time through a transition period to implement new requirements such as ensuring customs infrastructure is in place. In order to put in context the size of these costs to business we have expressed them as a percentage of Gross Value Added (GVA)\(^2\) which is a commonly used measure of economic output by sector. Our report does not make the case for any specific policy options.

**SUMMARY FINDINGS**

**RELATIVE SIZE**

The annual direct (or “red tape”) cost of WTO tariff and non-tariff barriers is estimated to total around £27 billion for UK firms (or equivalent to 1.5 percent of GVA) and around £31 billion for EU27 firms (or equivalent to 0.4 percent of GVA) after initial steps to mitigate the impacts have been taken. They are of a similar absolute magnitude but about four times greater for the UK as a percentage of GVA.

**CONCENTRATION**

Around 70 percent of the aggregate impact falls in just five sectors in both the EU27 and UK. The clustering of certain sectors means that specific regions are disproportionally impacted, such as London in the UK or Bavaria in Germany.

**CUSTOMS UNION**

A future customs arrangement that is broadly equivalent to the EU Customs Union would likely reduce the UK direct costs to £17 billion (equivalent to 1.0 percent of GVA) and for the EU27 to £14 billion (equivalent to 0.2 percent of GVA).\(^3\)

**COMPANY MITIGATIONS**

Our interviews show that there are steps companies can take individually to mitigate the costs of Brexit. For many companies mitigations will reduce “red tape” costs by 10 to 30 percent. This varies significantly by sector and company: for some no mitigations will be possible and for others much higher mitigation could be achieved. Our estimated impacts outlined in this paper have included the impact of reasonable and practical steps that companies can take, which vary by sector and geography. Small firms will be least able to mitigate these costs. Achieving this mitigation is not trivial: it will take time, planning, resourcing, and investment for companies to deliver. In our estimates we have not included the upfront investment required to achieve mitigations.
NOTE ON METHODOLOGY

Approach. This report estimates the most immediate and direct costs of post-Brexit trade barriers at a sectoral level for the EU27 and UK. It does this by applying WTO tariff rates and adding the estimated costs of the non-tariff barriers to trade in goods and services. The latter are estimated at a granular level by considering individual “behind the border” costs (for example, dual certification) and “at the border costs” (for example, time delays and administrative burdens). Our estimates are based on a combination of academic work, benchmarks and industry interviews. For example, our “behind the border” estimates use a detailed list of regulatory barriers identified by Clifford Chance and public studies such as Berden et al.’s (2009) analysis on the Transatlantic Trade and Investment Partnership (TTIP). From this we have built up a granular picture of costs associated with regulations for each sector, which are then adjusted based on proprietary benchmarks and interviews with companies and trade associations.

Scope and scenario. The analysis is limited to the first-order, direct EU27-UK trade costs only (see Exhibit 1). We have not considered a wider set of potential impacts that could arise from Brexit, such as workforce impacts, and have explicitly excluded in this report any impact from third-country free-trade agreements. We have modelled a scenario where the EU27 and UK revert to a WTO trading relationship with one another on a most-favoured nation basis. We have assumed a scenario in which major regulatory “cliff edges” (such as those that would leave airlines unable to fly) are avoided. This is informed by our discussions with industry bodies and impacted companies for whom these scenarios are so severe that they are of less use for practical contingency planning. We have assumed that there is a smooth transition to this WTO end state and effective alignment in regulatory standards as today. We have modelled the incidence of tariff and non-tariff costs to be borne by exporters and have not modelled pricing changes that will be passed on to importers. This simplifies multiple power and pricing dynamics that will play through supply chains and customer relationships.

The narrow focus of this report means that sectors such as hospitality or the public sector show limited impact. These and other sectors may face large impacts from potential restrictions in migration or higher import costs on goods and services, which have not been modelled.

Definitions. Throughout our analysis, we use a number of technical and defined terms, such as GVA, tariff, non-tariff barrier, and mitigation, and we explain them at the end of this report.

Exhibit 1: Scope of the Brexit impacts included in analysis

Notes: Assumes a smooth Brexit. Analysis does not include other Brexit-related impacts
Source: Oliver Wyman and Clifford Chance analysis
UK: DIRECT COSTS BY SECTOR

We estimate that, after a smooth transition and after reasonable mitigating actions have been taken by companies, the tariff and non-tariff costs of a WTO arrangement would be £27 billion or equivalent to 1.5 percent of GVA. This is a structural, annually recurring cost.

At a sectoral level, we estimate that 70 percent of the extra costs arising from trade barriers will be incurred by just five sectors in the UK: financial services; automotive; agriculture, food & drink; consumer goods; and chemicals & plastics (see Exhibit 2). We estimate direct costs will be equivalent to 5 percent of GVA or more in aerospace, chemicals & plastics, metals & mining and life sciences, where firms are highly integrated into European supply chains. But the largest absolute impact will come from financial services due to London’s role as Europe’s financial centre and the fact that it will be hard to mitigate impacts in this sector.¹⁰

Exhibit 2: Estimated cost of tariff and non-tariff barriers on the UK economy, by sector

Source: Oliver Wyman and Clifford Chance analysis
The impact of reverting to WTO arrangements will be very different across the regions of the UK. This reflects variations in the sectoral mix across the country. Given that financial services firms will take by far the largest hit, London will feel the greatest direct effect equivalent to roughly 2.5 percent of its GVA and accounting for approximately 40 percent of the national total. The impact on other regions will be between approximately 0.9 percent and 2.4 percent depending on the local industrial mix, such as automotive, and chemicals and plastics in the North East and aerospace in Wales (see Exhibit 3).

Exhibit 3: Estimated cost of tariff and non-tariff barriers, by UK region

<table>
<thead>
<tr>
<th>POST-MITIGATED COST</th>
<th>PERCENTAGE OF TOTAL UK COST</th>
<th>PERCENTAGE OF REGION’S GVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEFT AXIS, BAR CHART</td>
<td></td>
<td>RIGHT AXIS, POINT CHART</td>
</tr>
<tr>
<td>60</td>
<td></td>
<td>3.0</td>
</tr>
<tr>
<td>40</td>
<td></td>
<td>2.0</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td>1.0</td>
</tr>
<tr>
<td>0</td>
<td></td>
<td>0.0</td>
</tr>
</tbody>
</table>

Source: ONS 2016; Oliver Wyman and Clifford Chance analysis
EU27: DIRECT COSTS BY SECTOR

Because the EU27 is a net exporter to the UK, the absolute cost of new trade barriers to EU27-based companies is estimated to be greater than the direct impact on the UK at £31 billion. This is a smaller proportion of GVA than the costs to the UK. The direct costs of Brexit are concentrated in a few sectors across the EU27 (see Exhibit 4). Between them, automotive; agriculture, food & drink; chemicals & plastics; consumer goods; and industrials will incur an estimated 75 percent of the impact despite accounting for just 23 percent of the EU27’s economic output.

The ability of EU27 firms to mitigate the impact of trade barriers varies by sector but our research shows that at an aggregate level EU27 firms are better positioned to mitigate cost increases. This is because a larger proportion of their exports are in goods rather than services, and they also typically have a wider range of alternative suppliers to choose from within the EU27.

Country-level differences will be pronounced. In Ireland, for example, the exposure of the agricultural sector to UK consumers is a particular pinch point, and in Germany four of the sixteen states – Bavaria, Baden-Württemberg, North Rhine-Westphalia, and Lower Saxony – will shoulder around 70 percent of the total impact due to their respective strength in automotive and manufacturing.

Exhibit 4: Estimated cost of tariff and non-tariff barriers on the EU27 economy, by sector

<table>
<thead>
<tr>
<th>POST-MITIGATED COST</th>
<th>£ BILLION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERCENTAGE OF SECTOR GVA</td>
<td>(LEFT AXIS, BAR CHART)</td>
</tr>
<tr>
<td>Aerospace</td>
<td>15</td>
</tr>
<tr>
<td>Automotive</td>
<td>10</td>
</tr>
<tr>
<td>Chemicals and plastics</td>
<td>5</td>
</tr>
<tr>
<td>Metals and mining</td>
<td>0</td>
</tr>
<tr>
<td>Life sciences</td>
<td>0</td>
</tr>
<tr>
<td>Agriculture, food, and drink</td>
<td>0</td>
</tr>
<tr>
<td>Electronics</td>
<td>0</td>
</tr>
<tr>
<td>Consumer goods</td>
<td>0</td>
</tr>
<tr>
<td>Industrials</td>
<td>0</td>
</tr>
<tr>
<td>Aviation</td>
<td>0</td>
</tr>
<tr>
<td>Financial services</td>
<td>0</td>
</tr>
<tr>
<td>Energy</td>
<td>0</td>
</tr>
<tr>
<td>Transport, distribution, and logistics</td>
<td>0</td>
</tr>
<tr>
<td>Professional services</td>
<td>0</td>
</tr>
<tr>
<td>Tech and information services</td>
<td>0</td>
</tr>
<tr>
<td>Creative industries</td>
<td>0</td>
</tr>
<tr>
<td>Construction and real estate</td>
<td>0</td>
</tr>
<tr>
<td>Hospitality, leisure, and tourism</td>
<td>0</td>
</tr>
<tr>
<td>Public services</td>
<td>0</td>
</tr>
<tr>
<td>Utilities</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Oliver Wyman and Clifford Chance analysis

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CUSTOMS UNION

If the UK remains in a comprehensive customs union with the EU27 that provides market access broadly equivalent to the EU Customs Union the costs arising from tariffs would be avoided and some of the border costs reduced. The benefits would thus largely be felt by firms trading in goods rather than by firms providing services, as the provision of services is not covered by a customs union. Notably such a customs union would not mitigate the potential impact on the UK’s financial services sector. A customs union does not by default include mutual recognition of certification and so our modelling reflects that default scenario. These sectoral differences mean that a customs union would reduce costs to the EU27 more than it would to the UK, given that 76 percent of EU27 exports to the UK are in goods compared to 62 percent for UK exports to the EU27. Our research estimates that remaining in a customs union rather than moving to WTO rules would reduce the UK impact to £17 billion (equivalent to 1.0 percent of GVA) and the EU27 impact to £14 billion (equivalent to 0.2 percent of GVA). Due to the concentration of financial services firms in London, most of the benefits of remaining in a customs union would be felt outside of the capital.

MITIGATING ACTIONS FOR INDUSTRY

As outlined above, we have factored in the impact of actions that companies can take to mitigate the costs of Brexit. Through this analysis, two themes stood out.

First, the ability to mitigate varies by sector. For example, the automotive and aerospace sectors have the greatest opportunities to mitigate the direct costs to their current business, primarily by making more use of domestic suppliers or in some cases changing the location of final assembly. In another case, financial services firms, which do not have supply chains in the normal sense, will have fewer such opportunities and are likely to have to establish local sales, risk management, and control functions inside the EU27.

The model we have used takes into account the initial set of steps that companies can take to reduce the red-tape cost of Brexit. Based on interviews, steps such as developing better IT systems, warehousing at borders, and localisation of supply chains can and will be taken by companies to reduce the impacts but the scope to do so varies significantly by company, industry and geography.

While our analysis takes into account these first-order considerations, we believe this to be a starting point. When planning for Brexit, companies need to be thinking beyond first-order mitigations and consider both the operational and strategic impacts. The best prepared firms are preparing contingencies...
now based on the direct impacts on themselves, their supply chains, customers, and competitors (see Exhibit 5). However, delivering this potential mitigation at a firm level will be a major operational challenge. It will require planning, investment, and resources to deliver.

This links to our second key theme, which is that impacts will not vary just by sector but also by size of company.

Our research and interviews highlighted that smaller companies are less able to take mitigating actions. The costs of maintaining optionality are higher in relative terms, and the investment in mitigating strategies is not as feasible for many. Our research, leveraging Eurostat data, indicates that currently 65,000 firms in the UK with fewer than 50 employees only trade internationally within the EU (see Exhibit 6). These firms have little or no experience handling the barriers arising from cross-border trade. Large firms are far more likely to trade outside the EU and are more able to identify the changes needed and manage the increased costs. Small firms that today have no non-EU trade will need to establish and run processes that are entirely new to them.

These increased costs and uncertainty threaten to reduce profitability and pose existential threats to some businesses. The relative negotiating power and pricing dynamics within and between sectors, and between businesses and consumers, will determine where these costs fall. This report does not address the incidence of costs and pricing responses by firms, which will be considered in a subsequent report.

In the absence of clarity over the future trading relationship between the UK and the EU27, the most proactive firms are recognising the uncertain path ahead and have developed contingency plans that will be enacted in phases if uncertainty persists, and in some cases are already being deployed.

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Exhibit 5: Operational and strategic considerations

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**COMPANY RESPONSE**

**CUSTOMERS**
Pre-empting change in demand and priorities

**SUPPLIERS**
Systematic supply chain restructuring and renegotiation

**COMPETITORS**
Making the most of opportunities and risks arising from asymmetric impacts on competitors

**BREXIT NEGOTIATIONS**
Ensuring contingency plans can be enacted in phases as negotiations evolve

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However, the readiness of companies varies considerably and many have still made no contingency plans for adapting to Brexit. Robust plans will be required not only to manage the costs arising from Brexit but also to take advantage of the opportunities, such as the creation of new supply chains and the localisation of operations.

Exhibit 6: Proportion of firms that trade exclusively within the EU

<table>
<thead>
<tr>
<th>TYPE OF EXPORT RELATIONS BY SIZE OF COMPANY</th>
<th>UK</th>
<th>GERMANY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employees</td>
<td>Number of exporting firms</td>
</tr>
<tr>
<td></td>
<td>&lt;10</td>
<td>10-49</td>
</tr>
<tr>
<td>Only intra-EU</td>
<td>60</td>
<td>37</td>
</tr>
<tr>
<td>Both intra- and extra-EU</td>
<td>21</td>
<td>18</td>
</tr>
<tr>
<td>Only extra-EU</td>
<td>19</td>
<td>17</td>
</tr>
</tbody>
</table>

Source: Eurostat; Oliver Wyman and Clifford Chance analysis

1 EU27 means the EU countries except the UK.
2 See end note 9 for further details on GVA. The following link gives further detail from the ONS on the use of GVA for regional analysis. https://www.ons.gov.uk/economy/grossvalueaddedgva
3 While a customs union between the EU and the UK may take many forms, we are assuming for these purposes a new UK/EU27 customs union would have the same coverage as the present EU Customs Union. The greater the variance from this (and some variance would be probable in fact), the greater the extent of additional at the border and behind the border costs, which are not modelled here. Whilst a customs union will eliminate tariff barriers it is important to note it will not completely eliminate non-tariff barriers on goods as there will still be some border checks and administrative costs. A customs union will not cover any trade in services.
4 We take the average of ad valorem duties as specified by WTO EU most-favoured nation tariff schedules. They do not account for non-ad valorem duties.
5 This analysis models the impact of the UK reverting to a WTO scenario. In this scenario the ‘costs’ of Brexit differ for goods and services. For services, non-tariff barriers e.g. loss of passporting for Financial Services firms, will reduce cross border activity in certain sectors and this loss of activity is modelled here as the cost. For goods, there will be an increase in frictional costs of trade due to the introduction of tariffs and additional non-tariff barriers.
7 “At the border” cost estimates use a variety of public data, including HMRC figures, to size additional administrative costs and figures adapted from C. Hornok (2011) “Need for Speed: Is Faster Trade in the EU Trade-Creating?” to estimate the impact of delays. Again, the resulting estimates have been tested and iterated with industry participants, trade associations, and our own proprietary benchmarks.
8 We have avoided modelling the most severe industry cliff-edges such as an exit from EASA, REACH, and EURATOM without an adequate replacement which would mean that planes are unable to fly, trade in chemicals would stop, and the UK’s nuclear industry could shut down. This is in response to industry feedback which suggested it would not be helpful to firms to model these scenarios due to the extreme costs incurred. This report makes no comment on whether or not this is a realistic scenario.
9 Gross value added (GVA) is the measure of the value of goods and services produced in an area, industry or sector of an economy. GVA is GDP plus subsidies less taxes. Tariff is a tax or duty to be paid on a particular class of imports or exports. Non-tariff barrier is a restriction to trade not involving an import tax or duty. Mitigation is the action that can be taken by a company or government to reduce the size of the calculated impact on trade resulting from tariff and non-tariff barriers. The mitigation assumptions at a sector level assume all companies act to mitigate the impact of Brexit; however, this is not a given and will require planning and execution. 2016 data is used throughout the analysis.
10 In 2016, Oliver Wyman carried out extensive work to produce the report "The Impact of Brexit on the Financial Services Sector". We have drawn on this analysis for this current piece of work, and the figures used for the impact of Brexit on financial services are aligned between the two pieces of work.
11 Eurostat, ONS Pink Book.
12 To note, our modelling is focused solely on the costs that can be mitigated. We have not modelled any additional revenue generated for example increase in revenue for logistics firms or revenues from repatriated activities.
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