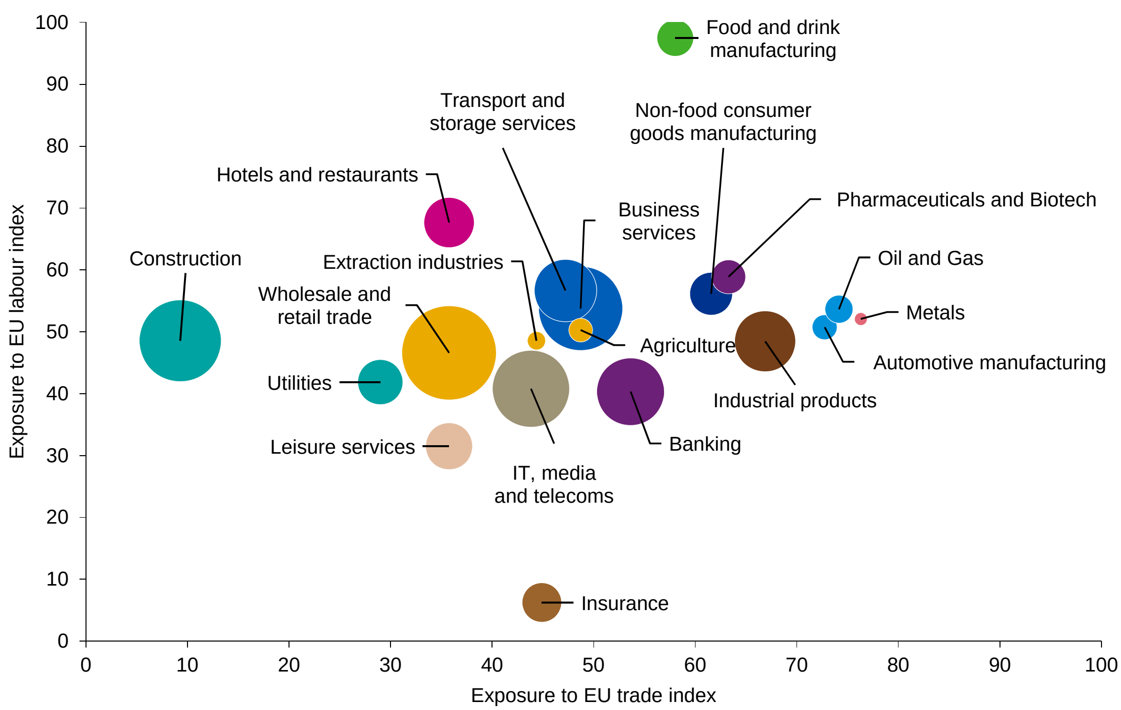
Brexit: The impact on sectors

With Article 50 expected to be triggered next month, information is still relatively scarce on how leaving the European Union will affect different parts of the UK economy. Some sectors are likely to be more sensitive to the impact of Brexit, others less. A lot will depend on the nature of the final agreement with the EU. In this report, we compare some of the potential vulnerabilities of UK sectors to Brexit, focusing on the two areas where the impact of Brexit is expected to be felt most: access to the EU market and access to EU labour.

As a starting point, we look at two simple measures: the proportion of EU nationals as part of each sector's workforce and exports as a share of each sector's output (as measured by GVA[1]). While exposure to EU labour tends to be broadly similar across many sectors, the relative importance of exports to the EU varies significantly, with some of the larger sectors such as construction and wholesale and retail trade being more domestically focused (see Chart 1 below).

Chart 1: Sectors exposure to EU labour and EU exports



Source: ONS data, KPMG calculations. The size of the bubble represents the size of the sector as measured by GVA compared to UK total.

Sector exposure should not be examined in isolation, with the high level of interconnectedness among sectors likely to amplify the impact for any individual sector. Problems faced by food and drink manufacturing will impact hotels and restaurants, for example, while setbacks for the metals industry will affect automotive manufacturing.

[1] Gross Value Added.

Brexit sector barometers

The overall impact of Brexit on different sectors – and the extent to which labour and trade are affected – will vary depending on the agreement ultimately negotiated between the UK and the EU27. We have therefore created three basic scenarios as to the possible outcome, and have weighted exposure to labour and exports accordingly, to determine a sector's sensitivity:

- Hard Brexit – Trade and labour are equally restricted. Weighting: labour 50%, trade 50%.
- Free trade – The UK obtains significant concessions on trade and is allowed to impose significant restrictions on labour. Weighting: labour 90%, trade 10%.
- Free labour – The UK suffers significant restrictions on trade but continues to adhere to free movement of EU labour. Weighting: trade 90%, labour 10%.

Table 1 shows the results under each scenario. For some sectors, such as hotels and restaurants, an emphasis of a deal on either labour or trade could see its ranking move from bottom to top. By contrast, food and drink manufacturing stands out across the board because of its particularly heavy reliance on EU labour as well as significant exposure to EU exports.

Table 1: Brexit sector barometers

Hard Brexit		Free trade		Free labour	
Food and drink manufacturing	78	Food and drink manufacturing	94	Metals	74
Metals	64	Hotels and restaurants	64	Oil and Gas	72
Oil and Gas	64	Pharmaceuticals and Biotech	59	Automotive manufacturing	71
Automotive manufacturing	62	Non-food consumer goods manufacturing	57	Industrial products	65
Pharmaceuticals and Biotech	61	Transport and storage services	56	Pharmaceuticals and Biotech	63
Non-food consumer goods manufacturing	59	Oil and Gas	56	Food and drink manufacturing	62
Industrial products	58	Metals	54	Non-food consumer goods manufacturing	61
Transport and storage services	52	Business services	53	Banking	52
Hotels and restaurants	52	Automotive manufacturing	53	Business services	49
Business services	51	Industrial products	50	Agriculture	49
Agriculture	49	Agriculture	50	Transport and storage services	48
Banking	47	Extraction industries	48	Extraction industries	45
Extraction industries	46	Wholesale and retail trade	46	IT, media and telecoms	44
IT, media and telecoms	42	Construction	45	Insurance	41
Wholesale and retail trade	41	Banking	42	Hotels and restaurants	39
Utilities	35	IT, media and telecoms	41	Wholesale and retail trade	37
Leisure services	34	Utilities	41	Leisure services	35
Construction	29	Leisure services	32	Utilities	30
Insurance	26	Insurance	10	Construction	13

Source: ONS data, KPMG calculations.

Brexit and trade

The proportion of output that is exported to the EU is clearly important. With four in every five UK-made vehicles being exported and just over half of these going to the EU, automotive manufacturing is more sensitive to Brexit than many other sectors. However, UK manufacturers will also have to bear in mind the regulatory impact of Brexit. In autos, for example, the EU, US and UN tend to set the rules on what is a highly regulated product. Outside the EU, the UK may find it harder to influence those rules.

The actual impact on sectors' exports will be determined by a combination of the proportion of exports destined to the EU market, any regulatory restrictions on their sale post Brexit, or the rate of tariff that could come into effect (and the sensitivity of EU customers to the higher costs as a result).

The likely loss of passporting rights for the UK-based financial services companies would expose the sector's exports to the EU disproportionately and therefore represents a sizable threat and disruptor to the industry. Business models will have to change even if the various equivalence statuses are granted, because equivalence provisions cover only a narrow subset of FS that currently enjoys passporting rights. And there is a real risk that not all the equivalence statuses are granted on the day of Brexit.

For the banking sector, without passporting rights, the desired fall-back option is that the EU regulator grants the UK 'regulatory equivalence'. Without equivalence, firms may have to split their capital and business models to try and maintain coverage, clients and footprint (with a consequent impact on cost and capital). Others may cut back their European operations and retrench to the US and Asia.

However, equivalence does not mean the same thing for the insurance sector. The EU-wide regulatory regime defines equivalence narrowly and this does not confer market access. Instead, it relates solely to the treatment of certain reinsurance contracts, use of the local regulatory rules within the group solvency calculations and reliance on the equivalent group supervision. The key point is that "equivalence" does not provide market access.

Without the market access that passporting provides – or a new trade deal with the EU might provide - then insurance groups also face the challenges of splitting their capital and business models to maintain coverage, clients and footprint. Indeed the challenges for the insurance sector can be greater, as any insurer that does not become locally regulated - or transfer existing insurance contracts into an insurer that is so regulated – will likely not be able to service their existing insurance obligations. The insurance sector needs some form of grandfathering provisions to be agreed to enable them to continue servicing existing policyholders.

The insurance sector may appear relatively unaffected by Brexit when looking at the share of EU workers and exports alone, but the fuller picture shows that it may face large disruptions to its business model and additional cost, to both restructure the business as well as on an ongoing basis, if businesses don't have certainty that full market access will continue.

Similarly, for the investment and fund management industry, there will be some scope to continue to provide investment management services and funds to professional investors, but access to the retail market will be much more restricted.

When it comes to the exports of goods, if the UK reverts to trading under WTO tariffs, under a case for example of a Hard Brexit scenario, WTO implied tariffs on UK exports to the EU can vary considerably. The range of tariffs for the most important UK exports categories to the EU oscillates between 19% for food residues and animal feed to zero in the case of pharmaceutical products.[2]

Food manufacturing and produce would be particularly affected, and British farmers may be disproportionally hit. For example, the WTO's average Most Favoured Nation duties on meat is around 48%[3].

On the other hand, the oil and gas industry is very global and has a large exposure to both exports and imports as a proportion of its domestic output, hence its relatively high score in our barometers.

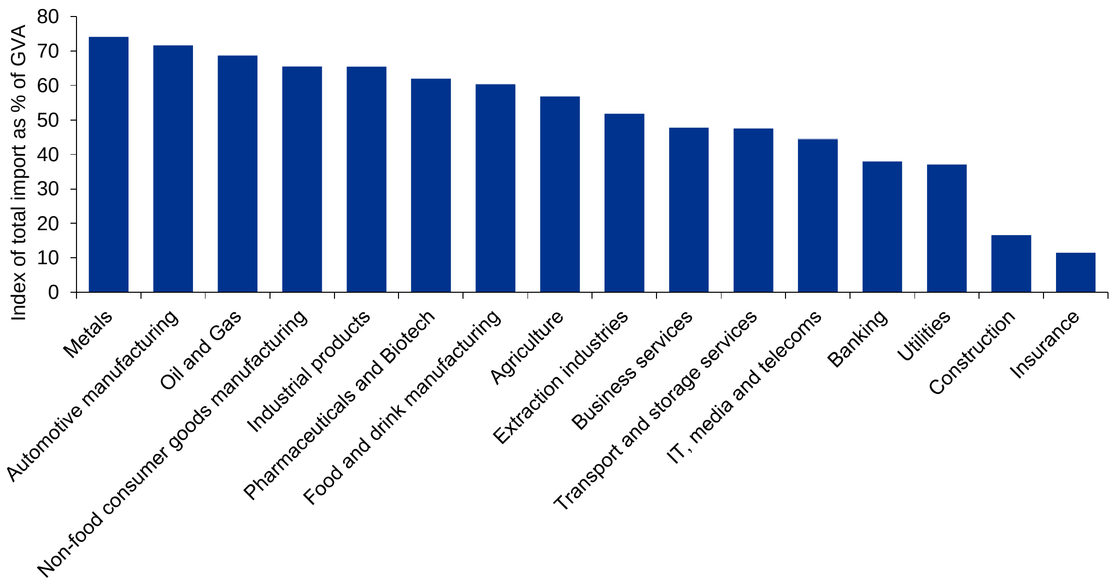
[2] See Lawless and Morgenroth www.esri.ie/pubs/WP550.pdf

[3] As above.

But oil is a commodity sold on the international market, and there is no WTO tariff on basic oil sold into the EU.

Some sectors may find other aspects of Brexit affecting their exports, for example restrictions on the free movement of people may be more pivotal for the hospitality industry, with 63% of inbound holidaymakers to the UK coming from EU countries according to the British Hospitality Association.

Chart 2: Sectors imports dependence



Source: ONS data, KPMG calculations.

The ability and ease of exporting to the EU are not the only trade-related issue to affect sectors. The fall in the value of the pound since the referendum result has increased the costs of many imports, especially for companies that did not hedge their exposure, while making UK exports of goods and services cheaper. Once the UK leaves the EU, a Hard Brexit scenario could see tariffs imposed on EU goods and possible additional border controls making imports dearer and less accessible.

Chart 2 above outlines total imports by sector as proportion of its output (GVA). The plight of the automotive manufacturing sector is exacerbated by the fact that between 20% and 50% of the total value of spend in the supply chain is imported from the EU[4]. Britain's automotive industry exemplifies the interconnected nature of the UK's and Europe's manufacturing sectors, with 58% of British-made vehicles that are exported going to the EU in 2015[5]. Because margins are relatively slim, both currency movements and tariffs could play a significant part in pricing and the overall profitability of UK car plants.

By contrast, the oil and gas sector may be less affected by tariffs on its main imports, but tariffs may still hit the oil and gas extraction industry to some extent on the cost of imported components. And with the UK out of the Single Market, and by implication the Internal Energy Market, the UK will now need to reach a free trade agreement to put back in place the tariff-free harmonised trading arrangements currently used by the UK as part of the Internal Energy Market (IEM).

For most retailers, fluctuations in the exchange rate – specifically a weak pound – remains a significant issue for a sector that imports a significant proportion of its merchandise. As retailers'

[4] www.smmt.co.uk/wp-content/uploads/sites/2/SMMT-KPMG-EU-Report.pdf

[5] www.smmt.co.uk/industry-topics/europe/eu-key-facts/

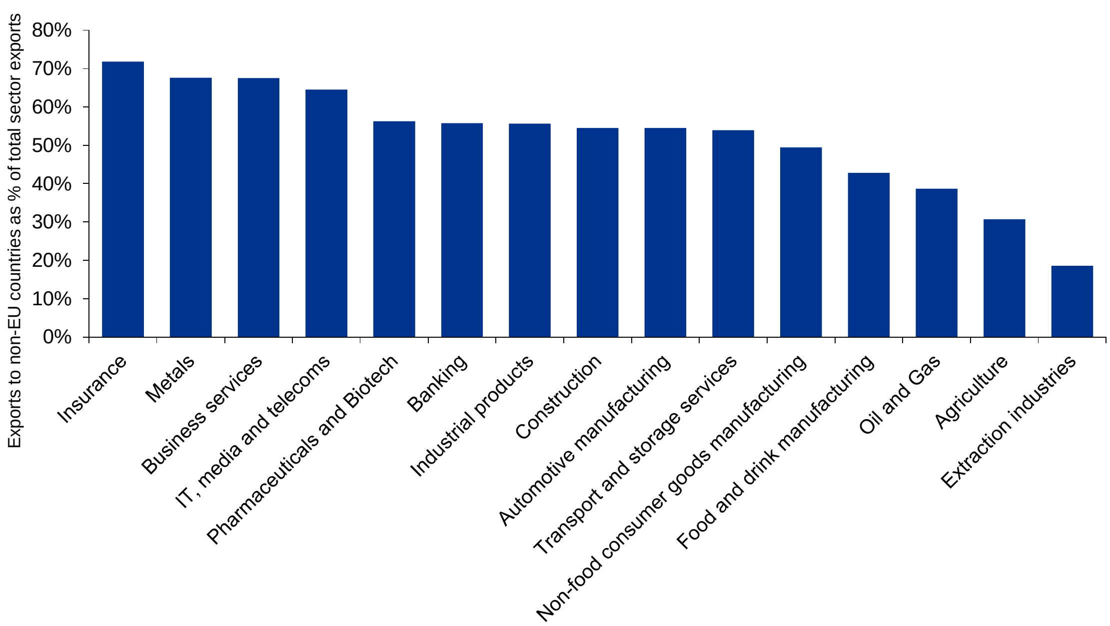
currency hedges run out, or strained balance sheets reach their limit, they have to pass costs on, and the prices of many goods are expected to increase in the first half of this year. At the same time, luxury British brands have benefitted from the weak pound as tourists have flocked to London in particular to snap up bargains. Some of the buoyancy in consumer spending data may be a result of this influx.

The British Retail Consortium has warned that failure to strike a good Brexit deal by 2019 would have a disproportionately severe impact on retailers because WTO tariffs on imports would be highest for staples like food and clothing[6]. The average duty on clothing and footwear would attract tariffs of 11-16% and tariff rates from a number of non-EU countries would also be higher.

Hotels and restaurants would face a similar issue as retailers and wholesalers with the imposition of WTO tariffs. Almost a quarter of all food consumed in the UK is imported, according to government figures[7]. The sector is also vulnerable to rising import costs due to a weakening pound.

The interconnected nature of UK and EU supply chains is likely to become an important issue for many businesses. A supply chain is only as strong as its weakest link, transport dependent sectors as diverse as retail and automotive depend heavily on their ability to deliver goods and parts reliably and on-time. Following Brexit, the ability to move goods cross-border as we do now is not a given, and all industries would need to think about how their transport-enabled supply chain itself depends on the freedoms associated with being part of the EU.

Chart 3: Sectors non-EU exports



Source: ONS data, KPMG calculations.

In the new world, post Brexit, those companies that rely less on the EU market for their exports may be less affected. Chart 3 above shows the proportion of sectors' exports that are currently destined for markets outside the EU. The London Market insurance subsector, for example, is a huge international centre with London seen as a key exporter of insurance underwriting capacity and expertise. However, EU represents only 28% of total insurance exports, a smaller proportion than the UK average.

[6] brc.org.uk/news/2016/brc-says-uk-brexit-strategy-must-focus-on-a-fair-deal-for-consumers

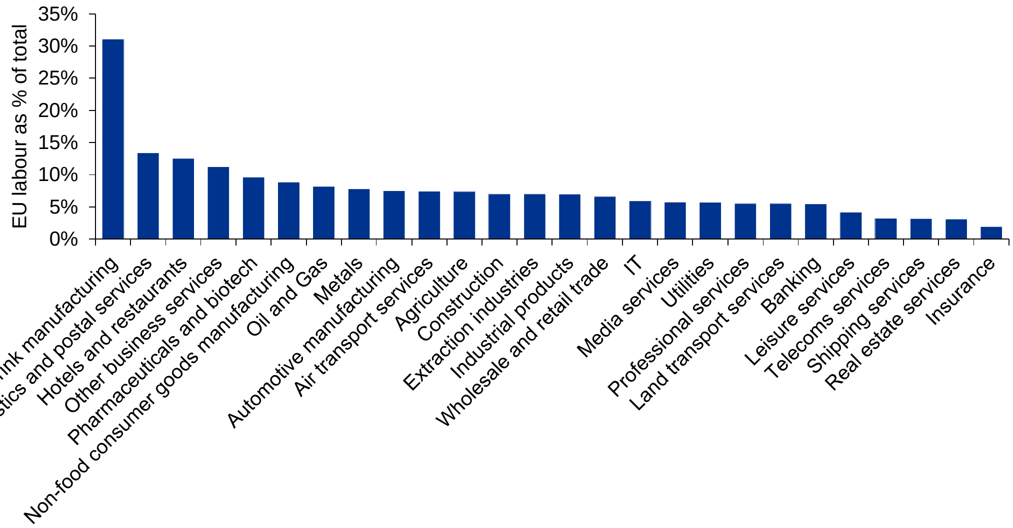
[7] www.gov.uk/government/uploads/system/uploads/attachment_data/file/515048/food-farming-stats-release-07apr16.pdf

Brexit impact on the supply of labour

Restrictions on the movement of people between the UK and the EU may be as important to businesses as any potential restrictions on trade. Chart 4 (below) shows the share of employees from the EU for different sectors as a proportion of their total workforce. Labour is a major concern for food and drink manufacturing as well as for non-food consumer goods manufacturing. Among manufacturing businesses, food and drink have the larger share of EU workers followed by non-food consumer goods and automotive, with industrial products manufacturing somewhat surprisingly less exposed.

In future, companies may need to increase the participation of domestic workers, and in some instances address their productivity gap and increase automation in order to maximise the return from the workers they do have.

Chart 4: Sectors exposure to EU labour[8]



Source: ONS data, KPMG calculations.

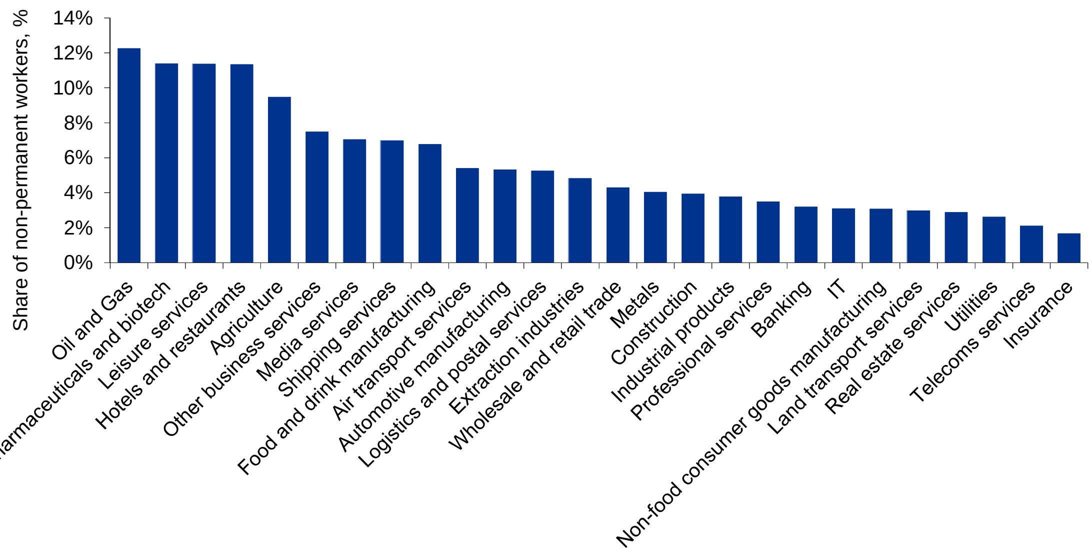
Transport and logistics are two other sectors where the availability of labour, post Brexit, is a concern. While the technology supporting autonomous transport moves ever closer to reality, the fact remains that buses still need drivers, trains need to be cleaned and maintained, and aircrafts need pilots. The logistics industry complained earlier of lack of drivers to support parcel delivery, and strikes on the railway show how disruptive the lack of labour can be.

Although, on average, the construction sector's exposure to EU labour is broadly in line with many other sectors, that figure masks the disproportionately high reliance the sector has on foreign labour in the South East and particularly in London.

The insurance industry may be less affected by restrictions on EU labour as the UK is seen as a specialist source of skilled labour in the industry. While the relatively low share of EU labour among utilities masks the potential impact on the energy industry, where four out of the 'Big 6' energy firms are foreign owned with significant proportions of EU nationals in their workforce.

[8] ONS data on labour was available for a more detailed breakdown of sectors than for trade. See sector composition and methodology section below for the composition of each sector.

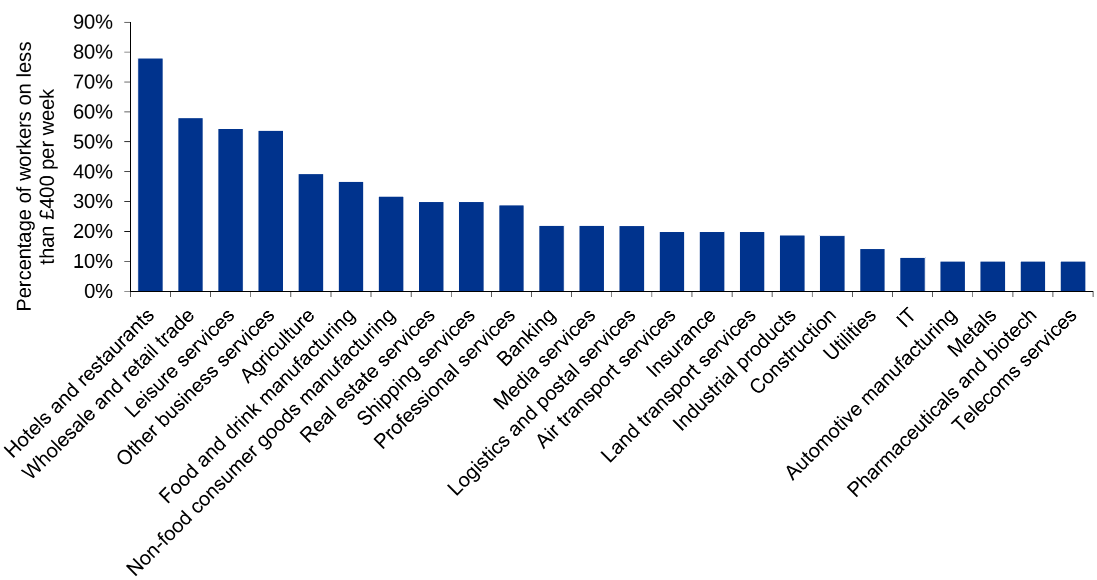
Chart 5: Temporary work prevalence across sectors



Source: ONS data, KPMG calculations.

In addition to the impact on the permanent workforce, another area where businesses may be exposed is temporary workers, where the weaker pound is already making it harder to attract labour in sectors such agriculture. Chart 5 (above) shows the share of non-permanent workers in the workforce of each sector. On some occasions, it is the short-term access to specialised skills, rather than an additional pair of hands, that is important. For example, although UK automotive companies make moderate use of EU migrant labour, they rely hugely on short-term movements of people from Germany and other European countries to support projects such as new vehicle launches. Without these highly skilled EU short-term secondments it may be hard for the UK automotive sector to thrive.

Chart 6: Exposure to low pay workforce



Source: ONS data, KPMG calculations.

Sectors with a high proportion of low paid workers tend to have higher turnover and therefore may find it more difficult to replace EU staff on a more regular basis. Low paid EU workers also tend to be more sensitive to the fall in the value of the pound, and departures of EU workers could accelerate if continued pound weakness made the UK a less attractive location for EU citizens sending home remittances. The pound's weakness is already increasing wage demands on top of cost pressures such as the Living Wage and Apprenticeship Levy for some sectors.

Chart 6 (above) shows the share of the lower paid workforce (defined as the share of employees receiving less than £400 a week) for different sectors. Steep attrition rates in some of the sub-sectors of non-professional business services – up to 50% a year in call centres – plus high numbers of EU workers in areas like facilities management, mean replacing staff could become more difficult for this sector.

In what is likely to become an increasingly competitive market for talent, staff retention and turnover will be key levers to protect productivity.

Making the most of Brexit

While vulnerabilities certainly exist, Brexit – in whatever form it eventually materialises – could also bring opportunities for business.

The weaker pound should help boost exports and overseas earnings, while financing costs may remain low for longer, as the Bank of England delays future tightening.

There is no doubt that many companies will need to forgo the status quo and reassess their operating model, but that could be an opportunity to uncover better ways of doing things.

From reassessing supply chains and transport plans, to taking a hard look at their recruitment, retention and training strategies, Brexit should see companies find ways to improve the way they operate today.

Sector composition and methodology

The composition of each sector is detailed in Table 2 below.

Table 2: Sector composition

Sectors used in our barometers	Sub-sectors used in the section on labour	Sectors composition
Agriculture	Agriculture	Crop, animal production, hunting; Forestry and logging; Fishing and aquaculture
Oil and Gas	Oil and Gas	Extraction crude petroleum and gas; Manufacture of coke & refined petrol
Extraction Industries	Extraction Industries	Mining of coal and lignite; Other mining and quarrying; Mining support service activities
Metals	Metals	Mining of metal ores; Manufacture of basic metals
Industrial products manufacturing	Industrial products manufacturing	Manufacture of chemicals; Manufacture rubber plastic products; Manufacturing non-metallic mineral products; Manufacturing fab metal prods, ex machinery; Manufacture of electrical equipment; Manufacturing of machinery not elsewhere classified.; Manufacture of other transport; Other manufacturing; Repair and installation of machinery
Pharmaceuticals and Biotech (services and manufacturing)	Pharmaceuticals and Biotech (services and manufacturing)	Manufacture of pharmaceuticals; Scientific research and development
Automotive manufacturing	Automotive manufacturing	Manufacturing vehicles and trailers
Food and Drink manufacturing	Food and Drink manufacturing	Manufacture of food products; Manufacture of beverages
Non-food consumer goods manufacturing	Non-food consumer goods manufacturing	Manufacture of tobacco products; Manufacture of textiles; Manufacture of wearing apparel; Manufacture of leather and related; Manufacture wood and wood products; Manufacture paper & paper products; Printing and recorded media; Manufacture of furniture
Utilities	Utilities	Electricity, gas and air conditioning supply; Water collection, treatment & supply; Sewerage; Waste collection, treatment, disposal; Remediation & other waste management
Construction	Construction	Construction of buildings; Civil engineering; Specialised construction activities; Architectural and engineering;
Wholesale and retail trade	Wholesale and retail trade	Wholesale trade, except vehicles; Retail trade, except vehicles; Wholesale retail trade repair vehicles
Transport and storage services	Land transport	Land transport including via pipelines
	Air transport	Air transport
	Shipping	Water transport
	Logistics and postal services	Warehousing & support for transport; Postal and courier activities
Hotels and restaurants	Hotels and restaurants	Accommodation; Food and beverage service activities
IT, media and telecoms	IT	Computer programming and consultancy; Information service activities; Repair of computers and other goods
	Media	Publishing activities; Film, video, television sound record; Programming and broadcasting; Creative, arts and entertainment
	Telecoms	Telecommunications
Insurance	Insurance	Insurance, reinsurance and pension
Banking and other financial services	Banking and other financial services	Monetary intermediation; Activities of Holding companies; Trusts, funds and similar financial entities; Other financial service activities, except insurance and pension funding; Activities auxiliary to financial and insurance including fund management activities
	Real Estate services	Real estate activities
Business services	Professional services	Legal and accounting activities; Head offices; management consultancy; Advertising and market research; Other prof, scientific and technical
	Other business services	Employment activities; Security & investigation activities; Office admin, support and other; Services to buildings and landscape
Leisure services	Leisure	Travel, tour operator, reservation; Libraries, archives, museums; Gambling and betting activities; Sports, amusement, recreation; Activities membership organisations

Source: KPMG based on ONS classification.

Sector composition was determined by the data available from the Office for National Statistics (ONS), with some sectors such as Life Sciences having a limited coverage under the Pharmaceuticals and Biotech category, while others such as investment and fund management covered mainly under Banking and other financial services.

The exposure to EU exports was measured as the ratio of exports to EU countries, as a share of the sector Gross Value Added (GVA). This data was gathered from various ONS publications, including the Pink Book.

The exposure to EU labour was measured as the proportion of EU workers in each sector based on a tabulation of the 2016 Q3 Labour Force Survey. We compared the 2016 Q3 survey data to the total of the three surveys available for 2016 and found it consistent.

The export and labour indices were constructed by referencing each sector log value to the average value for all sectors, as follows:

$$Index_i = \left[\frac{\ln(v_i) - {\sum_{i=1}^{N} ln(v_i)}/{N}}{std.dev(\ln(v))} + 3 \right] * 16.67$$

The index for sector i, with a total of N sectors, has data for the pillar denoted by v, which is derived from the raw data.

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