

Brexit

Potential impact on labour and materials



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Part one

Current issues in the UK construction sector and the potential impact of Brexit

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Introduction

The construction industry is of key strategic importance to the UK economy generating almost £90 billion annually to the Treasury. This equates to 6.1 percent of GDP and employing over three million people or 10 percent of UK employment.

The sector is facing a 'perfect storm' scenario of a number of key elements putting an already struggling industry under increased pressure.

These are:



Reduction of skilled construction workers



Poor productivity output



Brexit impact

Reduction of skilled construction workers

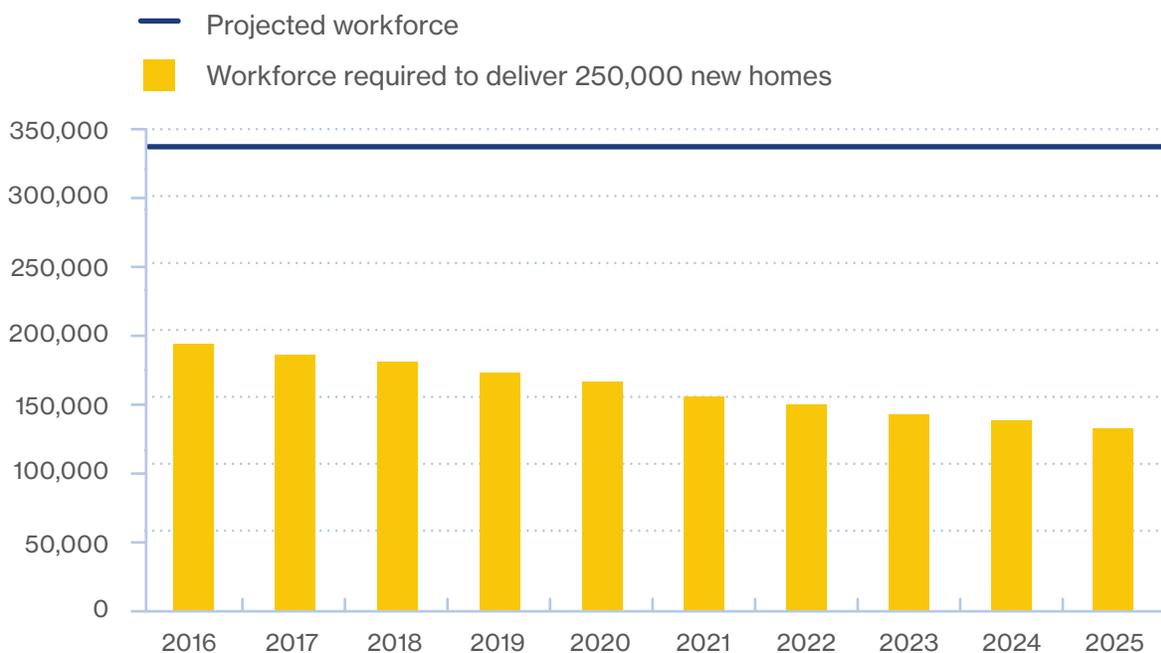
As the government tries to meet its current target of building 250,000 new homes every year, a continued strain is being put on finding and maintaining suitably skilled construction trades to meet this requirement.

Looking at the housebuilding workforce specifically, in 2016, there were 187,000 workers in the sector, representing just 55 percent of the workforce that would be necessary to build the required 250,000 homes per year. Yet with more workers leaving the industry than joining, it has been predicted that this will fall to just 124,000 workers in 2025 (Farmer 2016).

Assuming productivity growth remained in line with the trend over last two decades, these projections would leave the housing workforce at just a third the size needed to build the 250,000 homes a year the government has targeted by the mid-2020s.

Figure one – Projected shrinkage of housebuilding workforce

The housebuilding workforce is projected to shrink by a third by 2025



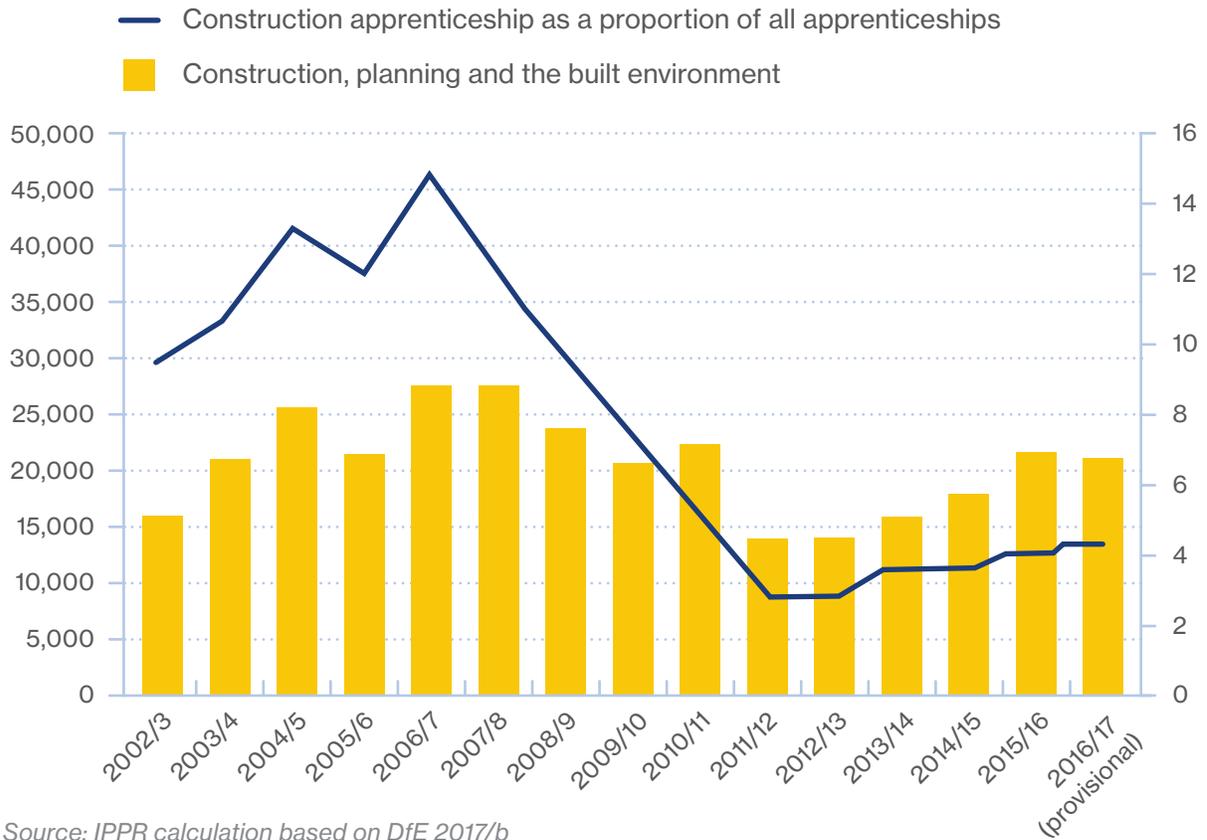
Source: Farmer 2016

The construction industry faces a significant and growing skills shortage, which is increasingly constraining output. Despite these skills shortages, and despite the best efforts of the Construction Industry Training Board (CITBO), employers in construction have consistently failed to train

enough employees as a result of longstanding structural challenges with the sector. The construction skills system is dysfunctional, there are not enough apprenticeships and construction courses in further education. (IPPR Report November 2017).

Figure two – Proportion of apprenticeships

The number of construction apprenticeships has recovered following the recession but it makes up a smaller proportion of all apprenticeships



Source: IPPR calculation based on DfE 2017/b

It follows that year on year demand for suitable skills will be high and supply will inevitably struggle to keep up. This scenario will create

inflationary pressures on salaries and erode margin for contractors that will find it difficult to pass on these increases to clients.

Poor productivity output

The UK economy is made up of four main sectors:

- Services
- Construction
- Production
- Agriculture

The services sector makes up 79.3 percent of GDP, construction contributes 6.1 percent, while production and agriculture equate to 14.0 percent and 0.7 percent respectively (ONS Report – Construction Statistics 2017).

Productivity growth in construction has been exceedingly slow in recent years. As the figure below shows, productivity in construction has grown at a fifth the rate of the economy as a whole over the last two decades, increasing by just 4.7 percent from 1996 to 2016, compared to 27.0 percent across the whole economy. Other European countries, such as France, Germany and Italy see a similar pattern to the UK, but US productivity tends to be higher.

(<https://www.bls.gov/lpc/construction.htm>)

Figure three – Slow productivity growth in construction

Productivity growth in construction has lagged behind the economy as a whole

Gross value added per hour worked in construction and the whole economy in the UK between 1993 and 2016.



Source: IPPR calculation based on OECD

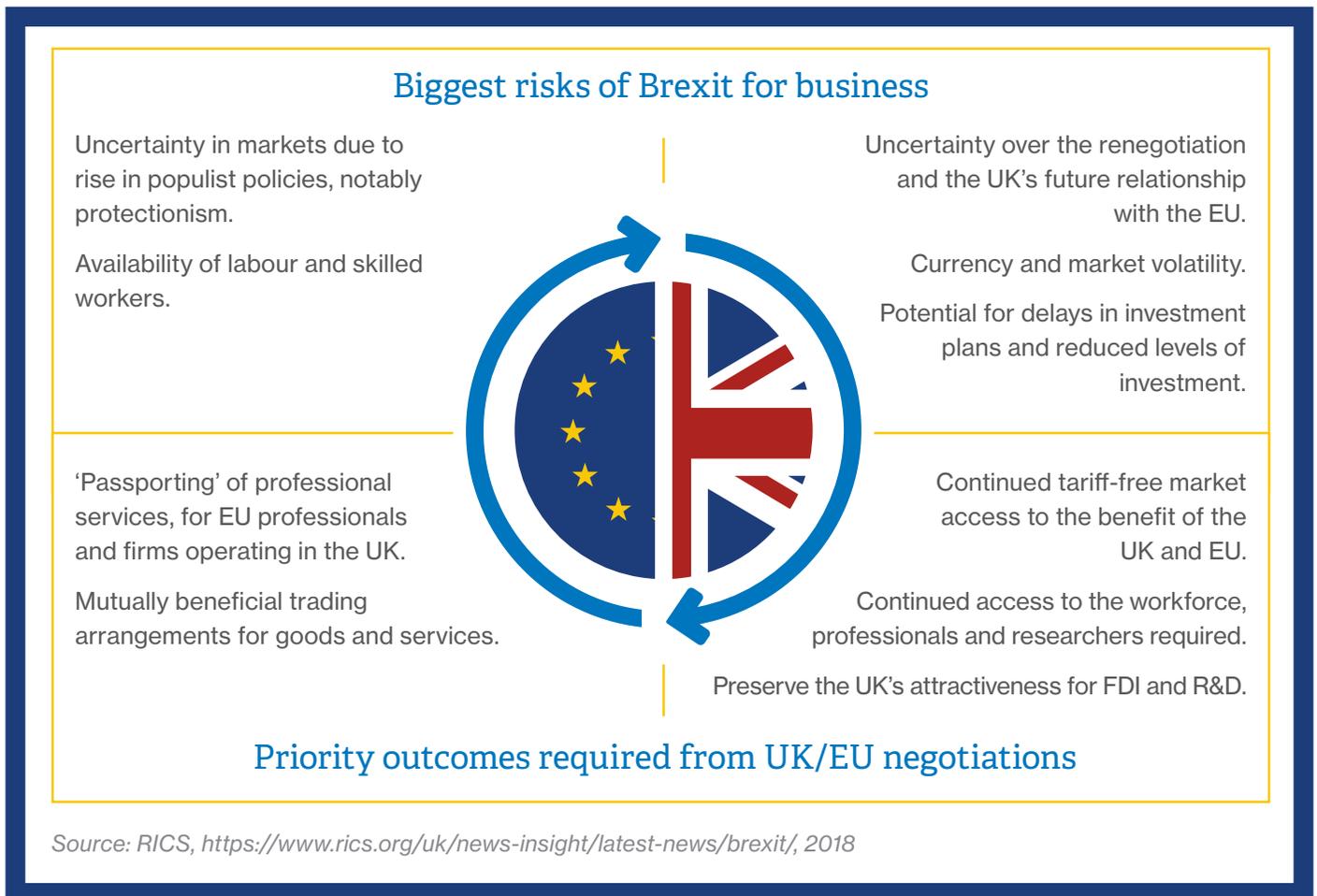
Some of the reasons for this pattern are that construction has suffered from low levels of innovation and R&D over the last two decades and the industry itself has been slow to adopt to new

technologies. If the industry wishes to meet the demands for new housing targets in the coming years then, this needs to change and opportunities need to be taken to transform the industry.

Brexit impact

In June 2016, the British people voted to leave the European Union. As no previous member has ever left the Union, the full impact of withdrawal is untested and even now, at the eleventh hour of the withdrawal process, the amount of uncertainty is affecting UK business as it enters uncharted waters.

The Royal Institute of Chartered Surveyors (RICS) use the following infographic to highlight the biggest risks of Brexit for business (top half of graphic) and what it considers to be the priority outcomes required from the UK/EU negotiations (bottom half).



The UK Construction industry has identified its own specific risks of a post Brexit world, namely:



Labour



Materials



Legislation

These elements will be affected regardless of the type of Brexit the UK negotiates, which at the moment could be one of three options:

Soft Brexit: where the UK remains part of the European Single Market, but leaves the Customs Union;

FTA: where the UK signs a trade agreement with the EU;

Hard Brexit: where the UK leaves the EU without a trade deal agreed.

Labour



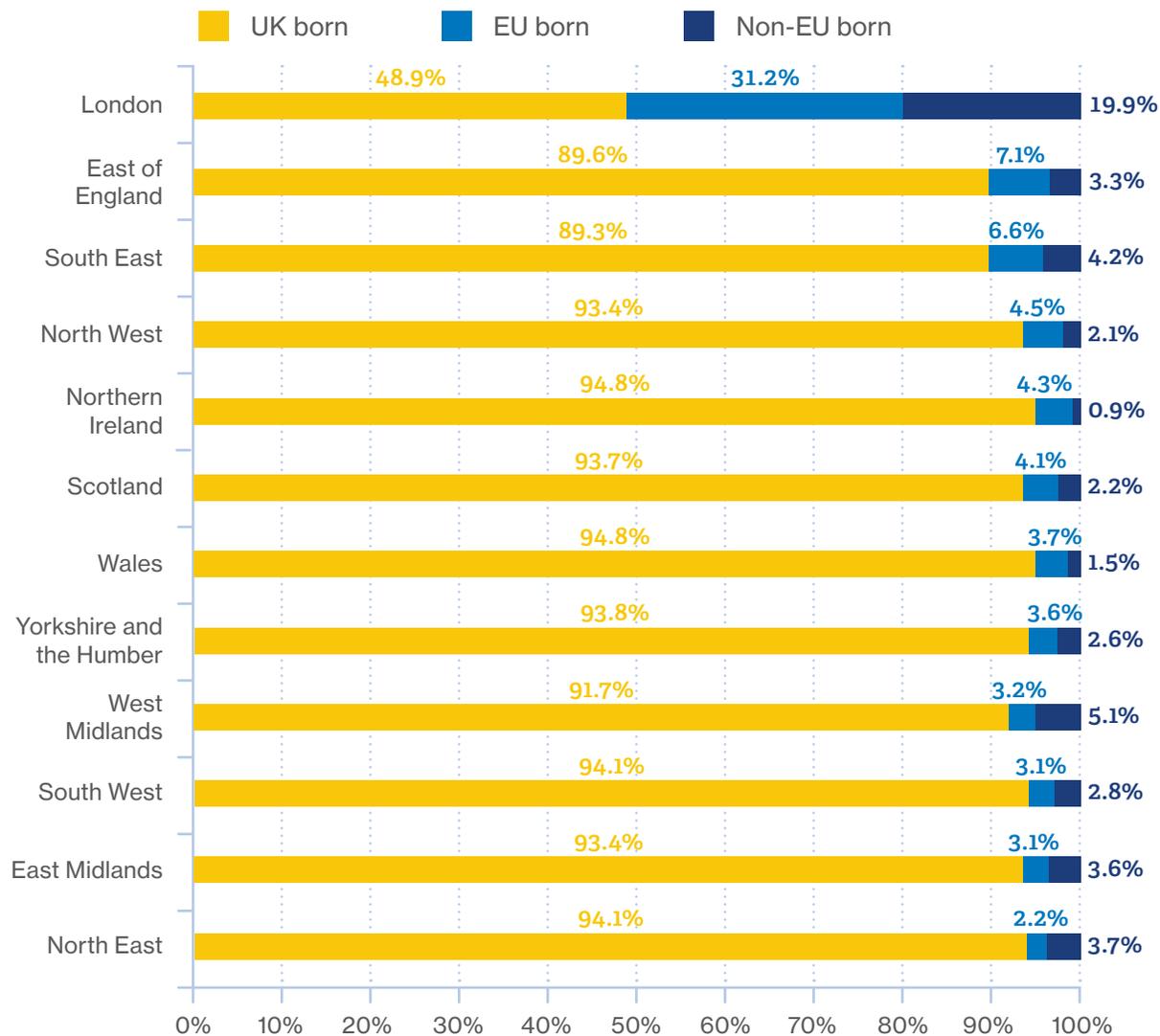
The construction industry has become increasingly reliant on EU and non-EU migrant labour to meet the skills shortages as stated above; particularly in London, where demand is highest, with a recent study showing they make up just over 50 percent of total construction workers in the capital.

In a separate survey conducted by the CITB, construction companies stated the lack of skilled UK applicants as the most significant reason for employing migrant labour, cited by more than half (55 percent) of employers. However, 45 percent cited a better work ethic, and 40 percent better productivity among non-UK workers. One in four (23 percent) cited better skills/qualifications and eight percent highlighted the fact that they were cheaper (CITB, 2017).

Figure four – Percentage of Migrant Workers in Construction

Migrant workers in construction are heavily concentrated in London

Construction workers by country of birth, by region



Source: IPPR analysis of LFS 2015 Q1–2016 Q4

Although construction companies have been reporting skills shortages for a number of years, understandably, there seems to be a significant amount of concern among the many employers in the industry who do use migrant workers about the impact of Brexit on restricting immigration.

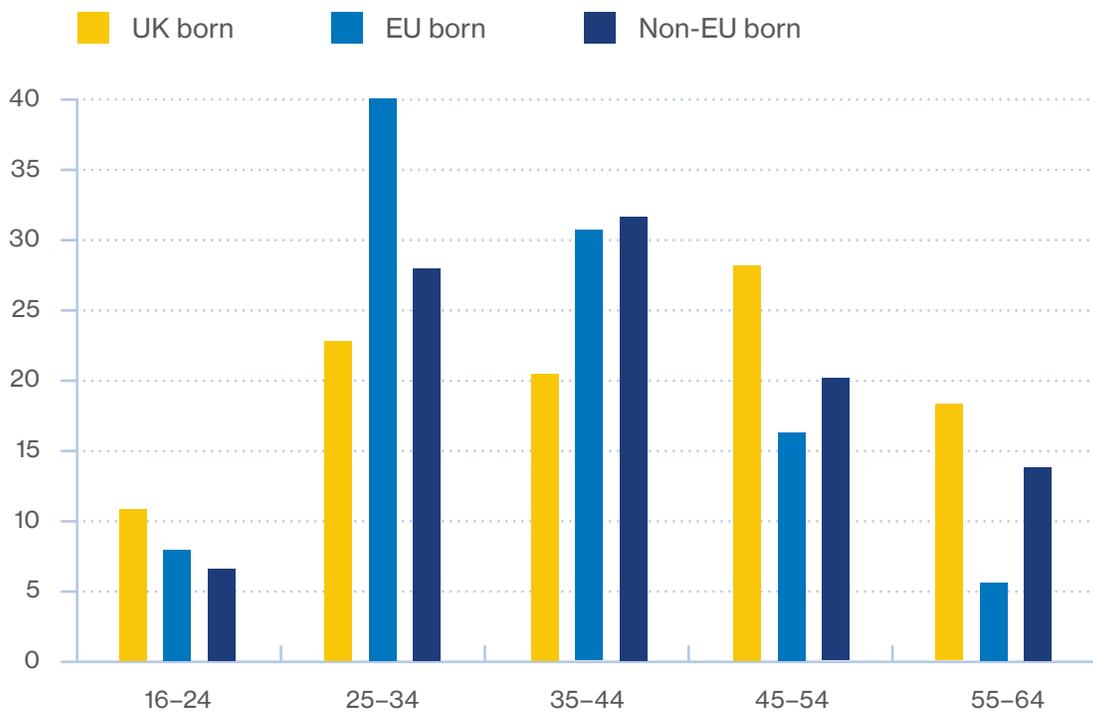
This has been exacerbated by the government's position on a skills-based immigration system and uncertainty about the free movement of labour post Brexit.

In addition, UK born construction workers are getting older, with the average age being over 45. In fact, according to the Chartered Institute of Builders (CIOB), the total number of workers aged over 60 has increased more than any other age group; with the biggest reduction being in the total number of construction workers under 30. The likely impact is as clear as it is worrying; a great deal of knowledge and many vital skills are about to be lost and fewer professionals are in line to replace either (CIOB, 2018).

Figure five – Age profile of workers in UK construction

One in two UK-born workers in the construction sector are aged over 45, compared to one in five EU-born workers

Age profile of construction workers by place of birth



Source: IPPR analysis of LFS 2016

Extending the retirement age is not a viable solution in construction, as the work is very physically demanding and it would naturally be very difficult to maintain a safe working environment.

Materials



The UK construction sector is a heavy user of goods and materials supplied from the EU, with government data showing that 61 percent (circa £10 billion) of construction imports come from within the EU alone; the majority of which are electrical wiring, air conditioning equipment and central heating boilers (Benfieldatt, 2018). The Construction Products Association (CPA) calculates that 92 percent of softwood imports are from the EU.

It is clear that membership of the EU benefits procurement in the construction sector due to the ease of transport and tariff free movement of goods. Construction companies have created a deep reliance on this market to source materials and machinery in preference to other global markets.

Although both the EU and UK have said they want to maintain tariff-free trade post-Brexit, it is uncertain; which, in turn, has weakened the pound and is already pushing up costs for many construction companies. Indeed, during 2018, building firms were having to wait more than a year for bricks due to high demand nationally and exacerbated by the weaker value of Sterling.

A recent survey by the Federation of Master Builders (FMB) has shown many companies are being quoted increased costs for bricks (9 percent), roof tiles (8 percent) and insulation (16 percent), caused mainly by supply issues. Unless these increases can be passed on, then these companies will ultimately face reduced margins, resulting in reduced spending, employment costs and investments; all of which will negatively impact the national revenue income from tax receipts and VAT.

Many believe Brexit could result in goods being imported into the UK from outside the EU to keep costs low. These may be inferior in quality to those currently regulated through the EU quality scheme (CE markings) and could potentially increase risk of subsequent property damage, especially with materials such as wiring and roofing materials. Although this may seem overly cautious; it identifies aspects that insurers and underwriting departments may need to factor into their future planning.



Legislation



The UK is a leader in driving higher standards of Health and Safety in construction, with key legislative frameworks such as the Health and Safety at Work Act 1974 and more recently, the Corporate Manslaughter and Corporate Homicide Act 2007; both of which were UK driven and not imposed by the EU. As a result, the UK has one of the lowest rates of fatal injury across the EU making it, unlikely that a post Brexit UK Government would do anything to relax these measures (CMS, 2016).

There are other significant pieces of legislation that have come from the EU that are now fully entrenched into working practices; these being *The CDM Regulations 2007* and 2015, the *Working Time Regulations* and the *Energy Performance of Buildings Directive (2002/91/EC)*, requiring Energy Performance

Certificates for all types of properties, which a future UK government may wish to repeal or certainly review.

In addition, many large construction contracts will have been procured pre-Brexit and may only complete post-Brexit. This becomes even more challenging where these contracts may be limited to fixed prices calculated before any effects would be known. The result could be reduced profitability due to increased tariffs for materials and “financial hardship”, where parties would have to use provisions in the contract to address the material changes in trading conditions post Brexit.



Modern methods of construction

In recent years, companies have used government initiatives to look at ways to combat the challenges identified in this paper, such as skills shortages, new housing targets and potential Brexit effects, by investing in Modern Methods of Construction (MMC). The MMC techniques used follow in the footsteps of Japan and Scandinavia, in constructing modular buildings off-site in purpose built plants, which are then transported to site for speedy fabrication. This method, much like auto manufacturing has done over the last four decades, can then utilise machinery and robotics more to reduce costs and improve the efficiency of the build. The UK weather also has little adverse effect on this method of construction with many more contracts being completed on time and within budget; unlike many of today's traditional housing and large scale construction schemes.

The above MMC scheme in Mossley, Greater Manchester by New Charter Housing Trust Group and Liverpool Mutual Homes (LMH), saw seven homes manufactured in a factory and craned into place, making it the first scheme of its type to receive funding from the government's Homes and Communities Agency (HCA). The larger scale the development, the more efficient it becomes.

The future potential of this way of working can be seen by the likes of tech giants Google (Katera) and Amazon (Plant Prefab), and even insurers like Legal & General investing in the growing sector.





PESTEL analysis

Introduction

Given the current and future challenges described above it is necessary to understand the strategic impact on the construction sector within the UK, which for this paper, has been done by undertaking a PESTEL analysis. The exercise will enable the

strategic scanning of the macro environment to help understand any threats affecting the sector in which it operates. But first we need to understand the general market and potential opportunity it presents.

General market conditions and opportunity

The UK hosts the fourth largest insurance market in the world, and the largest in Europe, with a total premium volume in 2016 of just under £225 billion. According to the Office of National Statistics (ONS), there are 17 million properties in the UK with

buildings insurance cover. In 2016, the industry paid out £12.9 million per day in settling property claims (ABI Key Facts 2017). Escape of water (28 percent) represented the highest number of claims followed by fire, explosion and weather.

Source: Insurance Institute Network

PESTEL analysis

PESTEL analysis is a concept used in marketing and strategy development. It is used by organisations to track the environment in which they are operating. PESTEL invites us to explore what is happening in the wider world in a number of key areas (**P for Political, E for Economic, S for Social, T for Technological, E for Environmental and L for Legal**).

Political

- Potential Brexit impact on migrant labour and material import costs
- Potential change of government and possible impact on economy
- Increased litigious claim culture in the UK
- Impacts of flood defence spending
- Increased spending on new housing
- Employment level improvements and labour market shrinkage
- Impact of 'cash in hand' payments and promotion of 'Black' economy
- Green Deal scheme – improvements on property environmental impacts – better insulation, heating systems – what will be the effect on future claim volume?

Economic

- Cost management paramount for insurers meaning squeeze on margin
- Low productivity in construction sector
- Increased use of Third Party Validation companies by insurers
- A market reduction as underwriting tightens
- Recessionary pressures on claimants
- Potential to want cash settlement instead of fulfilment
- Economic conditions have effect on supply chain – recruitment/motivation etc
- Financial services regulation changes
- Increase in policy excess, means potential fewer claims being made?
- Changes in cost of fuel
- Cost of labour increasing
- Cost of materials increasing
- North/South divide or "London and the rest"

Social

- Litigious society becoming more prevalent
- People wanting more for less
- A perfect experience is expected, not least because insurers have placed advertisements saying this is what a customer will get
- Some low income families do not have insurance cover
- Insurance cover may not be adequate
- Immigration impacts post Brexit
- People living longer, needing insurance cover longer in life
- Attitudes toward "green" products
- Attitudes toward renewable energy

Technological

- Increase in Modular Housing (MMC)
- Increased use of experts at desks using mobile apps and making cash offers on the spot
- What will be the effect of aggregate websites?
- Ease of making claims likely to increase – self serve (Lemonade)
- Ease of settlement also likely to increase in line with this
- Real time input of data
- Disrupters entering the market – Lemonade, Amazon, Google etc
- Adoption of Leaksafe type devices
- Social media – customers complaining/praising through social media channels
- Autonomous homes/ vehicles etc

Environmental

- Changing weather patterns
- Increased surge events – storms/floods/frosts/prolonged dry weather subsidence
- Laws regulating environmental pollution
- Recycling of waste regulations
- Asbestos control and regulations
- ‘Green Deal’ impact on properties
- Corporate, social and responsibility initiatives
- Climatewise Sustainable Claim Management
- Landfill tax increases
- Increased government spending on river dredging

Legal

- Financial services regulation changes
- HMRC tax implications
- CIS regulations
- Carbon Emissions Reduction Target (Cert) for home insulation and possible impact on future claim leaves
- Potential post Brexit changes in H&S laws – CDM 2015 etc
- Changes in consumer laws – Consumer Rights Act 2015
- Building Regs changes and impacts – Fire Safety post Grenfell
- Consumer Contracts Regs 2014

Conclusions

As demonstrated, the ramifications of Brexit are complex and potentially far reaching; all companies should already be well ahead in the development of their plans to mitigate any potential risk. However, this is proving difficult as there are still so many unanswered questions of how the UK will be affected in a post Brexit world, and this uncertainty is likely to continue through the transition period and beyond.

On the bright side, the UK construction sector may attract overseas investment from foreign backers looking to take advantage of a low pound, which could create an additional upturn in work opportunities. EU competition for large scale tenders is also likely to reduce post Brexit, creating further growth opportunities. There may be an upturn in UK suppliers sourcing materials locally and through other strategic worldwide supply chains.

From a Contractor Connection perspective, this analysis is being used to formulate our plans for the future and already, initial steps have been taken to help mitigate against labour shortages with the formation of the Contractor Connection Foundation. The foundation is made up of a number of charities and other organisations, such as Building Heroes which provides construction training to military veterans;

the National Association of Women in Construction (NAWIC), which promotes and supports women working in the male dominated world of construction; and Care Aware, which gives advice to construction companies when working and designing for people with dementia and other vulnerable situations. Finally, Contractor Connection is promoting the employment of apprentices within our contractor network, to work alongside the best tradespeople, before their much needed skills go out of the sector.

A further, more localised Brexit impact analysis is currently being compiled, using feedback from UK's construction material companies and a survey of the Contractor Connection network. This will form Part 2 of this paper.



Part two

Addendum to

“Current issues in the UK construction sector and the potential impact of Brexit”

Including contractor survey results

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Contractor survey

Given the national picture stated in the previous paper, “Part One – Current Issues in the UK Construction Sector and the Potential Impact of Brexit”, Contractor Connection wanted to obtain primary information to understand the potential impact of Brexit from a local contractor perspective, and seek an insight into how this could affect the service they offer to our clients and customers. The chosen method was a self-administered questionnaire, using a question set to test the findings of the UK Construction sector detailed in the previous paper.

The questionnaire method is a simple way of reaching a widely dispersed audience to get a panoramic view of data (Denscombe, 2014). Due to the contractor network being spread around the UK, this method was determined as the most suitable approach to capture the views of the contractors. To maintain the anonymity of responses and mitigate against bias, the use of a proprietary on-line survey site was used

to design, distribute and analyse the questionnaire responses. It was also felt that this approach stood the best chance of achieving a healthy response rate and improving the quality of the data.

The invitation to participate in the survey was sent out to 80 contractors using a stratified sampling method and this gave a response rate of 75%.

National building suppliers feedback

To supplement the contractor survey, we also wanted to understand the position and information being given to the UK's largest building suppliers.

Contractor survey findings

In response to the UK Construction Industry stating in the previous paper that the three main risks identified post Brexit are labour, materials and legislation the survey tested the contractors own thoughts on two of these elements – labour and materials – with

the responses given below. Legislation was not covered in the survey, as the potential impacts were deemed to be too vague at this stage to obtain any meaningful responses.

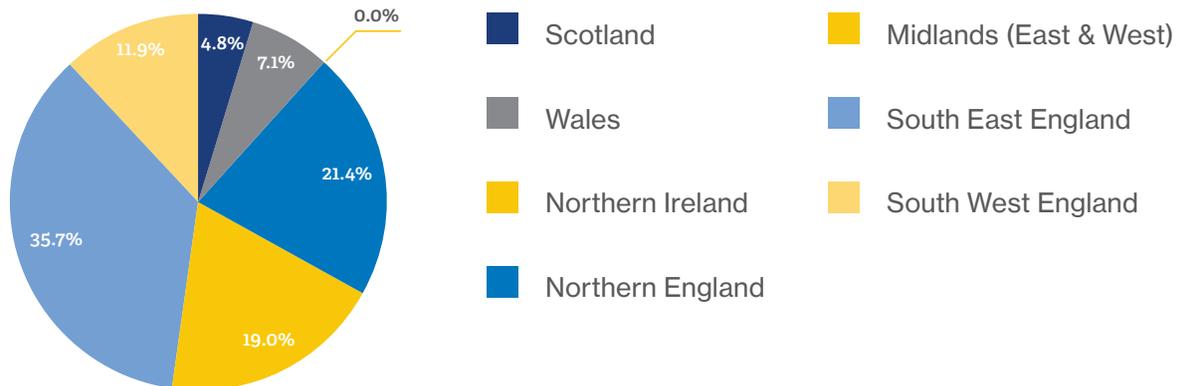
Location of contractors

To understand any regional influences on the responses we asked the contractors to identify their geographic location. As can be seen 36 percent of the

responses are from companies based in the south-east of England where, as indicated in Part One, the impact of Brexit is more likely to be felt.

Figure one – Regional location of contractors

In what region of the UK are you based?



Labour – Difficulty in finding suitably skilled labour

To test the findings of the national survey conducted by the CITB described in “**Part One – Current Issues in the UK Construction Sector and the Potential Impact of Brexit**”, the contractors were asked to rate on a scale of 1-10 how difficult they currently find employing

adequately skilled tradespeople, with the findings shown in Figure two below. It was demonstrated that almost 55 percent rated the difficulty at 7 and over, which matched exactly the CITB survey findings.

Figure two – Current difficulty rating of employing adequately skilled tradespeople

At the moment (pre Brexit) on a scale of 1-10 (10 = very difficult), how difficult do you find employing adequately skilled tradespeople?



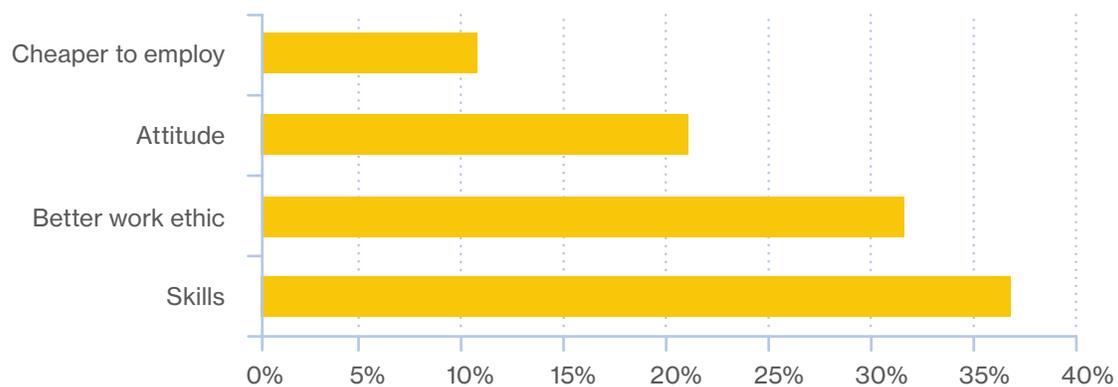
Labour – Reasons for employing overseas labour

The contractors were asked the question – ***If you do employ non UK citizens, what are the perceived benefits?***, and out of the responses, the majority stated they only employed UK labour

currently, but made it clear that this was not being discriminatory, just the local labour availability when advertising for roles.

Figure three – Current difficulty rating of employing adequately skilled tradespeople

If you do employ non UK citizens, what are the perceived benefits?



However, of those that do employ non UK citizens (19 contractors), 37 percent said they had better skills 32 percent cited a better work ethic, 21 percent said they had a better attitude and 11 percent stated they were cheaper to

employ. This follows a similar pattern to the survey conducted by the CITB as described in ***“Part One – Current Issues in the UK Construction Sector and the Potential Impact of Brexit”***.



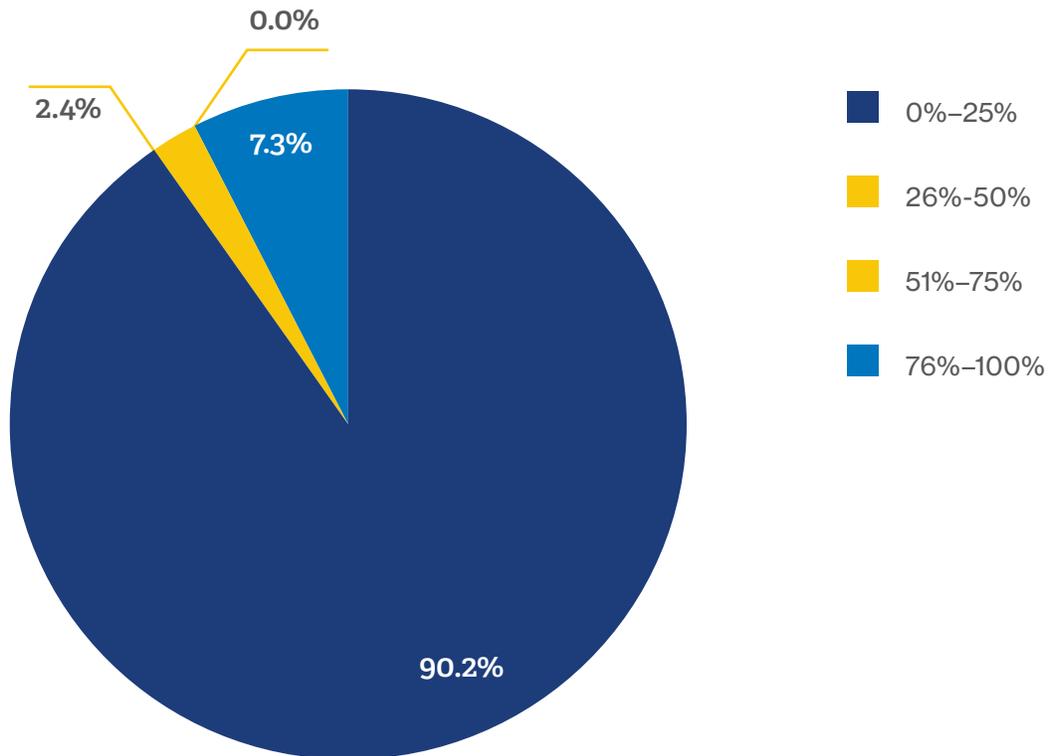
Labour – Overseas workers within contractor trades

The UK Construction sector reports that contractors within the London area have over 50 percent of their trades from EU and non-EU backgrounds (see Figure four “**Part One - Current Issues in the UK Construction Sector and the Potential Impact of Brexit**”). Due to the

contractor survey being conducted anonymously, it is not possible to know which contractors are based in the London area; but 36 percent of responses are from the South East of England and it can be assumed that there would be an influence contained in the result.

Figure four – Percentage of workforce non UK citizens

Approximately what percentage of your overall workforce are non UK citizens?



The vast majority of contractors stated they had over 75 percent dependency on non UK citizens, with the vast majority (90.2 percent) saying they had less than 25 percent dependency. This result

suggests that the contractors' workforce in this sector does not seem to attract the same need to utilise migrant labour.

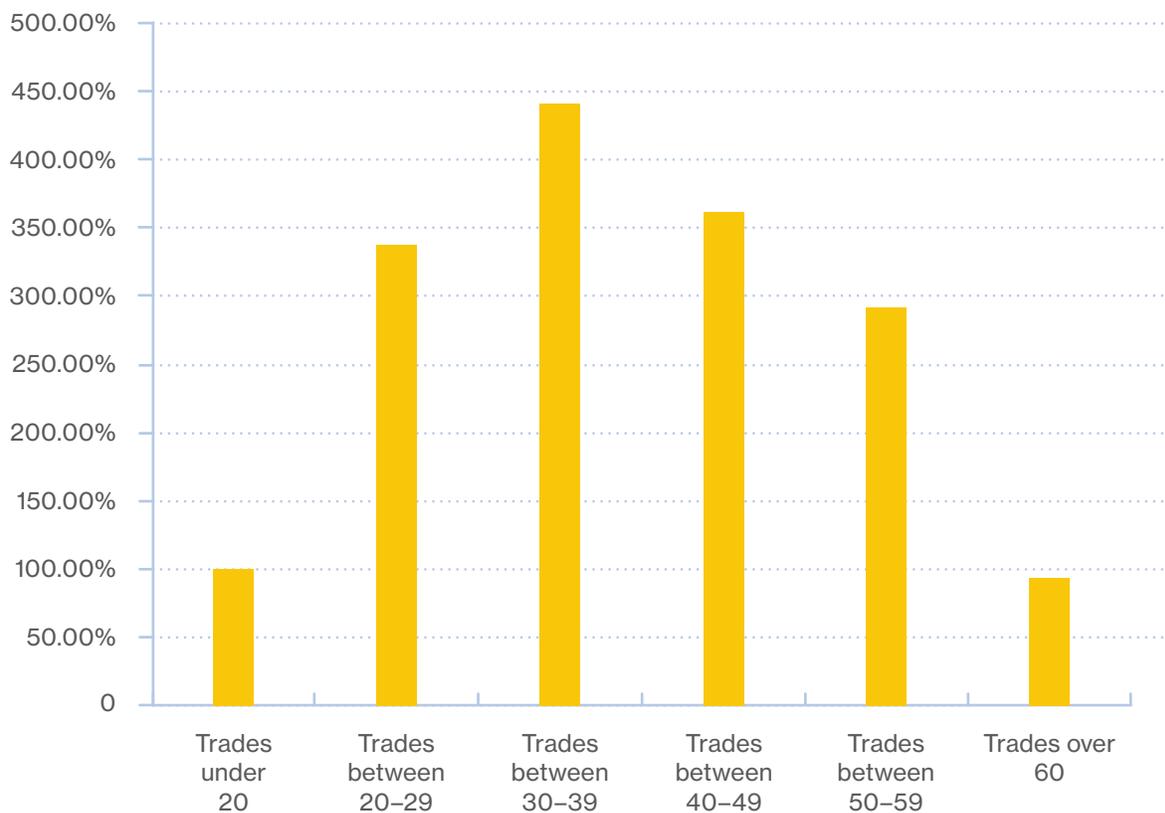
Labour – Age profile of trades within contractors

The survey details that, out of the contractors who responded, there are a total of 1617 trades – that works out at an average of 39 trades per contractor. The age profile of the trades within the contractors are shown in the table below and demonstrates that the highest age group is between 30 and 39, which makes up 27 percent of the total workforce. The next most populous age group is between 40 and 49, which represents

22 percent of the overall number. Interestingly, there are 92 trades (6 percent) over the age of 60 still working, which is almost as many as trades under 20 (101 trades). This correlates to a large extent to Figure five in **“Part One - Current Issues in the UK Construction Sector and the Potential Impact of Brexit”**.

Figure five – Age profile of contractor trades

At the moment (pre Brexit) on a scale of 1-10 (10 = very difficult), how difficult do you find employing adequately skilled tradespeople?



Material related responses

Materials – Are any of your material suppliers warning you of potential Brexit impacts?

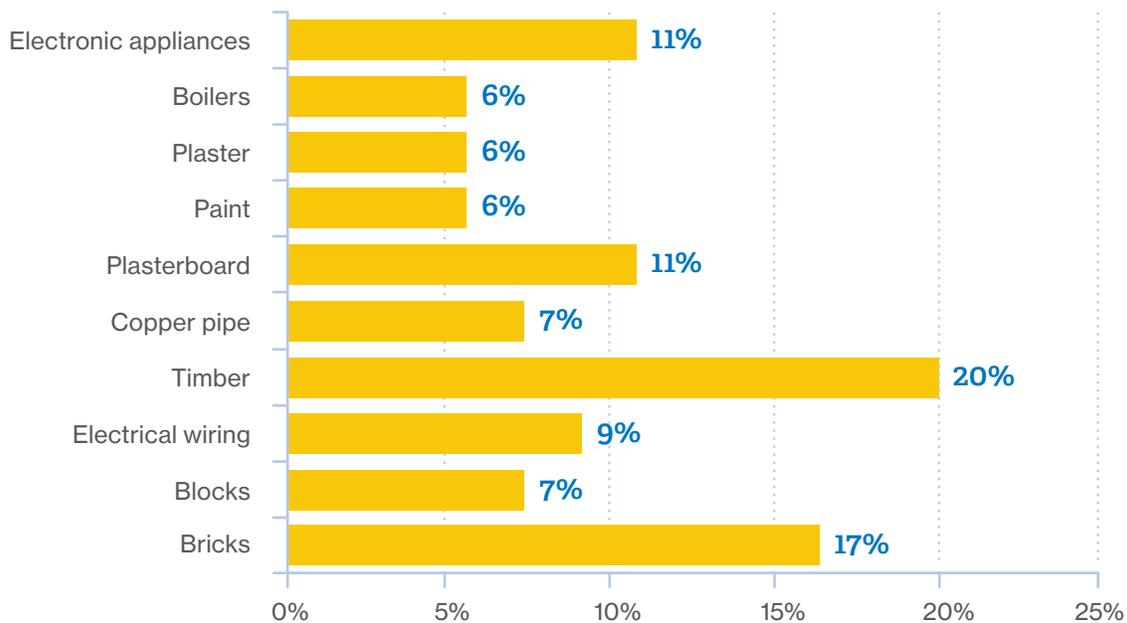
One of the more surprising responses from the survey was 71.4 percent of companies stated that they have not had any warning from their largest material suppliers, of any potential Brexit impacts. This of course does not mean there will not be any, but just that they have not been made aware.

Materials – What materials could be the hardest to resource post Brexit?

In the Part One paper, The Construction Products Association (CPA) calculated that 92 percent of softwood imports are from the EU, and therefore would likely to be one of the main construction materials affected by Brexit, together with the sourcing of electrical wiring and central heating boilers.

Figure six – Materials potentially affected post Brexit

Please state the materials or items that you have been informed could be the hardest to source post Brexit



The survey sought to understand if this is what contractors were being informed by their suppliers at a local level and as demonstrated, in figure six timber (20 percent) and brick supplies (17 percent) are the items that are deemed most

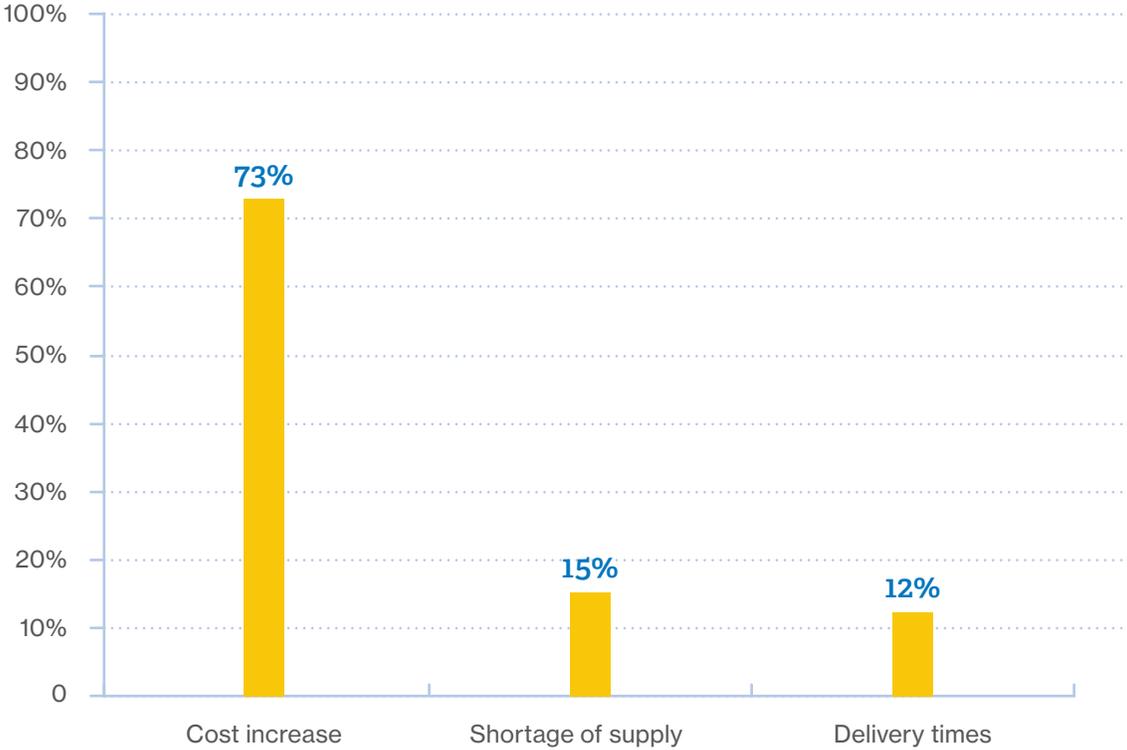
under threat, followed by electrical appliances and plasterboard. Electrical wiring (9 percent) and central heating boilers (6 percent) were not found to be amongst the most at risk in this survey.

Materials – What could be the biggest impact on materials post Brexit?

Although not specifically raised in the Part One paper, it is important to understand what the UK’s largest construction material suppliers are saying could be the biggest impact on material supply post Brexit.

Figure seven – Anticipated biggest impact on materials post Brexit

What are your material suppliers saying could be the biggest impact to you?



Our survey indicates quite clearly that these suppliers are warning contractors that costs are likely to increase (73 percent), with some of this adversely affected if there is a drop in the exchange rate. Other potential impacts being a shortage of supply of some materials (15 percent) and an adverse impact on delivery/lead times (12 percent), due to different raw

material suppliers being potentially needed as an alternative to EU resources.

In a separate question, it was asked if they had been made aware of how much material costs were likely to increase by; the response was predominantly that no information had yet been released.

General responses on potential Brexit impacts

The survey has also been used to understand any additional impacts on service or costs following the UK's exit from the EU and a summary is given below.

1. How do you propose to handle any increased costs of working as a result of Brexit uncertainty, such as increased staffing costs, possible import tariffs and price fluctuations?

Some of the open responses to this question were:

“Dependent on the increase really. Small increases could be absorbed but larger increases would have to be negotiated with the client and suppliers”

“Impossible to say at present, it's difficult to be pro-active given the lack of information surrounding a possible no deal Brexit”

“We would be unable to work with the current rate set, we would have to increase prices”



2. Are you, or any of your sub-contractors, stockpiling raw materials or goods to hedge against Brexit issues?

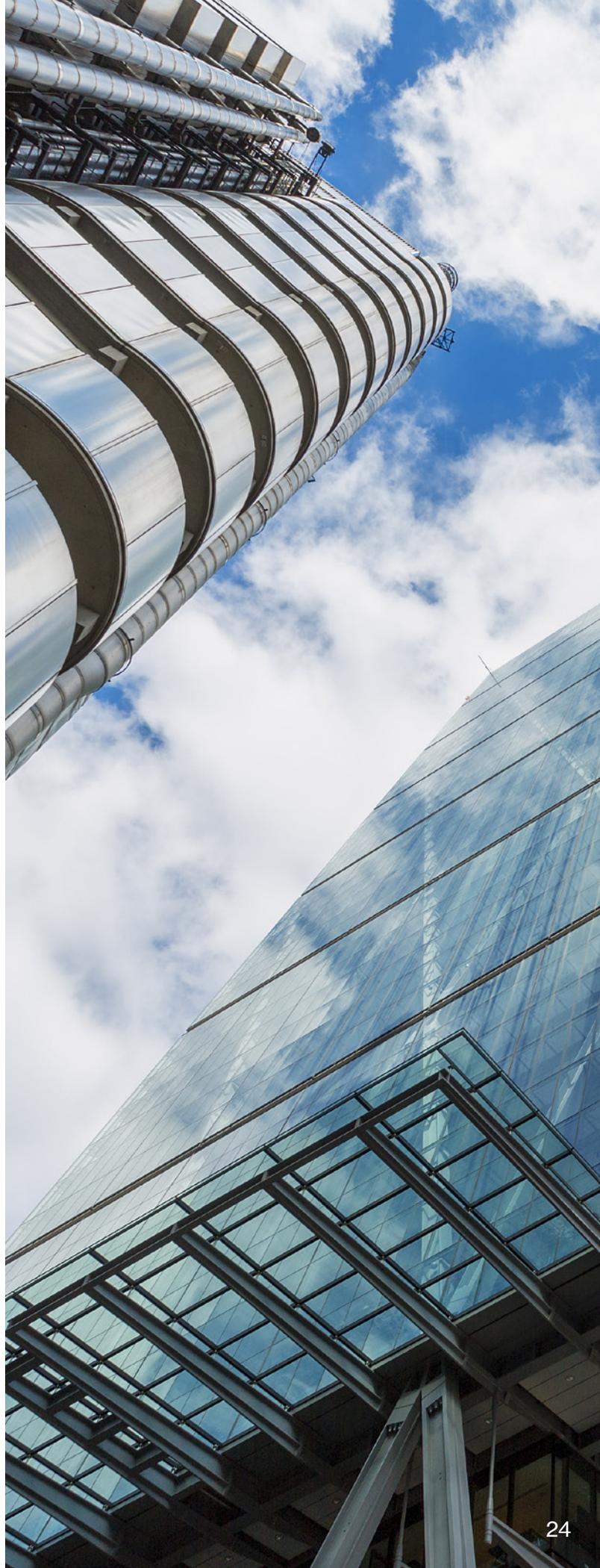
The resounding response to this question was “No”. given by 86 percent of the respondent companies.

3. How much would either fluctuations, fuel price increases or fuel shortages impact your service delivery, and to what extent are you able to mitigate against this?

Thirteen (31 percent) respondents stated they did not foresee any impacts regarding this, but nine (21.4 percent) indicated that should this situation arise, then they would have to review their coverage area and six (14.3 percent) would look at investing in other fleet efficiency savings.

4. Is your company data held solely within the UK or is any data held offshore?

There were three (7.1 percent) companies that stated they have their data hosted offshore and who would potentially need to consider other options for this, but with no great overall impact expected.



Summary

At the time of writing, the UK Government has announced an extra £2.1bn for no-deal preparations as we approach the new proposed exit date of 31 October 2019. Many business groups are warning that delays due to border checks post-Brexit could soon become very long and would have knock-on effects for firms reliant on a constant stream of supplies.

The feedback from the UK's biggest construction material suppliers seems to suggest uncertainty is preventing any meaningful planning to minimise any potential impact. The result being that much rhetorical information, lacking any factual substance, is causing even greater uncertainty and concern amongst many businesses. Unlike many large retailers, such as supermarkets and car manufacturers, it is unknown if the UK construction industry is stockpiling materials in preparation for Brexit. If they are, they do not seem to be managing the concerns of their suppliers with the lack of communication at the moment.

The contractor survey undertaken by Contractor Connection does show some correlation with the national picture in the earlier Brexit Impact paper, especially in the areas of current skills shortages and benefits contractors find when employing migrant labour. There is also some similarity with the age profile of trades working in construction and the increase of workers in their 60s, despite the manual

aspects of the job. Again, with the materials element of the survey, there is correlation in that it would seem that timber and bricks are likely to be the most adversely affected building materials post Brexit, especially in sourcing and potential delays in lead times. Cost increases are also deemed to be the most likely outcome, which could worsen further in a no-deal scenario, due to trade tariffs and potential import duties.

Contractor Connection operates a managed network of over 100 suppliers, including 65 building contractors, estate management operatives and national specialist suppliers, servicing the insurance repair sectors and other direct clients. We are currently working with all our supply chain to mitigate against any adverse impacts of the UK's exit from the European Union, including partnering with our Contractor Connection Foundation members and promoting the employment of apprentices to learn the much needed construction skills before more senior tradespeople retire.



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Part one

Current issues in the UK construction sector and the potential impact of Brexit

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Part two

Addendum to “Current issues in the UK construction sector and the potential impact of Brexit” including contractor survey results

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