# **BREXIT:** Assessing the Impact on the UK Construction Industry & Mitigating Identified Risks

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#### Abstract

The United Kingdom construction industry acts alone as a substantial contributor to its economy by contributing about £113 billion to the UK economy, 6% of total economic output in the year 2017. Being a key indicator of a nation's stability, it's one of the first industries to feel any ramifications, and ordinarily one of the last to recover. Therefore, makes it crucial to ensure the economic stability of the UK. The industry to maintain this level of input to the economy relies heavily on migrant labour, EU funding, materials and supply chain to deliver many key infrastructure projects. However, Brexit vote has unwrapped complex economic, political and legal consequences with provisional uncertainty in key areas. Thus, making it pertinent to discuss and evaluate the potential implications that Brexit may have on the UK construction industry. Therefore, a mixed method approach is used to explore the stakeholders' perspectives and concerns in light of the challenges and prospects that Brexit may bring further aiding in to establish and provide recommendations on key mitigation measures.

# Keywords

Brexit, construction industry, European Union (EU), labor shortages, economic, political, legal and stakeholders.

# 1. Introduction

The United Kingdom and its relationship with the European Union are being a turbulent one. It appears that the British public has never been fully convinced of the benefits that such a union could bring to the nation. After only two years of joining the EU in 1975, the UK held a referendum on whether or not to remain within the Union, with the UK majority voting to remain. However, four decades later, the same vote has taken place with the opposite result, with only 48% of UK citizens choosing to remain within the EU in 2016, this clearly shows a substantial shift in public opinion over the space of 40 years, raising the important topic of what triggered the British public ultimately decide to withdraw from the European Union (Dhingra, 2016). Thereafter, the issue of Brexit has unlocked an abundance of debates surrounding the economic, legal and political ramifications, which will in return have implications on different UK industries.

The UK construction industry is alone a substantial contributor to its economy (Levack, 2012). In 2017, the construction sector contributed £113 billion to the UK economy, 6% of total economic output. There were 2.4 million jobs in the sector, 7% of UK total. There were 1.0 million construction businesses in the UK, 17% of the total (House of Commons Library, 2018). Due to which it becomes pertinent to assess the impact of Brexit on United Kingdom construction industry. Similarly, literature suggested that uncertainty exists concerning the professional and public opinion relating to the potential implications of Brexit on the UK construction industry.

Therefore, this paper intends to discuss and evaluate the potential implications that Brexit may have on the UK, with a particular focus on the construction industry. To address this, the paper seeks to explore the stakeholders' perspective and concerns in light of the challenges and prospects that Brexit may bring. Finally, to establish and provide recommendations on key mitigation measures for those key stakeholders within the UK construction industry.

# 2. Literature Review

The United Kingdom, a country known for the strength of its institutions, the tolerance of its population, measured and outward looking foreign policy ultimately decided to back 'Brexit' and voted to leave the EU, an unprecedented occurrence, being the first member state to initiate proceedings to exit the European Union (Arnorsson, 2016). As a result, the <del>vote</del> caused instant instability within the financial markets, a political crisis and a potential constitutional crisis due to the Scottish & Northern Irish being unwilling to leave the EU (Arnorsson, 2016). This showed a daunting insight into the ramifications that could potentially follow as the withdrawal negotiations begin, highlighting the various ways and markets that could be impacted, and how the nation became divided overnight over their visions of how the UK should move forward regarding the many political, legal, economic and social factors that would be up for debate.

Unfortunately, the path to which Brexit will now lead the UK and the EU remains unknown, with a long process of withdrawal proceedings in the meantime. It has also potentially acted as a catalyst for other EU member states to trigger departures. The former UK Prime Minister, David Cameron stated during his fight to keep the country within the EU that backing Brexit and leaving would be a 'leap in the dark' (Busch, B & Matthes, J, 2016). Thus, showing there exist an uncertainty on how the UK and the rest of Europe will look like post-Brexit when the UK and its 'divorce' from the EU is complete.

However, professionals including economic and legal experts have made substantiated claims as to the potential consequences the UK may face such as restrictions on free trade, access to the single market and introduction of inconvenient tariffs (Koch, 2016). The limitations of which could be felt across many UK industries, in particular, UK construction companies could potentially be hit with barriers from EU member states when it comes to recruiting skilled labour and professionals due to tighter border controls (Palmer, 2016) as well as uncertainty over imports, with EU imports accounting for 59% of the total construction material imports in the UK (Department for Business Innovation and Skills, 2015). This portrays the extent of which the construction industry could be impacted upon through the UK's withdrawal from the EU.

The construction industry being a key indicator of a nation's stability, one of the first industries to feel any ramifications, and ordinarily one of the last to recover, makes it crucial to ensure the economic stability of the country in this case the UK. Therefore, this paper intends to highlight the key areas and factors of concern such as economic, political and legal factors.

#### **2.1 Economical Factors**

Economic stress and continuous fiscal austerity became a key contributing factor in the shift of public opinion in the Brexit 2016 vote. The leave campaign of 2016 gained support from those individuals that felt the need to regain British sovereignty which included cutting immigration, imposing tighter border controls and stopping contributions to the EU budget along with the legislative procedure no longer being 'ruled' by EU entities (Minford, P and Lyon, G, 2016). However, now there exist a sense of uncertainty and concern about the impact Brexit may have on economic factors such as: Labour shortages, funding & investment and industry growth.

#### 2.2 Political

A sense of political fear and uncertainty has risen post Brexit vote of the potential change to the free movement of People and the impact on the supply and demand of the materials. The construction industry relies heavily on labor and goods by enjoying benefits that come with their free movement.

#### 2.3 Legal

Legal issues and concern for businesses that arise post Brexit are likely to trigger extremely complex legal consequences and provisional uncertainty with practitioners debating over its dramatic impact on bureaucracy and return sovereignty to the UK in general and on construction industry particularly. The areas that could potentially be impacted as a result of Brexit is the regulations that govern construction.

Overall, the findings from the literature have highlighted key areas of potential impact as a result of Brexit within the construction industry as summarised in Table 1; which consolidates the factors of concern and questions that have been extracted from the viewpoints of industry professionals. Therefore, this paper intends to provide some validation on just how much of an effect Brexit is going to have on the construction industry as the UK navigates the muddy waters of an EU exit.

Area of Impact	Factor Surrounding Questions					
	Labour Shortages	How can the industry prepare and overcome labour shortages? Could there be programme implications on projects?				
Economical	Materials	Will there be cost increases? Could there be programme implications on projects?				
	Industry Growth	Will Brexit impact on the construction industry's growth? Is there a decrease in confidence across the industry?				
	Funding & Investment	Will funding and investment decrease post Brexit? Has there been any impact to date?				
Political	Free Movement of People	How does any change to the free movement of people affect the industry?				
Tontical	Free Movement of Goods & Services	Will any change in the free movement of goods and services affect the industry? Would there be a positive impact on British supply chains?				
HI Regulations		Are the current EU regulations sufficient? Would any changes impact the industry?				
	Legislation	How would any legal alterations impact the industry? What are the benefits of amending current legislations?				

#### Table 1. Platform to Research

Table 1 provides the platform to inform the researcher's methods to address the aims of the research; which can be achieved by implementing accurate methodology as discussed in the next section.

# 3. Methodological Steps

The literature review assisted this study with deducing the key areas of concern of the construction industry with regards to Brexit such as economic, political and legal. These findings have enabled the study to raise broader questions surrounding those key areas, using both qualitative and quantitative research method of data collection. The following methodological steps are followed to aid the purpose is:

- Survey: An initial survey targeting consultants, contractors, sub-contractors, developer and suppliers from the construction industry to examine the stakeholders' perceptions of the impact of Brexit on different aspects of the construction industry.
- Semi-Structure Interviews: The semi-structured interviews allow to develop an overall picture of the perspectives of a range if key stakeholders that could be impacted upon Brexit, by interpreting the data rather than simply generalising the data. It aids in establishing the level of concern and real impact amongst the actual workforce, providing the inductive element.

The methodological steps provide a platform for the research to discuss and evaluate the potential implications that Brexit may have on the UK construction industry.

### 4. Data Analysis & Results

This section presents the results and analysis of the questionnaire survey and the semi structure interviews, which assist in examining the stakeholders' perceptions of the impact of Brexit on the UK construction industry.

#### 4.1 Survey Findings

Key stakeholders were targeted including; consultants, contractors, sub-contractors, developers and suppliers. A total of 45 questionnaires were distributed via email to a wide range of individuals within the construction industry, with 28 of the respondents completing the questionnaire. The majority of participants were over 35 years of age, the number of participants that held over 15 years' experience within the construction industry, formed a total 75% of the targeted population.

To address the research aim, the assessment of the potential impact of Brexit on the construction industry, the survey responses gathered some interesting results regarding the participant's perceptions of Brexit's impact on the construction industry as a whole, summarised in Table 2 and 3.

Questions		No	Maybe
If their confidence in the construction industry had altered since the Brexit result	29%	71%	None
Stakeholders: Has your confidence in the construction industry altered since the Brexit result?		54%	4%
Does the shortage of skilled labour affect the performance of the construction industry at present?		22%	None
Is the construction industry relied on EU workers	82%	18%	None
Do you think the access to skilled labour will be reduced post-Brexit?		18%	None
Awareness of any change to the supply and demand in projects to date		82.1%	None
If there has been a change in the supply costs of materials since the Brexit vote	35.7%	64.3%	None
If they are aware of any rise in delays on constructions projects already since the Brexit vote	32.2%	67.8%	None
If the industry feared any fall in investment in construction projects post Brexit	53.6%	46.4	None
If any short-term impact had been felt		32.2%	None

#### Table 2. Survey Findings

One thought-provoking finding as illustrated in Table 2 was the high number of respondents who confirmed that Brexit had not altered their confidence in the UK construction industry. This generally conflicts with the academic view of Brexit's impact on the economy in general, as extremely damning, as noted in findings by Curtice, who concluded that following the referendum vote, most voters regarded the economic impact of the referendum in a negative way (Curtice, 2016). This could potentially suggest that in reality, the majority of the workforce and population do not feel there will be such a harmful impact as is suggested by the academic writers and media, or that any impact felt will be temporary. Furthermore, Table 3 aims at gauging the impact of Brexit by the opinion of participants.

Table 3. Survey Findings	(Continued)
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Questions	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Impact on the company by any potential change with regards to the Free Movement of People post Brexit	17.9%	35.7%	32.1%	10.7%	3.6%
Do they think the demand for skilled labour in the construction industry will increase post Brexit	17.9%	46.4%	21.4%	14.3%	0.0%
Impact of Supply and Demand: Whether the demand will alter due to Brexit?	10.7%	60.7%	28.6%	0.0%	0.0%
Access to Materials: will it be reduced post Brexit?	10.7%	25%	35.7%	28.5%	0.0%

UK Benefit of EU Regulations: whether the industry believe changes will be made to the current regulations governing the construction industry post-Brexit	7.1%	39.3%	21.4%	28.6%	3.6%
Level of Delayed Projects: Do you believe there will be an increase in delayed construction projects post-Brexit?	4%	67%	11%	19%	0.0%
Reduction of Projects Post Brexit: if an overall fall in construction projects across the UK after Brexit is experienced?	3.6%	39.3%	39.3%	17.8%	0%

Finally, the survey looked to identify within the areas found to be of key interest within the literature review, the level of concern in terms of impact felt from Brexit of professionals within the construction industry as a whole. There were four key areas identified as areas of concern, those being labour, materials and supply chain, regulations and investment. The participants were asked to rate 0-5 their level of concern of each area, 0 being no concern and 5 being very concerning. The results of each are shown in figure 1 below.

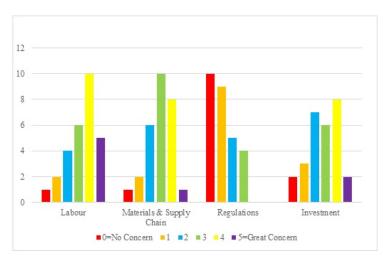


Figure 1. Concern Levels of Key Areas of Impact

As indicated above, the participants show there is a greater level of concern with regards to labour, materials and supply chain and investment all rating generally high ranges of concern ranging from 4-5 on the scale.

A key finding from the survey results addresses the research aim of establishing the prominent areas of concern in terms of impact within the construction industry. Of the areas with the potential to be affected, those being economic, political and legal; the results show overall that among these areas; factors of labour alongside materials and supply chain is a major factor of concern. This aligns with the previous research and perceptions of industry experts within the various Brexit discussions.

#### 4.2 Semi Structured Interviews

The semi-structured interviews were carried out to corroborate the findings of an initial survey. It allows to develop an overall picture of the research topic, by interpreting the data rather than simply generalising the data. For the semistructured interviews five of the surveyed participants were selected based on their location in relation to the North West of England and experience in the construction industry, with the sample taken from developers, contractors and professional consultants.

To triangulate the findings of the survey with the semi-structured interviews, analysis was based on coding technique, which highlighted certain themes and patterns between all the interviews that were conducted as shown in Table 4.

#### Table 4. Themes of Code

Themes of Codes	Description of Codes
Uncertainty	Uncertainty, concerns, hesitant, changes
Business Strategy	Approach, change, business, preparations, implications
Supply & Demand	Supply, demand, supply chain, costs, impact, bubble
Labour Shortages	demand, shortages, skilled labour, work ethic

*Uncertainty*- In looking at the theme of uncertainty, Morphet recognised that Brexit has created a significant level of uncertainty within the likes of political, economic and market environments, with this likely to persist in the near future, certainly until full terms of the UK's withdrawal is agreed (Morphet, 2017). All five of the interview participants discussed the uncertainty surrounding Brexit.

A clear correlation with the uncertainty theme can be witnessed by the statement of Participant B:

# "It depends on well, you know, I don't think a single person in this country from Theresa May downwards knows where this is going. I don't think anyone in the EU knows where it is going"

Thus, confirming it is difficult to quantify the effect of the change to the economy one way or the other since Brexit and to confirm how much of the change is as a result of Brexit, identifying with Gudgin et al., 2016 who stated that the market has been unbalanced for years (Gudgin, 2016). In addition to this, Participant D stated:

#### "We have a lot of Slovakian guys that work for us and have worked with us previously, for 10-15 years and they have worked in this country for all that time and whether there are rules that state they have got to go back or rules that are brought in that state they aren't allowed to work here or travel freely to work, we don't know what, so there is a level of uncertainty as to how they are going to be affected"

Following on from the interviews, it is clear that the theme of uncertainty is a definite impact the construction industry is experiencing due to Brexit. Yet overall the findings within this theme portrayed throughout the interviews correlates to the previous literature surrounding the impact of Brexit as a whole, this has merely established the prevalence of that uncertainty within the construction industry, however temporary it may be. As the terms of the exit agreement are firmed up, a level of certainty will return to the market and confidence will return.

**Business Strategy-** The theme of business strategy ran throughout the participant's responses. Overall, all participants implied that Brexit would not impact how their organisations would run their business day to day at present. All those that were aware, confirmed that no alterations had been made. This was generally due to the participants feeling there was no requirement to make any changes at present. Paradoxically to a widely held view that businesses across Britain did detect some direct change following the Brexit vote (Killen, 2016). However, none of the participants interviewed appear to have seen any such dramatic changes to date as can be determined by Participant A statement:

"I suspect so but I have no ideas what those details are ....., we do have offices in Europe, offices in Amsterdam and so on so I can imagine the connections between those two could become more difficult if trading laws become more ....., of a barrier for once of a better word"

Similarly, Participant E also stated:

"As I'm certain the business stayed silent on their stance prior to the vote I can't say either way, sorry"

*Supply & Demand-* the theme of supply and demand, a huge factor within the construction industry. Overall it seems from the participants' responses that demand is relatively unchanged, with Participant D admitting of an initial downturn as he states:

"Early on, for about 6 months after the referendum, we definitely saw a downturn in tenders. I think there was a lack of confidence in the sector ....., lack of investment from developers. It probably took 9 months before we started seeing tenders come back in, and lots of delays in ones that were almost on site too"

Participant A also acknowledged by stating:

"Not me personally no. I tend to work in the transport sector so with all our stuff it tends to be Network Rail and TfGM people like that so actually those immediate projects go on for a long period of time so when we first got involved in the first round of projects it was 5-10 years ago so it will be a few years' time before we could feel the effect of it but I guess if Government funding gets re-directed elsewhere then obviously it is going to have an impact"

Therefore, acknowledging that they have not felt any impact to demand or supply as of yet due to the line of projects they are involved in, yet they anticipated this would alter in a number of years once the current project cycle had completed. This aligns with the common view that in any market, supply and demand is continuously adjusting, causing cost shifts to projects (Cortesi, 2003). Interestingly all participants recognised an impact to cost. This would align with the opinions established within the literature that stated predicted costs to increase.

*Labour Shortages-* The final theme of labour shortages is arguably the most fundamental topic surrounding the construction industry due to the impact of Brexit. It is one of the biggest potential issue found from the literature review. All of the interviewees strongly acknowledged a serious problem within the construction industry and the void within skilled labour. As admitted by Participant B:

"I think there are shortages in certain trades aren't there and I suspect that will only get worse come next year or the year after. We don't appear to be training enough people, British people to take the place of all the people who have come from in particular Eastern Europe to do all our plumbing and electrics and painting and decorating. We have been relying on that for too long I think."

Similarly, Participant C states:

"what has actually happened is there is a generation gap so you know people like me who are in their 50s and 60s are still working and I know people in their 70s who are still working because there is nobody behind and until that gap gets filled by the kids that are sort of coming through, a bit like yourself you know 20 to 30 to 35 40 year old type bracket it is that middle ground that mid-30s to 50s thing that is absent, and that is what is impacting on businesses so until the other generation come through as experienced then you will have a problem ....., I think that is exacerbated by the fact that ..... We are reliant on people from abroad who already have those sills and if those people who are abroad, or foreign rather and decide to go back abroad it will just mean that we are you know going to continue to have a problem until that generation has the experience required"

Thus, aligning with the findings presented in the Briefing paper which highlights that the industry can experience further difficulties especially due to the movement of skilled labour from the EU (House of Commons Library, 2016).

Therefore, it is evident from the descriptive and qualitative analysis that Brexit, has not made a big impact as originally predicted in the lead up to the referendum, although this is perhaps the result of the UK not having left the EU yet. It appears the results portray an initial uncertainty amongst the industry followed by an increase in confidence in the time passed since the vote, with the uncertainty returning as the UK's exit draws closer. Nevertheless, the element of uncertainty and apprehension appears underlying throughout and could impact how the construction industry and overall market reacts in the future.

The findings from this research however have evidently filled the void in the existing literature regarding Brexit and the construction industry specifically. As Brexit is a fairly recent event, there is a shortage of academic literature that references the potential impact the vote to leave the EU could have on the UK construction industry. Therefore, in light of the findings of the data analysis, the researchers recommend a number of potential mitigation measures for professionals within the industry with a view to assisting in preparation for the implications of Brexit.

#### 5. Recommendations

The section aims to provide measures recommended to assist the construction industry with the transition for a UK outside of the EU:

- Business Plans/Strategy It is recommended that all organizations within the construction industry frequently review their business models and strategies at the current time, ensuring their business plans align with the even minor changes that could affect their organization as the negotiations and path to the UK's withdrawal comes to a close.
- Labour The construction industry and the UK Government are recommended to work more closely together to find alternative ways for younger generations to access careers within the industry. This would include more apprenticeship opportunities and more engagement with young people whilst at school and college. Although this would take time, and the shortages could increase in the short term, overall this is the only way to improve and fill the current void in the industry and lessen the reliance on migrant workers that may not have the same rights once the UK withdraws from the EU.
- Supply & Demand The industry professionals are recommended to frequently review the supply streams of materials and projects overall during the Brexit transition and implement any cost reducing exercises as necessary. The industry must monitor the demand throughout the negotiations until the closing of the withdrawal and constantly re-assess the business needs.

Due to contemporary and recency nature of this research, this study is considered as an exploratory study to identify the themes i.e. that might be effected by Brexit. Future research will build on this study to be more conclusive by using statistical test in order to really determine whether the highest value from the survey results is significant or not.

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