

BREXIT IMPACTS UK COMPANIES' SUPPLIER RISK APPETITE

February 2020

dun & bradstreet



The UK officially left the EU on 31st January 2020, but there are still uncertainties about what this means for businesses.

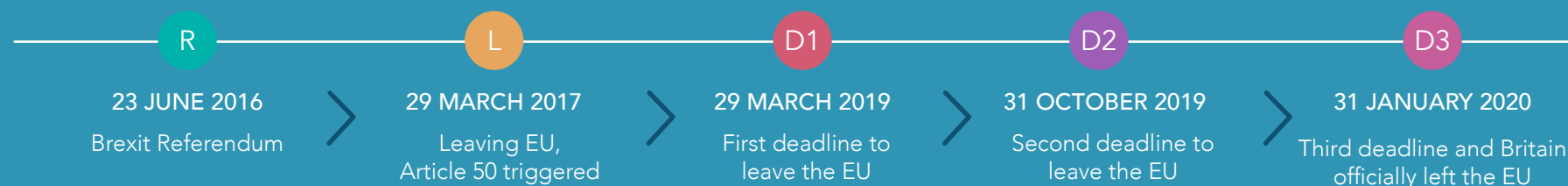
Since the referendum in June 2016, uncertainty around the impact of Brexit has resulted in companies reacting in different ways, such as reviewing supplier base, shifting operations from the UK to the EU or the other way around, and changing appetite for risk-taking in their transactions with suppliers. In this article, we take a look at some of the risks and measures businesses have taken so far, using transaction data from December 2015 to December 2019, to answer the following questions:

- Have there been any changes in companies' appetite for risk in their supply base after key Brexit events?
- Have buyers based in the UK tended to shift their supplier base to the UK?
- Have buyers based in the EU shifted their supplier base away from the UK?



BREXIT: A SHORT RECAP

We all are aware of the Brexit situation. Just to refresh our memories, here are the key dates.



Our Research

The data set from Dun & Bradstreet represents 1,304,842 transactions, reported by a limited number of UK and EU companies that regularly update their supplier base data. The sectors represented in this research are Construction, Manufacturing, Finance, and Services.

We have previously investigated the supply chain risk exposure of companies in the UK across a number of [Quarterly Global Supply Chain Risk Reports](#) – which use four key supply chain risk metrics: Supplier Criticality, Financial Risk, Global Sourcing Risk, and Foreign Exchange Risk.

Below, we provide time series analysis of these four key metrics and do a before / after comparison, based on the Brexit timeline above. Since supply chains are often complex, and not easy to adjust quickly in line with external shifts, we have investigated the risk over three-month intervals. We have also developed two new metrics to tease out any specific effects of supplier country preference, these are the proportion of transactions where the suppliers are based in the UK, and the proportion of transactions where the suppliers are based in any other EU country.



THE FINDINGS: UK BUSINESSES AS A WHOLE

One of the consequences of Brexit has been that it brought the 'supply chain concept' on the agenda of almost anybody involved; owing to the uncertainty in operating conditions once the UK left the EU. It's no secret that uncertainty affects companies' appetite for risk, and we investigate how UK organisations changed their risk appetite over the Brexit timeline. Let's get into the detail.

Supplier Criticality

The **Supplier Criticality** score represents the proportion of buyer-supplier transactions where the supplier is considered critical or key by the buyer company. This indicates a company's perceived degree of dependency on its suppliers.

On average, Supplier Criticality for UK companies increased from around 49% to almost 62% after Article 50 was signed (which gave a 2-year notice that the UK would exit the EU) and is still higher than it was three years ago at 58%. This indicates an increase in the buying companies' perceived dependency on suppliers and therefore their perceived exposure to risk. Uncertainty on future operating conditions, fuelled by Brexit, is a likely cause of this.



FIGURE 1: SUPPLIER CRITICALITY FOR UK COMPANIES

Financial Risk

The **Supplier Financial Risk** score refers to the percentage of buyer-supplier transactions where the supplier has a high or very high financial risk score according to Dun & Bradstreet ratings. This shows the risk of the supplier going insolvent. When calculating Financial Risk, we consider only transactions where the supplier has a financial risk rating.

On average, Financial Risk has been steadily decreasing over the past three years from 22% to just over 19% and we do not see any striking change before and after the key Brexit milestones. The increase in the last quarter to 26% is due to a change in Dun & Bradstreet's Financial Risk Rating score in October 2019. This was part of a periodical review to account for business, political, economic, social, and technological changes in the external landscape, and was carried out to improve the predictiveness of the score.

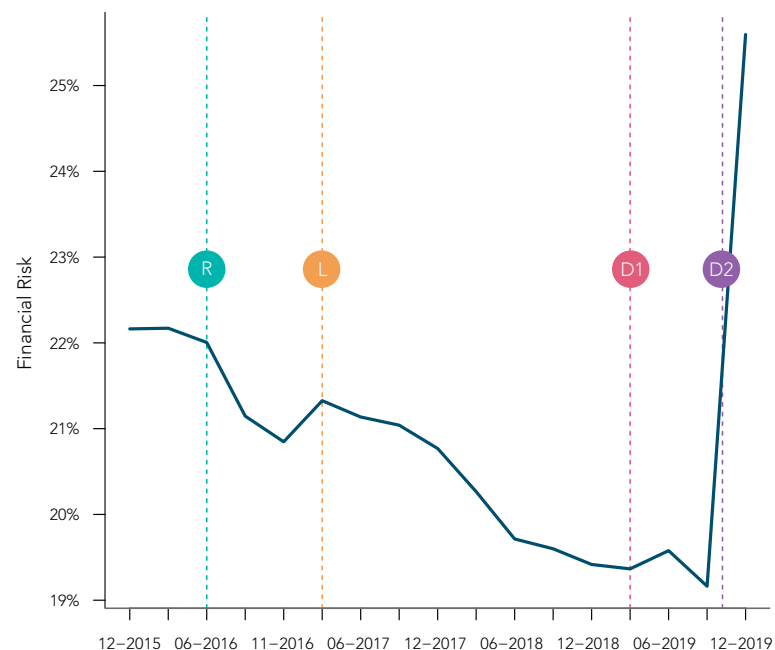


FIGURE 2: FINANCIAL RISK

Global Sourcing Risk

The **Global Sourcing Risk** score represents the percentage of buyer-supplier transactions where the supplier is in a country with a Country Risk higher than or equal to 4, as assessed by Dun & Bradstreet. Dun & Bradstreet's Country Risk Indicator is a composite index encapsulating the risk posed by country-wide factors on the predictability of export payments and investment returns. It ranges between 1 and 7, where higher values of the index suggest higher risk. When calculating Financial Risk, we consider only transactions where the supplier has a financial risk rating.

Global sourcing risk is generally low, 6.8% at its highest and 4.9% at the end of December 2019, (because UK based companies tend to source from low risk countries) and has only reduced over the past four years. There is no discernible pattern before or after the key Brexit events, suggesting that Brexit has so far not had a significant effect on the extent to which companies are sourcing from high risk countries, which is understandable given these high-risk countries are typically outside of the EU.

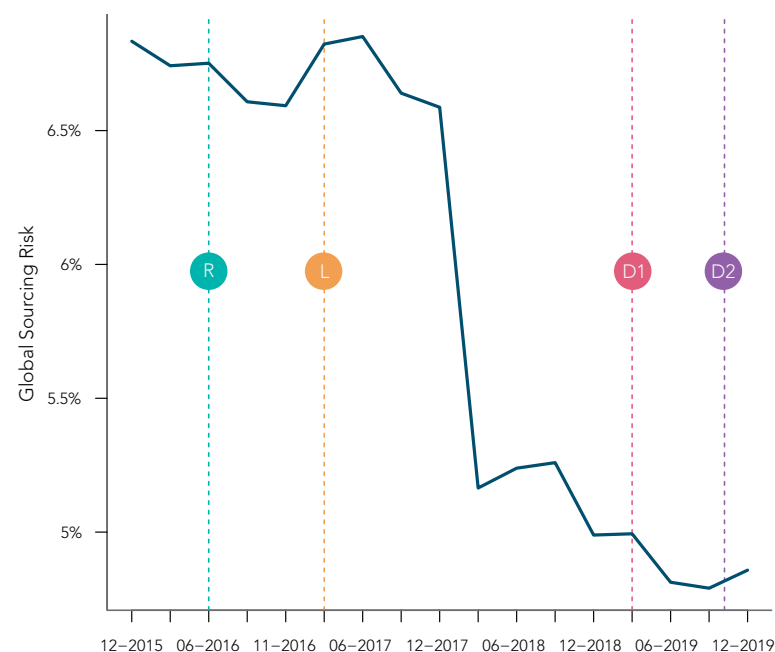


FIGURE 3: GLOBAL SOURCING RISK

Financial Exchange Risk

The **Foreign Exchange Risk** score represents the percentage of buyer-supplier transactions where the transaction is between different currencies. Many of the currencies involved are relatively stable, such as the Euro (EUR), British pound (GBP), Swedish krona (SEK), and US dollar (USD).

Foreign Exchange risk decreased from 31.9% to 29% between the end of 2015 and Q3 2018, indicating that UK buying companies may be increasing sourcing within the UK or asking their suppliers to transact in GBP. The sharp drop shown is a few months after Article 50 was signed, therefore, the increased sourcing from the UK could have been a reaction to this. Over the last 18 months, Foreign Exchange Risk appears to be relatively stable, at around 29%.

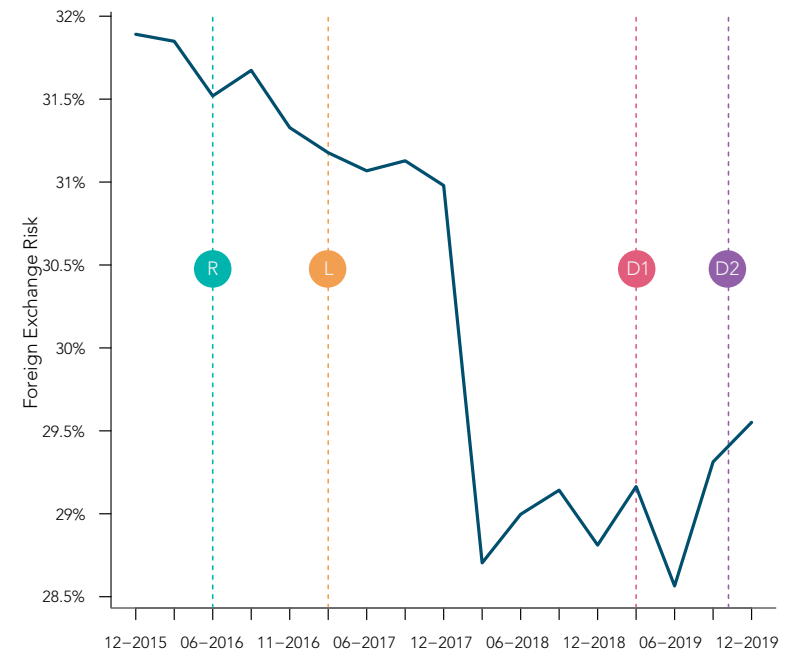


FIGURE 4: FINANCIAL EXCHANGE RISK

Overall, UK companies have tended to reduce their risk appetite across the four key supply chain risk metrics - except for Supplier Criticality which is the only metric based on perception rather than a 'hard' objective measure. **This suggests that, while actual supplier risks have decreased, buying companies' perception of dependency and risk exposure in the supplier base has increased. This is most likely fuelled by the uncertainty companies are facing from the Brexit process.**



UK-BASED SUPPLIERS VS. EU-BASED SUPPLIERS

We investigated the distribution of UK-based and EU-based suppliers in the datasets from two points of view:

- From the buying companies that are based in the UK
- From the buying companies that are based outside the UK, but in the EU

From the UK's point of view

We investigated if the proportion of EU-based Suppliers had declined since the referendum in 2016, for buying companies based in the UK. A general downward trend from 17.5% to 14.7% is visible (Figure 5). A regression analysis gives $R^2 = 0.91$, which means that, time alone explains 91% of the variability in the proportion of EU-based suppliers in the supplier base and therefore a discernible downward trend: the more time that passes, the lower the proportion of EU-based suppliers in the supplier base of the UK companies.

On the other hand, the proportion of UK-based suppliers has increased from 64.1% to 66.7% for companies based in the UK (Figure 6). Similarly, in Figure 5, we see that 84% of the variability in the proportion of UK-based suppliers can be explained with time. In other words, the more time that passes, the higher the proportion of UK-based suppliers in the supplier base. This, combined with the decline in EU-based suppliers shown above, suggests that companies based in the UK have been shifting their supplier base from the EU to the UK - possibly to avoid potential trade barriers arising from Brexit.

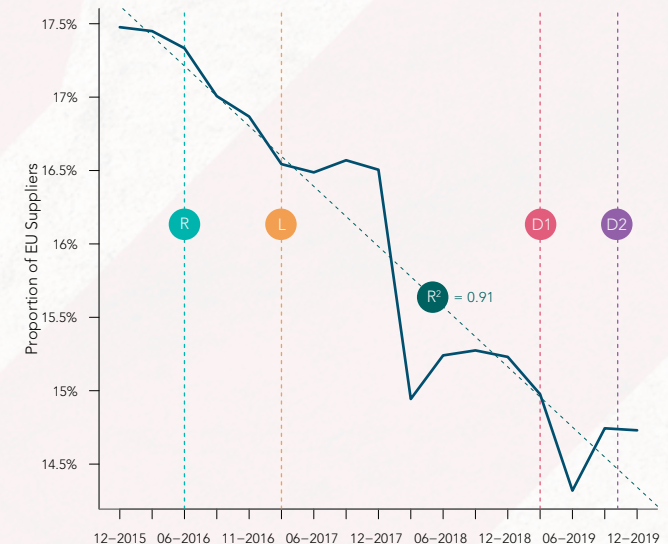


FIGURE 5: PROPORTION OF EU BASED SUPPLIERS IN THE SUPPLIER BASE OF COMPANIES IN THE UK

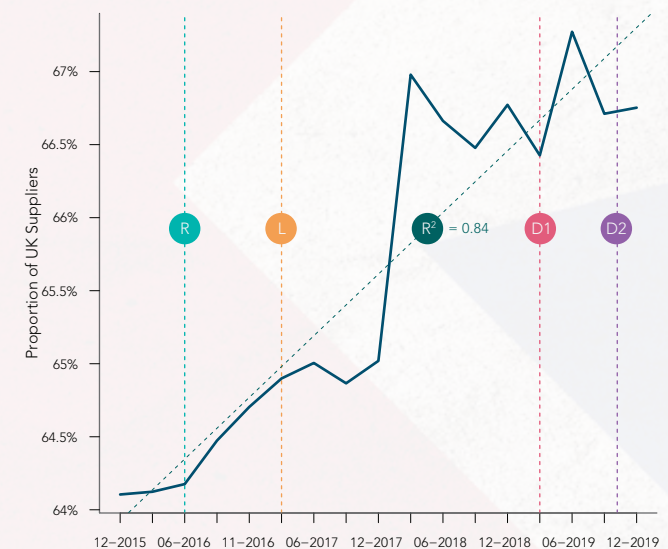


FIGURE 6: PROPORTION OF UK BASED SUPPLIERS IN THE SUPPLIER BASE OF COMPANIES IN THE UK

From the EU's point of view

Amongst companies based in the EU, the proportion of EU suppliers does not appear to change significantly (Figure 7), fluctuating around 80%. There is no discernible trend as the regression analysis shows a non-significant relationship with time.

Although the proportion of UK suppliers appear to be declining, the proportion of UK suppliers is generally low for EU companies (between 4% and 5% averaging at 4.6%) and the total change over the 4-year period is insignificant (Figure 8). Again, there is no discernible trend as the regression analysis shows a non-significant relationship with time.

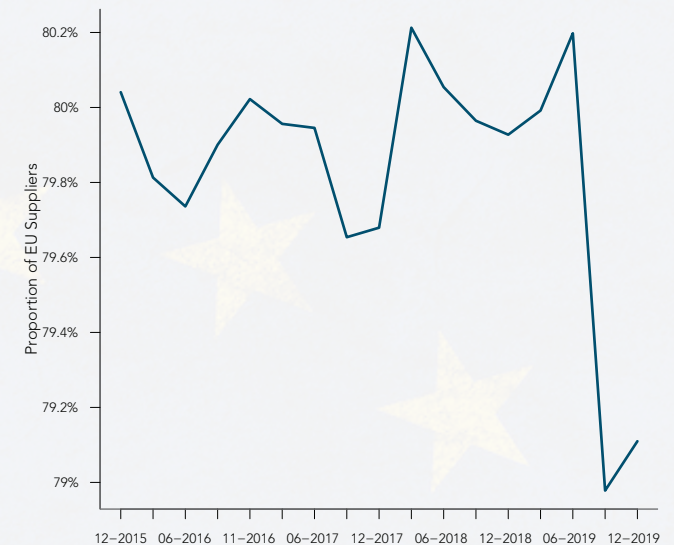


FIGURE 7: EU SUPPLIER PROPORTION FOR COMPANIES BASED IN THE EU

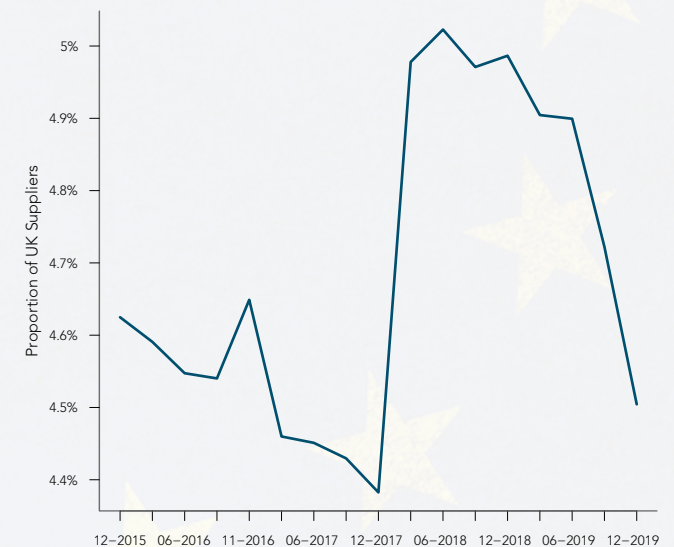


FIGURE 8: UK SUPPLIERS FOR EU COMPANIES

CONCLUSION

This research suggests that, so far, the Brexit process has had an impact on the appetite UK-based buying companies have for supplier risk. We have seen a movement to reduce supplier risk, especially in terms of financial risk and foreign exchange risk. The latter could be explained by UK-based companies shifting a proportion of their supplier base from the EU to the UK, as shown by our analysis, which could be to avoid potential trade barriers arising from Brexit.

Over the same time period, UK buying companies' perception of Supplier Criticality has increased. This suggests that, while actual supplier risks have decreased, buying companies' perception of dependency and risk exposure in their supply chains has increased. This is most likely fuelled by the uncertainty companies are facing from the Brexit process.

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About Cranfield

Cranfield School of Management is one of the oldest and most prestigious business schools in the UK. The Cranfield Centre for Logistics and Supply Chain Management, part of the School of Management, is Europe's largest grouping of faculty specialising in the management of logistics and supply chains. As a major centre of excellence, it has come to be recognised as Europe's leading centre for advanced research and teaching in these important fields. Cranfield's Logistics and Supply Chain Management MSc programme is ranked first outside the US and 11th worldwide in the SCM World "University 100" annual survey 2016.¹

1. [SCM World "University 100" annual survey 2016](#)



About Dun & Bradstreet

Dun & Bradstreet, a leading global provider of business decisioning data and analytics, enables companies around the world to improve their business performance. Dun & Bradstreet's Data Cloud fuels solutions and delivers insights that empower customers to accelerate revenue, lower cost, mitigate risk, and transform their businesses. Since 1841, companies of every size have relied on Dun & Bradstreet to help them manage risk and reveal opportunity.

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