

**Supply
chain risk
and the UK
construction
sector**



Introduction

The outlook for the UK construction industry will be as bumpy as 2022, with output forecast to decline in the first three quarters of the year. Supply chain disruption is the leading cause of anticipated mid-air turbulence.

Geopolitics and domestic developments far from the UK will continue to affect access to materials and their price. The reopening of the Chinese economy following the end of the “zero COVID” strategy and the ongoing conflict in Ukraine are two key international drivers of potential disruption. The post-Brexit realignment of UK-EU relations appears to be largely heading in a positive direction, but that could quickly change if the issue of Northern Ireland’s customs status is not resolved.

Meanwhile, domestically, demand for the work of the construction sector - particularly in relation to large infrastructure projects, but also smaller projects and homebuilding - remains affected by political vacillating and high demands on public spending. Although elections are unlikely before 2024, 2023 is the year in which the government and opposition will essentially go into campaign mode. Expect big promises on investment in building infrastructure to “level up” the country, which create potential for more opportunities in the coming years.

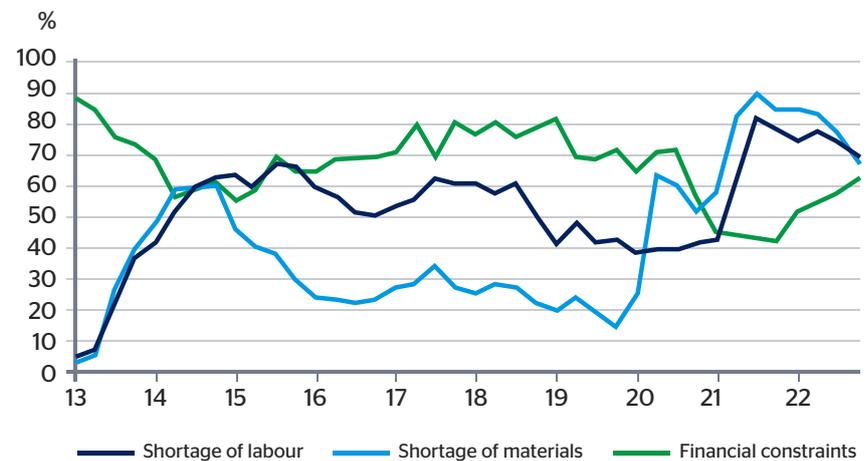
How important is supply chain risk for construction firms?

Since the first pandemic lockdown, a shortage of material inputs has been the largest factor constraining construction activity in the UK. Scarcity of inputs was cited by an average of 78% of construction firms as a brake on output across the four RICS Construction Market Surveys conducted in 2022, compared with 74% for shortages of labour and 56% for the firms' financial position (Fig 1). This is the highest percentage balance since the question was first asked more than a decade ago. According to the Office for National Statistics survey evidence released in December, 39% of construction firms attributed this to global production shortages, 21% to the Coronavirus pandemic, 9% to increased cost inflation, and 6% to transport issues.¹

A shortage of material inputs has been the largest factor constraining construction activity in the UK



Figure 1: What factors are limiting construction activity?



Source: RICS

It is possible to estimate the impact of the material input shortages on construction activity by undertaking a simulation on a large scale macroeconomic model.² The results of this scenario suggest that construction output in the UK was just over 2% lower than the baseline forecast in 2022 because of the difficulty in getting the required supplies. The prediction from this scenario for 2023 is of a similar order of magnitude.

Looking forward, the construction industry's supply chain is particularly vulnerable when it is reliant on inputs which are not produced domestically and supplies from abroad are sourced from a single or only a few countries. Examples of imported inputs where supply is heavily dependent on particular overseas countries are: bitumen and asphalt (68% of which is imported from the Netherlands), road rollers and tamping machines (68% of which are imported from Germany), and oriented strand board (OSB) (38% of which is imported from Latvia).

¹ ONS, 2023. "Business Insights and Conditions Survey data, Wave 73"

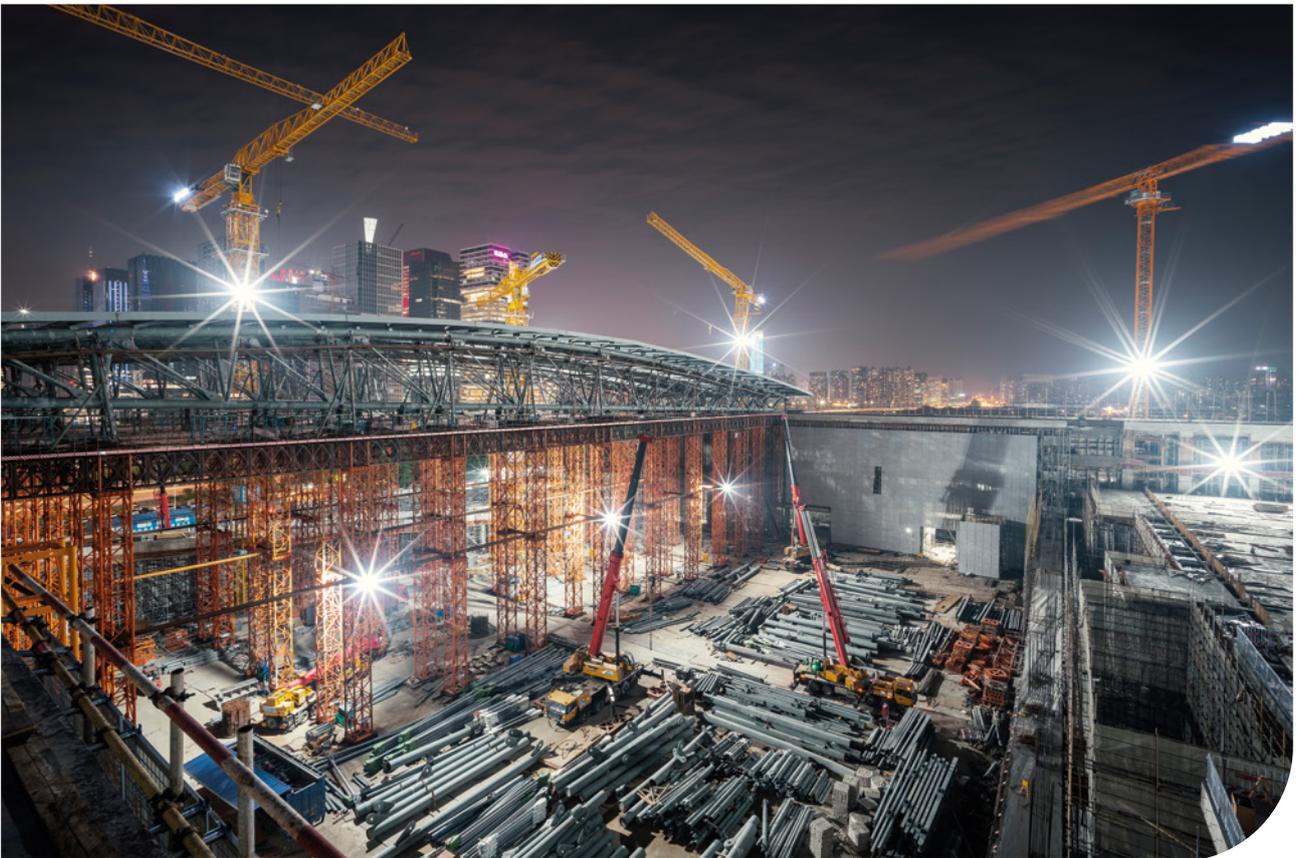
² Oxford Economics' Global Industry Model



There are broader indicators of supply chain concentration risk. Around 18% of total construction material imports are sourced from China, which might be vulnerable to Covid lockdowns or geopolitical risk.³ While trade data suggests 57% of construction material imports arrive by sea, where issues with ports may be a potential problem.

Key things to watch

- > Trajectory of the reopening of the Chinese economy - is it smooth and linear or do new lockdowns cause further disruption and suppress the supply of construction materials?
- > The continued Western response to the war in Ukraine - how far do further sanctions go, especially on the energy sector and energy prices?
- > UK-EU relations: a collapse of talks over Northern Ireland could call into question the broader post-Brexit agreement and lead to the imposition of new trade barriers.



³ Department for Business, Energy and Industrial Strategy. 2023. "Monthly Statistics of Building Materials and Components: Commentary, December 2022"



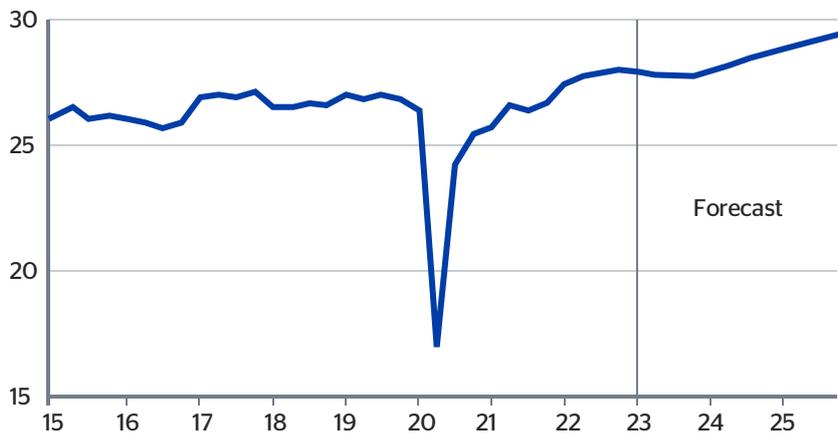
Construction output is predicted to decline for the first three quarters of 2023

Our central forecast

Our central forecast is the construction output will decline for the first three quarters of 2023 (a cumulative contraction of about 1%), before resuming positive growth in the fourth quarter (Fig. 2). The decline reflects the expectation that the whole economy will enter a shallow recession from the fourth quarter of 2022 onward. The main segment driving the contraction is house building, which is predicted to fall because of an expected decline in new house prices, reflecting falling household real disposable income, increases in mortgage interest rates, rises in unemployment, and a decrease in the number of people aged 25 to 34 who tend to be those who buy new builds. Infrastructure and non-residential construction are forecast to be more robust through the recession.

Figure 2: UK construction output

£ billions (2015 prices)



Source: Oxford Economics

Our central forecast encompasses a view of how the supply chain problems the construction industry continues to face will evolve in the future. But the scale and duration of the bottlenecks may be different.



What can construction firms do to lower supply chain risk?



The first is to shift from the “just in time” supply chain that was finessed during the period of economic stability around the turn of the century, towards a “just in case” supply chain to help insure against period of economic instability that firms are currently facing. The old school methods of boosting stock levels and ordering further in advance than normal still have a place. Albeit, they come at the cost of absorbing capital and storage space, which may require additional external finance to pay for stocks, restore liquidity, or rent warehouses.



Thirdly, diversifying procurement to build relationships with a number of suppliers is wise. This diversification can potentially occur across modes of transport or hubs (for example, different ports) suppliers use and the geographical location of suppliers’ supply chain to avoid overdependence on production facilities in the same part of the world. Scenario planning for plausible disruption, transport or logistical problems, and geopolitical issues is also advisable.



Secondly, for larger firms, technology can also play a role by automatically ordering supplies when stock levels go below a certain point. Where firms feel they may be left short, a smart move is to invest resources in gaining market intelligence about a wide range of potential suppliers.



Finally, where higher input prices are the likely fallout from supply chain disruption, construction companies could also consider adding a cost escalation clause to future contracts—that allows for an automatic increase in agreed-upon prices if certain conditions change—to provide the option of sharing expenses if they rise uncontrollably.



This report has
been developed
for QBE by
Control Risks and
Oxford Economics

QBE European Operations

30 Fenchurch Street
London EC3M 3BD
tel +44 (0)20 7105 4000
QBEurope.com

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