



Chain reaction

How UK manufacturers are adapting to supply chain challenges



Contents

Key takeaways	3	Strategies for success	13
<hr/>		<hr/>	
Executive summary:		Trade solutions	14
Mending the chain	4	About the authors	15
<hr/>		Additional sources	16
The issues:			
Heart of the storm	5-8		
<hr/>			
The effects:			
Unfinished business	9-10		
<hr/>			
The solutions:			
Fresh thinking	11-12		

About the research

This report is based on bespoke market research conducted by Censuswide among senior executives of 631 UK-based manufacturing businesses. The sample covered businesses with 10 or more employees operating in a range of sub-sectors, and was structured to enable statistically representative results for each UK region. The research was conducted between 21-31 October 2022. For economic modelling purposes, Development Economics has combined the findings with industry data sourced from the Office for National Statistics.

Key takeaways

Supply chain pressures continue to preoccupy UK manufacturers, who are having to deploy all their ingenuity to navigate the challenges, shore up profits and future-proof their operations, our research reveals.

- ✓ UK manufacturers are unable to realise the value of goods with a total value of £23.6bn that can't be finished or sold because key parts or materials are unavailable.
- ✓ Seven in 10 businesses are dealing with this issue, holding items worth over £1m on average that they are unable to finish or dispatch.
- ✓ Producers of steel and other metals have £9bn of goods held up awaiting completion, and food & drink manufacturers have £3bn. Plastics and electronics also currently account for large values of goods locked in production facilities pending completion due to supply chain challenges.
- ✓ Half of businesses say their customers are suffering fulfilment delays because of supply chain issues; a further 15% describe their hold-ups as significant.
- ✓ Almost four in 10 businesses have had to increase their storage capacity. A third have responded by bringing suppliers closer to home. A similar number are practising 'friend-shoring' – moving sourcing and manufacturing sites to more amenable locations and insulating them from less like-minded nations.
- ✓ Recruiting people with the right skills to meet businesses' needs is a sizeable part of the challenge. Manufacturers are currently seeking to fill more than 250,000 vacancies, or 14% of the workforce.
- ✓ Current pressures are making it harder for most manufacturers to achieve their sustainability goals, but undeterred, 64% have made sustainability more of a focus over the past six months.



Mending the chain

Persistent supply issues continue to stretch UK manufacturers

These are testing times for UK manufacturing. With November data highlighting an output fall of 2.3%, and every manufacturing sub-sector now reporting a drop, the past three months have marked the worst quarterly performance for the sector since the 1980s.^{1,2}

Many factors are in play, not least the high costs of energy, raw materials and transport, alongside geopolitical uncertainty, recruitment gaps and the onset of a recession. As our report reveals, supply chain issues – stemming from the Covid-19 pandemic and exacerbated by the invasion of Ukraine – are also continuing to hinder progress for many businesses.

“Our research reveals the sheer number of solutions being used by businesses to reconfigure supply chains.”

Lee Collinson

Managing Director, UK Head of Manufacturing, Transport and Logistics, Barclays Corporate Banking

Fulfilment times stretched

Despite this, the picture is more nuanced than headline economic figures suggest. Of our respondents, who lead manufacturing businesses across the UK, two-thirds report a higher turnover this year than in pre-pandemic 2019.

For a significant number of businesses, the current challenges are intense. Of the six in 10 facing supply chain difficulties, 47% are having to lengthen order fulfilment times. Almost as many are seeing a fall in their output as a direct consequence. Significant numbers report squeezed margins and a deterioration in client relationships.

Products in limbo

One effect of supply chain challenges is that 72% of manufacturers find themselves with items stacked in warehouses, awaiting final components, materials or ingredients. Seeing products frozen in this kind of stasis is frustrating for any business.

Producers of steel and other metals are holding £9bn of stock that can't be sold. Food & drink, plastics and electronics are also heavily affected.

In the face of these forces, there is something powerful about the proactivity and pragmatism being displayed by UK manufacturing leaders. Whether by transforming supply chains, trialling new methods or materials, or exploring new markets, our research reveals the sheer number of solutions being used by businesses to reconfigure supply chains in ways that enable them to survive and thrive, while securing the sector's future.



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Heart of the storm

Economic and geopolitical forces weigh heavily on businesses

Structural issues lie behind some elements of global supply disruption – the semiconductor shortage, for instance. But for many manufacturers, the current supply chain issues have their origins in the Covid-19 pandemic and the aftermath of the UK's exit from the EU.

While much of the economy has moved on, for this sector these problems linger. China's ongoing lockdowns continue to have consequences, with any hope of normalisation further curbed by the conflict in Ukraine.

The result is that 59% of the UK manufacturers we questioned are still experiencing supply chain challenges. Soaring energy costs top the list of concerns, magnifying these challenges.

Biggest barriers

After energy, the rising price of raw materials is the second-most common concern: 32% see this as a major challenge. Transport and logistics challenges, along with the location of supply chains, are the next most pressing issues.

Trade barriers are a concern for almost one in three manufacturers. They are a particular issue for the electronics industry (43%) and the automobile industry (41%). Construction and aerospace (both 45%) are most likely to be struggling with labour costs.

A third of food manufacturers struggle with the availability of materials, as the Ukraine war continues to limit supply of critical ingredients such as wheat and sunflower oil. Availability is also a severe problem in sectors such as electronics (39%) and aerospace (44%).

Supply blockages are most common from domestic sources – 32% have issues with suppliers in the UK. While only 13% cite East Asia as a supply blockage, this may mask issues faced by supplier tiers further down the chain.

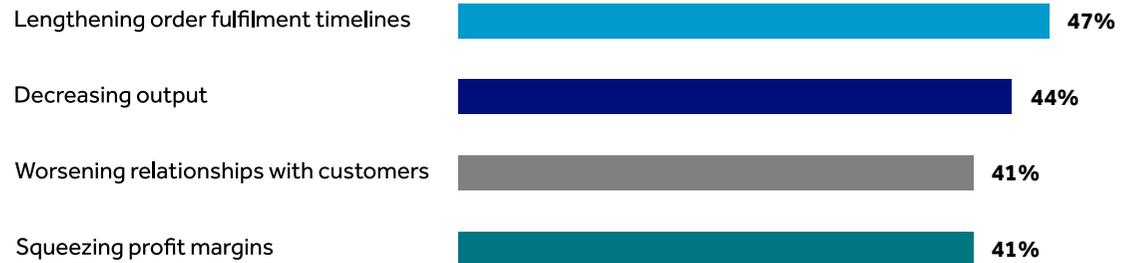
59% of UK manufacturers are still experiencing supply chain challenges; soaring energy costs top the list.





The sector is attempting to hire the equivalent of 14% of the current manufacturing workforce – this equates to more than 250,000 unfilled roles.

How supply chain issues are affecting manufacturers



Where clients are dependent on component parts for the wider manufacturing process, these issues force businesses to look at simplifying designs to work around the problem, or to seek alternative supply sources.

Exchange rates and prices

These issues are deepened by inflationary pressures and foreign exchange (FX) volatility. The weakness of the pound has piled on costs for 64% of respondents, including 11% who have seen a significant effect.

This has aggravated existing pressures for many. A significant 39% say FX volatility has heightened financial strain, and a similar number have seen an impact on profitability. Some 37% say it has forced them to change buying patterns, further disrupting production. For 34%, it has prompted exploration of onshore supply alternatives. Barclays has seen increasing client interaction with its FX specialists as businesses seek to mitigate FX risks.

The ability to pass on increases to customers will be key. However, a third of manufacturers say they are not currently able to hand on price increases – including over half in the automobile industry (57%) and 47% of clothes, electronics and furniture manufacturers.

Holes in the workforce

Recruitment difficulties are not new for the industry. High levels of vacancies can only exacerbate supply problems for manufacturers who are unable to find employees with the right skills to enable them to produce at the levels required.

Some 39% of manufacturers are currently recruiting. On aggregate, the sector is attempting to hire the equivalent of 14% of the current manufacturing workforce. This equates to more than 250,000 unfilled roles.

The issues

The recruitment gap is unevenly spread. Chemical & pharmaceutical manufacturers have 18% of roles to fill. In terms of numbers, food & drink producers have the biggest recruitment target, with 71,500 vacancies.

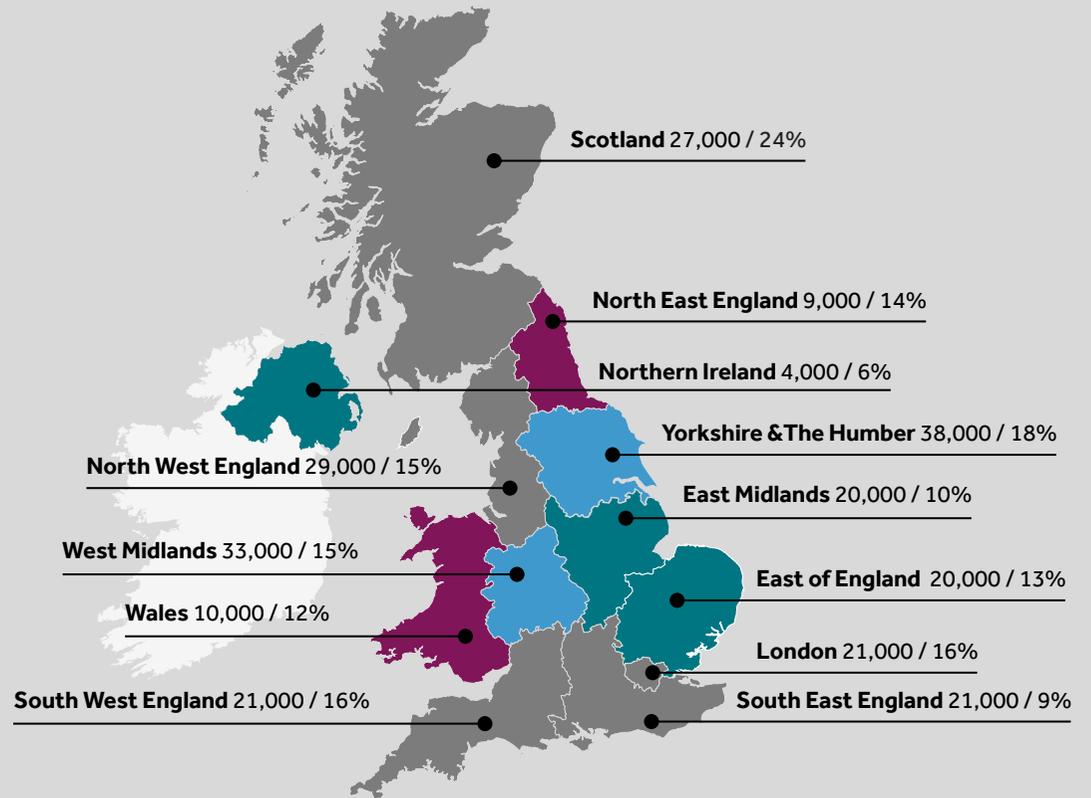
Scotland's recruitment effort is proportionally the biggest – the nation is looking to find just under a quarter (24%) of its baseline manufacturing employment level, some 27,000 roles. Businesses in Yorkshire and the Humber are recruiting for 37,800 roles (18% of the workforce) and the West Midlands for 32,600 (15%).

Cause for optimism?

There are signs that some of the core reasons for global supply chain disruption might be easing. Globally, port congestion has started to clear, space is becoming available on container ships and ocean freight rates have tumbled.^{3,4} In the UK, an industrial dispute has been resolved at the busy port of Liverpool, while autumn strike action at Felixstowe has not been renewed.^{5,6}

Perhaps for these reasons or because their own amelioration efforts are having desired effects, manufacturers are optimistic for improvement. Two-thirds expect supply chain issues to improve over the next six months, while 30% foresee little change.

Recruitment targets by region



Overall survey sample:

251,000

Aggregated current recruitment target

14%

Aggregated recruitment as % of 2021 workforce

Aggregated current recruitment target

31-40,000 21-30,000 11-20,000 0-10,000

%

Aggregated recruitment as percentage of 2021 workforce

The issues

Recruitment targets by sub-sector

Sub-sector	Aggregated current recruitment target	Aggregated recruitment as % of 2021 workforce
Food & drink	72,000	17%
Electronics	24,000	14%
Steel & other metals	24,000	8%
Chemicals & pharmaceuticals	21,000	18%
Plastics	19,000	14%
Automotive & transport	18,000	12%
Leather & paper	11,000	20%
Telecommunications	11,000	18%
Furniture & homeware	10,000	14%

For some businesses even two months of further disruption would put their existence in jeopardy. Three in 10 leaders say their companies could sustain current operations under existing challenges only for three to six months; businesses in the aerospace (87%) and telecommunications sectors (62%) are most likely to place themselves in this category.

If supply chain challenges don't improve within the next 12 months, more than 60% of UK manufacturing businesses predict they will have to close their doors.



Unfinished business

Unsold items worth £23.6bn are suspended in manufacturers' warehouses

One especially frustrating effect of the supply logjam is the volume of materials now awaiting completion or currently stored in warehouses because key components can't be sourced.

This is an issue for over seven in 10 (72%) manufacturers. The value of goods in limbo is significant – a total of £23.6bn, with each business on average holding unfinished products worth more than £1m.

Consumers may not feel the impact of these problems yet, since stockpiling action by retailers is ensuring a continued flow of goods to the shelves. However, if the supply chain issues persist for manufacturers this could ultimately affect end buyers.

Knock-on effects

Businesses are having to hold increased stock, either to lock in prices or to secure supply. At the same time, debtor numbers are inevitably on the rise because of the recessionary environment; manufacturers are having to pay more quickly to secure suppliers, or as part of new supplier relationships. The ultimate effect is that the working capital required for day-to-day operations is expanding.

Other consequences are equally significant. Some 47% of manufacturers say the time they take to fulfil orders has lengthened due to current challenges. Lead times are particularly stretched in the automobile (64%) and chemical & pharmaceutical industries (61%).

Value of goods awaiting completion due to supply challenges

Sub-sector	Value of products awaiting completion (£m)	Value of products as % of industry turnover (%)
Steel & other metals	£8,992	18.80%
Food & drink	£2,952	2.80%
Plastics	£2,590	11.20%
Electronics	£2,084	6.80%

*These sub-sectors occupy the top four places in a comprehensive list of sub-sectors totalling £23.6bn



The effects



Output has been reduced for 44% of companies and four in 10 say their relationships with customers have been damaged.

Region or country	Value of products awaiting completion (£m)	Value of products as % of industry turnover (%)
Scotland	£3,463	13%
East Midlands	£3,456	8%
East	£2,811	6%
Yorkshire & Humber	£2,014	5%
North West	£1,971	4%
West Midlands	£1,939	3%
South West	£1,815	7%
London	£1,655	2%
Wales	£1,396	7%
South East	£1,392	2%
Northern Ireland	£1,233	9%
North East	£465	3%
Overall survey sample	£23,611	4.7%

Some companies may have been forced to streamline their product offerings. Output has been reduced for 44% of companies, including two-thirds of aerospace manufacturers. And four in 10 (41%) say their relationships with customers have been damaged as a result.

Sustainability hindered

Supply chain challenges are also affecting manufacturers' progress towards sustainability. Nearly three-quarters (73%) say their goals have become less attainable, although their commitment to those goals remains intact. In fact, 64% say sustainability has become a stronger focus for them over the past six months.

Fresh thinking

Agility and ingenuity characterise manufacturers' response to challenges

One response to the supply chain challenges of the past few years has been to move away from the low-inventory, just-in-time model that had been standard for decades. Just-in-case models now prevail, putting warehousing space at a premium.

Some 39% of our respondents who are experiencing supply chain problems have increased storage and are holding more stock than before to compensate. Around two-thirds of aerospace manufacturers (67%) and 55% of automobile producers are adopting this way of working.

The next most common response is to widen the supplier base. More than a third (37%) have increased the number of suppliers of key materials, while 33% have moved to near-shore suppliers.

Similar proportions have switched to UK suppliers closer to their production facilities, or adopted a policy of 'friend-shoring' – building supply bases in allied or friendly nations. In addition, 32% are taking some elements of their supply chain in-house.

Price deals

Transformation of supply chains on this scale demonstrates the agility of UK manufacturers, but can come with drawbacks, as new suppliers may not be offering the same credit terms.

Most manufacturers do have fixed-price agreements with suppliers of their key components. In fact, 31% have agreements covering six months to a year, 32% of one to two years, and 27% of three to five years. Yet even fixed price deals may include scope for renegotiation based on movements in material prices. Clothing manufacturers have the longest price deals in place, averaging more than three-and-a-half years, while aerospace firms have the shortest average, at around 15 months.

Steps taken to manage supply difficulties



Similar proportions have fixed deals in place with suppliers of energy. With energy costs identified as the top supply challenge, manufacturers nearing the end of those deals face a dilemma about whether to lock in current high prices for a new term, or to join a variable tariff in the hope that prices decline.

Food & drink producers are working closely with their clients to ease the pressures, with growing recognition by the big supermarkets of the price pressures facing manufacturers.

Some 39% of manufacturers who are experiencing supply chain problems have increased storage and are holding more stock to compensate.



The solutions

Transformation of supply chains demonstrates the agility of UK manufacturers, but can come with drawbacks if new suppliers don't offer the same credit terms.

Financing solutions

The current economic environment leaves businesses squeezed between buyers seeking longer credit, and suppliers who are keen for faster payment. Some 42% of our respondents are seeking to optimise their working capital cycles in response to these pressures, including 57% of food & drink, chemicals & pharmaceuticals, and clothing manufacturers.

A similar proportion of manufacturers are accessing additional bank funding to help them meet current challenges. Turning to private equity is a consideration for 38%, while 32% are seeking shareholder loans and a similar proportion are selling assets to raise funds.

Working with their banks, manufacturers can seek structured funding aligned to their working capital cycle – this can be more flexible and expansive than traditional overdrafts or revolving credit facilities.

The forging of new supplier relationships increases the need for funding too, with new terms often requiring manufacturers to pay deposits, or even in advance. Combined with the greater uncertainty of using a new supplier, this may lead more companies towards using documentary trade products.

Strategy switches

One response to price rises is to explore new market sectors, a strategy being pursued by 28% of manufacturers and half of chemical & pharmaceutical producers.

More than a quarter (26%) are cutting their energy use, while a similar proportion (25%) see this as a chance to invest further in automation. Switching to new materials is a strategy popular with clothing manufacturers (43%).

Among more defensive strategies, 35% of construction manufacturers have opted to reduce their output. A fifth of companies have had to cut their workforce, including 32% of East Midlands firms and 30% in chemicals & pharmaceuticals, and furniture & homeware.

Policy options

Some aspects remain outside manufacturers' influence. Still, many would like to see the UK government invest in industrial energy transformation (37%), while others urge a more aggressive energy price cap for industry (32%).

Other popular policy actions among our respondents include incentives to attract investment (36%), as well as investment in skills development (35%) and UK infrastructure (32%).

Strategies for success



Monitor your chain

Visibility of your supply chain is key to predicting and heading off disruption. Run simulations to predict spikes and shortages, and ensure you have real-time data on demand, inventory, capacity and supply across the chain.



Take a fresh look

Think creatively about how to ensure speed and reliability of supply – could suppliers be moved closer to production, or even brought in-house? Can you strike mutually attractive terms with new suppliers? Or would it be viable to adopt alternative materials or manufacturing methods?



Consider financing solutions

Lending structured around your company's working capital cycles, via trade loans, import finance, asset-based lending and sales finance, can boost your available cash. Seek out facilities that can grow with your working capital cycle, plus a little extra headroom for safety.



Seek out export help

Many manufacturers are also exporters and can take advantage of government support via UK Export Finance – helping you access the support you need to fulfil contracts, and to guarantee payments even in challenging markets.



Trade solutions

Barclays' global networks, support and expertise can help expand your trading opportunities

Bonds, Guarantees and Indemnities

In a competitive marketplace, Barclays' trade finance bonds, guarantees and indemnities can elevate your credibility and attractiveness as a trading partner – assuring customers worldwide of your commitment to deliver.

Letters of Credit

With Barclays' expertise in letters of credit, you can trade in new markets or with new partners with confidence. We provide the documentary support to ensure timely payment or delivery and strengthen your trading relationships.

Trade Loans

Barclays' trade loans offer a flexible way to finance purchases while you are waiting for payment for goods. We can structure loans to suit your trading cycle and both regular and one-off financing needs.

Trade Collections

Barclays' extensive experience in international trade enables you to enter new trading partnerships and markets with confidence. Our comprehensive trade collections service offers added security whenever you import or export across world markets.

UKEF

Barclays has a strong relationship with the UK's export credit agency, UK Export Finance (UKEF). UKEF helps UK companies to: win export contracts by providing attractive financing terms to their buyers; fulfil contracts by supporting working capital loans; get paid by insuring against buyer default.

Foreign Exchange

Barclays helps corporate clients manage currency exposure. We can help you assess and address any foreign exchange (FX) needs across your business.

Receivables Finance

Businesses need a healthy cash flow. Our receivables finance solutions may be able to help you free up working capital to keep your business running smoothly.

Green and Sustainability Solutions

Barclays' range of Green and Sustainability Linked solutions support our Trade and Working Capital offering. To be eligible for a Green Trade and Working Capital solution the underlying transaction(s) or projects must, among other things meet a qualifying green purpose under the Barclays Sustainable Finance Framework Barclays also offer Trade and Working Capital solutions that link the price of the facility to the achievement of agreed sustainability performance targets. These demonstrate your commitment to your sustainability agenda by linking financing with sustainability objectives.

About the authors



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Lee Collinson is Managing Director and Head of Manufacturing, Transport and Logistics for Large Corporate across the UK. He joined Barclays in 1988 and has developed extensive lending experience while working in relationship and debt finance teams.

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Prior to his current role, Richard was Head of Large Corporate for the Midlands. This followed a period leading Debt Finance across both the Midlands and North of England.

Additional sources

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