





FOREWORD





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In the boardgame of chess, Zugzwang, the German term for a 'compulsion to move', is a situation where a player is obliged to make a move that will inevitably make their position worse.

The term perfectly encapsulates the predicament facing UK manufacturers. In many ways much of the UK economy feels trapped in a Zugzwang today.

Inflation in the UK, the US, and the Eurozone, is far above target, driven by a potent mix of high energy prices and domestic price pressures. The Bank of England is thus faced with the unenviable prospect of continuing to raise interest rates in an effort to bring inflation back to target, just as the economy enters an ominous recession such a measure could also worsen.

The tax burden was already at its highest since WWII and prices were rising at their fastest rate for 41 years before the Chancellor was forced in the Autumn Statement to raise more revenue in the face of domestic financial turmoil. With cash reserves weakened by the Covid19 pandemic the effect will likely result in a drag on growth.

The value of Sterling has declined meaning the cost of importing much needed raw materials and component parts is rocketing up at the same time as manufacturers are seeing a sharp fall in output demand and customer price elasticity. Yet inputs like electricity will always be needed no matter how high the price rises.

All manufacturers are playing a difficult game, but the resilience of this industry has been tried and tested many times before and firms continue to prove they can keep fighting on, no matter how many times they appear to be cornered.

In the latest edition of Make UK's *Manufacturing Outlook* report, in partnership with BDO, our survey suggests a sobering end to a very mixed year.

At the start of 2022 it was clear that the rate of growth in output and orders was beginning to slow, but activity remained strong, masked by a robust backlog from the pandemic. Businesses continued to expect growth in exports but in the end the domestic market provided the majority of business for many firms with manufacturers finding that global supply-chain disruption made domestic sales easier to fulfil.

The manufacturing sector already pays salaries 12% above the national average. But while ONS data show that nominal wages are rising at their fastest rate in more than 20 years, the soaring cost-of-living means incomes are falling in real terms so pressure to boost pay even further will continue to grow.

At the same time, a near record 86,000 vacancies mean the skills shortages is costing the industry almost £20 million a day in potential output. Consequently, manufacturers must play a gambit and continue to recruit despite slowing activity.

Across the board the sector has had a very difficult year. With no endgame in sight, it looks like 2023 will be equally as challenging.

HEADLINES

Make UK's Q4 2022 *Manufacturing Outlook* report, in partnership with BDO, shows manufacturers end the year in positive territory for output and total orders, but the signs of impending recession continue to grow stronger.

Output growth this quarter remained stable at +5% on balance, unchanged from Q3. This is following back-to-back slowdowns in activity since the start of this year. However, the current expectations laid out by manufacturers suggest industry is merely taking a brief pause before the slowdowns continue from next year.

The output and order gap has narrowed significantly this quarter indicating supply-chain challenges may be easing for some manufacturers. Access to inputs, such as metals and electronics, have improved in the last three months with recent Purchasing Managers Index (PMI) figures indicating better lead times. Businesses have also been reporting falling prices for freight and the Chancellor also recently removed import tariffs from 100 goods. The wide output and order gap observed earlier this year was partly the cause for rampant inflation, and this narrowing could be a sign that the rate of inflation could slow down.

Investment intentions, however, has declined for the first time since the start of 2021, reporting a balance of -5%. Extraordinary level of inflation and high energy costs has had the expected outcome of consuming liquidity which is now resulting in investment plans being held back or cancelled.

Prices have grown at near record rates for the eighth quarter in a row as manufacturers report little slowdown in the rate of inflation. On the other side, margins continue to tumble as it becomes nigh impossible to pass on costs as higher prices as new orders begin to fall.

Business and economic confidence have fallen sharply this quarter. However, optimism for individual businesses remain strong despite the plethora of challenges faced. Confidence in the economic environment has fallen into negative territory for the first time since late 2020 meaning manufacturers now expected a deterioration in the next twelve months. Many analysts are expecting a recession, with some suggesting the downturn has already begun.

INDICATOR	BALANCE	CHANGE	
Confidence	5.7	\downarrow	Businesses remain slightly optimistic
Output	5%	\leftrightarrow	Production activity unchanged
UK orders	-2%	\downarrow	Domestic orders contracted for the first time since 2020
Export orders	-6%	\downarrow	Exports decline outpacing the domestic market
Employment	3%	\downarrow	Jobs growth slows further but remains positive
Investment	-5%	\downarrow	Investment plans in reverse

Source: Make UK Manufacturing Outlook Survey

However, the biggest reason the output and order gap narrowed is not the easing of supply-chain disruption but the fall of demand which has resulted in a decline in new orders for many manufacturers.

Total orders growth fell from +15% on balance last quarter to +6% today. This means a balance of 6% of manufacturers reported increasing orders overall. However, the situation is very different when considering domestic and export orders separately, which includes firms that may do both domestic sales and exporting, or just one of these. The metrics for UK orders has turned negative for the first time since the pandemic, reporting a balance of -2%. The domestic market has supported the manufacturing industry with strong demand throughout the recovery period, but it is likely this growth has now come to an end. Export orders reported a balance of -6% of manufacturers seeing international sales decline, worse than the domestic market performance.

Employment growth and future investment intentions have both trended downwards, with the latter signalling an overall decline since the third quarter. Employment reported a balance of +3% suggesting manufacturers continue to hire despite a slowdown in activity. Although the growth rate has slowed. Investment

Confidence continues to dip but overall optimism remains high

Confidence in the next 12 months 1 = substantially worse, 10 = substantially better



OUTPUT

Two years on since the start of the pandemic manufacturers have been on a rollercoaster. As the pandemic brought on the single largest quarterly decline in output on record in 2020, the economy saw a remarkable rebound in activity throughout the majority of 2021.

This year has offered a list of old and new challenges, many of which are a consequence of the last few years. Inflation sums up the majority of these challenges due to rising energy costs and other inputs. However, due to strong demand output levels have remained positive over the course of this year, despite slowing consistently quarter on quarter between Q1 and Q3.

The latest survey reports the output balance at +5%, unchanged from the previous quarter. This is the first quarter this year the rate of growth in output has not slowed down, but it remains just above zero with expectations likely to turn negative in 2023. The balance figure for Q4 is well below the expectations set by manufacturers in previous quarters (it had initially been predicted to rise to +30%), as has been the case almost every quarter this year. The increasing challenge in predicting business

may also reflect the current fiscal environment, particularly on energy prices as the Government has affirmed the Energy Bill Relief Scheme (EBRS) will not be extended beyond April 2023, except for yet undefined "vulnerable" businesses. If gas prices remain high, it will be difficult for many manufacturers to continue operations and produce anything at all.

The situation for the intermediate subsectors remains mixed. Basic Metals, Mechanical Equipment, and Electrical Equipment all reported positive balances for output growth. Rubber & Plastics reported a flat performance, unchanged from the previous quarter. On the other hand, Metal Products (fabricators) and Electronics reported negative output balances that are significantly worse than the industry average performance.

The Electronics subsector continues to face supply-chain difficulties in accessing key components, especially semi-conductors which is likely the cause of the subsector's poor performance. However, manufacturers in this subsector expect an improved situation for the start of 2023, though recent US and UK sanctions on China might alter that possibility.

PAST THREE MONTHS



5%

NEXT THREE MONTHS

-19

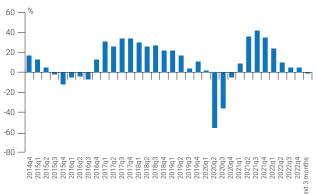
activity even three months ahead has become so difficult that manufacturers are consistently unable to plan forward. As a result, many of our survey's metrics are reporting negative expectations for next year.

Next quarter manufacturers forecast an output balance of -1%. For the first time since the pandemic, manufacturers expect their output levels to fall indicating that consistently high levels of optimism may finally be coming to an end. The bleak forecast

The smallest and the largest manufacturers by turnover appear to be performing well in comparison to the average performance. However, manufacturers in the middle range (£10-£24m turnover) have reported a very negative output balance. In many cases these businesses do not have the level of collateral available that big manufacturers have available to weather the storm, and equally may find it more difficult to access support as they are less likely to be considered vulnerable.

Output continues to slow

% balance of change in output



Source: Make UK Manufacturing Outlook Survey

Output summary

% balance of change

SECTOR	PAST 3 MONTHS	NEXT 3 MONTHS
Basic Metals	50%	50%
Metal Products	-9%	-12%
Mechanical	8%	-6%
Electronics	-29%	14%
Electrical	14%	0%
Rubber & Plastics	0%	9%
TURNOVER		
£0-9m	9%	6%
£10-24m	-13%	-1%
£25m and over	10%	6%

ORDERS

The total orders balance remains positive this quarter, although the rate of growth has been cut by more than half. Interestingly, the performance of domestic and export orders has reported negative balances this quarter indicating the performance of manufacturers who may be UK or export only could be resulting in irregular trends in the data.

The gap between the balance for output and orders have narrowed significantly since last quarter indicating supply-chain disruption may be improving. Access to raw materials and inputs have been challenging for manufacturers this year, but recently logistic cost has been coming down

UK ORDERS

UK orders have reported a negative balance of change for the first time since Q4 2020. However, even in decline its performance is relatively better than for export orders. A -2% balance is close enough to a flat performance as the domestic market appears to remain strong for some businesses. However, this fall into negativity is a cause for concern. Till now the domestic market's rate of growth has been a boon for the industry because even with rampant inflation strong demand for goods domestically have kept businesses going in trying times.

UK ORDERS	PAST THREE MONTHS	V	-2%	NEXT THREE MONTHS	V	-6%
EXPORT ORDERS	PAST THREE MONTHS	V	-6%	NEXT THREE MONTHS	V	-11%
TOTAL ORDERS	PAST THREE MONTHS	V	6%	NEXT THREE MONTHS	V	-2%

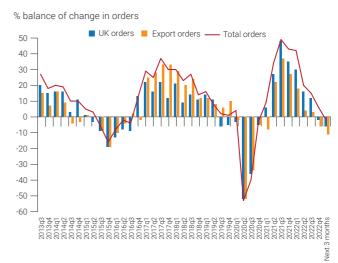
reducing pressure on business. However, the narrowing of output and orders may also reflect falling global demand.

Total orders reporting positive balances, whilst UK and export orders reported negative balances indicates that across the sample it is possible that manufacturers that sell both domestically and internationally may be performing better than those that sell exclusively to the domestic or international market. In such cases it is possible that for a typical manufacturer their UK orders could improve by more than the decline in exports, or vice versa, leading to a growth in total orders. However, across the sample some manufacturers that do not have diversified sales strategies and are now reporting declining UK or export orders resulting in a disparity in the survey data.

Manufacturers now predict negative growth for all measures of orders next quarter indicating the slowdown has finally reached contractionary territory. Whilst the balance for output remains positive this quarter, negative expectations for orders suggests output will also fall at the start of 2023. As the Bank of England and the OBR has already predicted, 2023 will pose a highly recessionary environment for businesses.

As manufacturers expect the domestic market to contract even further next year, forecasting a balance of -6% for Q1 2023, the latest result may signal the end of the recovery period as well as the completion of order backlogs.

All measures of orders growth are losing momentum



By subsector, the performance is mixed domestically with a number of intermediate industries reporting negative growth in orders, including Metal Products, Electronics, and Electrical Equipment.

However, both the Mechanical Equipment and Rubber & Plastics subsectors have reported above average positive balances for domestic market growth. The growth in the former subsector is a good sign of investment activity growing for capital goods in manufacturing, albeit a positive balance of +5% is low.

Like the survey results for output, both the smallest and largest manufacturers appear to be only just avoiding negative balances for domestic markets. However, businesses in the middle turnover region (£10-£24m) are seeing larger falls in demand than others.

EXPORT ORDERS

Export orders reported a balance of -6%, three times worse than the balance for domestic orders.

International orders have been underperforming in the UK since even before the pandemic as the UK has yet to increase trade with countries outside of the EU. Industry, however, continues to seek ways to ease trade frictions with our closest neighbours and HM Government recently extended the validity of CE markings to allow goods that meet EU standards to move freely in the UK.

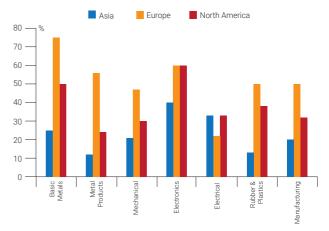
Nevertheless, the value of Sterling has been relatively stable in recent weeks which will improve the ability of manufacturers

to set contracts with international suppliers or customers. In addition, the Chancellor announced in the Autumn Statement that 100 goods will be exempt from import tariffs, including many foods and metals. This will ease inflationary pressures coming from overseas and may support the competitiveness of UK goods in the export markets. It is possible that export orders can still recover in 2023.

Furthermore, manufacturers continue to report positive demand conditions from the rest of Europe. North America remains the second strongest market for manufacturers and Asia completes the top three. Last quarter saw the Middle East also perform well for UK manufacturers but has fallen slightly in Q4.

Demand conditions weaken across most key markets

% of companies reporting positive demand conditions by market



Source: Make UK Manufacturing Outlook Survey

Orders summary

% balance of change

	UK O	UK ORDERS		ORDERS	TOTAL ORDERS		
SECTOR	PAST 3 MONTHS	NEXT 3 MONTHS	PAST 3 MONTHS	NEXT 3 MONTHS	PAST 3 MONTHS	NEXT 3 MONTHS	
Basic Metals	0%	17%	0%	0%	33%	33%	
Metal Products	-14%	-5%	-14%	-14%	-16%	-9%	
Mechanical	5%	-13%	-16%	-16%	9%	-11%	
Electronics	-14%	0%	0%	0%	14%	14%	
Electrical	-10%	15%	0%	0%	5%	23%	
Rubber & Plastics	9%	0%	0%	38%	18%	10%	
TURNOVER							
£0-9m	3%	0%	-7%	-10%	8%	0%	
£10-24m	-14%	-11%	-4%	-7%	-12%	-4%	
£25m and over	0%	0%	0%	1%	18%	8%	

EMPLOYMENT & INVESTMENT

Both the Employment and Investment intentions metrics have trended downward since last quarter, with investment entering negativity. Having both remained at suppressed, but positive, levels for the previous two quarters but this quarter marks a break from that pattern.

In the case of employment, the past year has been characterised by a high demand for skilled workers from manufacturers, but with insufficient supply to satisfy companies' needs. The tightest jobs market for half a century has seen the unemployment rate drop to just 3.6% and still there are 86,000 unfilled vacancies in UK manufacturing firms.

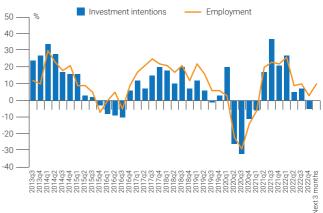
The difficulty filling roles is illustrated by our future 3-month intention employment metric, which has consistently shown over the year that manufacturers intend to hire more employees, but when that quarter comes to pass, companies were unable to realise an expansion in their headcount.

This quarter's employment figure maintains that pattern, with only a marginally positive balance figure for employment of +3% and a higher, albeit not as high as previous quarters, future 3-month intention balance figure of +10%. A balance figure as low as +3% has not been seen since the first quarter of 2020, during the pandemic. The main reason for the suppressed

manufacturing. The sustained inflationary environment has eroded confidence in UK manufacturing's outlook, and much of the industry is braced for a challenging year ahead as many of the hurdles being clambered over now look set to persist

Investment intentions turn negative for the first time since Q1 2021

% balance of change



Source: Make UK Manufacturing Outlook survey

EMPLOYMENT	PAST THREE MONTHS	\downarrow	3%	NEXT THREE MONTHS	个	10%
INVESTMENT	NEXT TWELVE MONTHS		-5%			

employment growth figures over the past year has been due to a lack of supply in the labour market. However, with overall demand for the industry's goods cooling off also, the demand for labour will likely follow suit and we will begin to see employment figures enter contractionary territory either next quarter or in Q2 2023.

Nevertheless, the latest ONS data¹ for active vacancies within the UK economy shows that demand for jobs within the manufacturing sector remains high, if not slightly cooled from the heights seen near the start of 2022. The latest figure for October this year reveals there are 3.6 vacancies for every 100 jobs employed within the sector. This is down from a high of 4.1 in February. For comparison, the average figure since 2001 (excluding the abnormal 2022) is 1.9, illustrating that there has been approximately twice the demand for labour in the UK's manufacturing sector in 2022 compared to the past twenty years.

Investment intentions have entered negative territory for the first time since Q1 2021, when the economy was in the grips of the Covid19 pandemic. This quarter's result showing contractionary investment intentions, confirms that the post-pandemic recovery period is well and truly over, as the new pressures of inflation, supply issues and energy have become the primary challenges to business prosperity in UK

throughout the next year also. This, of course, is weighing heavily on investment intentions, particularly as businesses now look to repurpose what was once capital expenditure funds into business continuity or contingency spend.

Employment and Investment summary

% balance of change

	EMPLO'	YMENT	INVESTMENT
SECTOR	PAST THREE MONTHS	NEXT THREE MONTHS	NEXT TWELVE MONTHS
Basic Metals	0%	0%	33%
Metal Products	-2%	9%	-16%
Mechanical	17%	3%	-6%
Electronics	13%	25%	-13%
Electrical	-9%	9%	5%
Rubber & Plastics	-9%	36%	-36%
TURNOVER			
£0-9m	6%	15%	-5%
£10-24m	8%	7%	-4%
£25m and over	6%	15%	1%

¹ ONS Vacancies by Industry data, Published 15th Nov 2022, accessed 30th Nov 2022.

PRICES & MARGINS

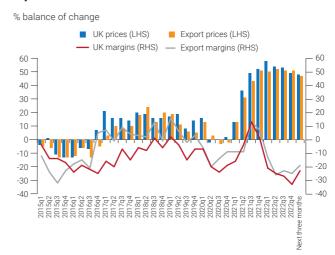
As we move towards the conclusion of the year, this period marks the 8th consecutive quarter where *Manufacturing Outlook's* price metrics have soared, indicating consistently high quarter-to-quarter price increases in every period since the start of 2021. By the fourth quarter of 2021, margins have also been in decline, now doing so for a 6th quarter in a row. The sustained inflationary environment that UK manufacturers are operating in presents perhaps the most significant risk to firms' prosperity.

Many of the previous inflationary quarters up until this point have been, at least, accompanied by a strong demand outlook, as illustrated by our Orders metric. This, for the most part, has cloaked the worst of the damaging effects of persistent price inflation within industry, as high demand has kept order books full, shop floors busy, and cash flows above water. Now, as demand cools significantly, the manufacturing industry is still saddled with significant price pressures, pressures that, counterintuitively, have not subsided in line with the fall in demand.

It has been the expectation for some time that the UK manufacturing industry was heading for a period of 'stagflation', a phenomenon where there is little to no growth but where price inflation perseveres. This is the first quarter where the data, regrettably, confirms clearly those predictions have come true.

illustrating that the situation is worsening with yet further declines in both UK margins and Export margins balance figures, at -33% and -25% respectively.

Prices growth remains historically high but hints at a pace reduction



Source: Make UK Manufacturing Outlook Survey

UK PRICES	PAST THREE MONTHS	Ψ	49%	NEXT THREE MONTHS	\downarrow	48%
EXPORT PRICES	PAST THREE MONTHS	\leftrightarrow	51%	NEXT THREE MONTHS	Ψ	47%
UK MARGINS	PAST THREE MONTHS	\forall	-33%	NEXT THREE MONTHS	个	-23%
EXPORT MARGINS	PAST THREE MONTHS	Ψ	-25%	NEXT THREE MONTHS	个	-19%

One solace, however small it may be, is that the balance figures for our UK prices and Export prices metrics are not quite as high as they have been in the previous two quarters, posting figures of +49% and +51% respectively. This is down from a peak, in the case of UK prices, in the first quarter of 2022 in which we saw a balance figure of +58%. Nevertheless, the relative difference between these figures is small, and the overall price balance figure this quarter is eye-wateringly high.

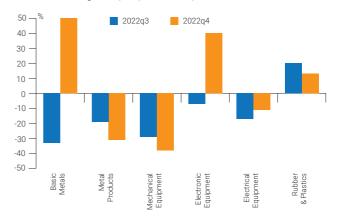
Recent ONS² data details a similar story, with the latest Producer Price Inflation (PPI) figure standing at 19.2% on the year to October, a little down from the highs observed around July at approximately 24%.

The practical concern for industry arises in the relationship between businesses' margins and these elevated prices. Our data shows that despite 8 consecutive quarters of price rises, the manufacturing industry has endured 6 consecutive quarters of margin decline, with the latest data this quarter

² ONS Producer price inflation published 16th Nov 2022, accessed 30th Nov 2022.

Export prices of materials signalling a fall in price

% balance of change in export prices in the past three months

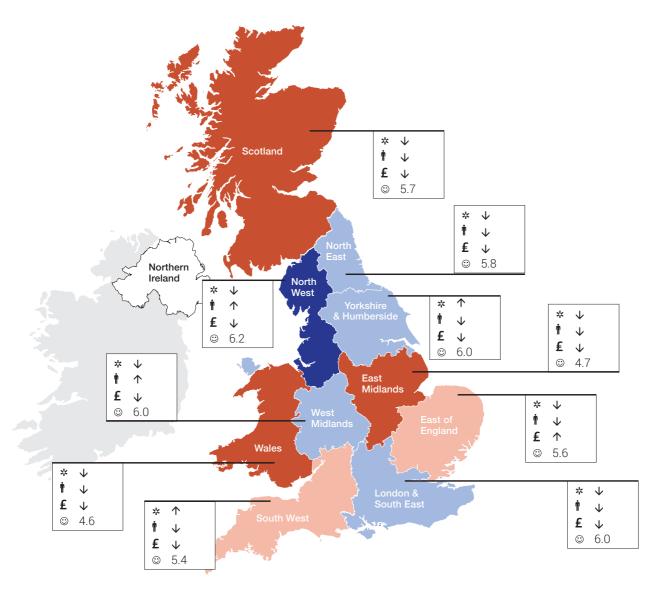


Source: Make UK Manufacturing Outlook Survey

NATIONAL & REGIONAL

This quarter's *Manufacturing Outlook* report finds that, overall, manufacturers remain optimistic about business conditions but in some locations, firms have become relatively more negative. The national average for business confidence reports an overall fall, with eight out of ten

locations reporting positive expectations for the year ahead (i.e. those regions that have reported above the '5' inflexion point)³. Average confidence in the UK economy has also declined for the fifth quarter in a row.



KEY:

↑/↓ INCREASE/DECREASE ON PREVIOUS QUARTER

- ★ OUTPUT
- **†** EMPLOYMENT
- **£** INVESTMENT
- BUSINESS CONFIDENCE

The map is coloured according to the business confidence levels difference from average UK business confidence



³ This includes Scotland which follows a different survey elicitation method, which means Scottish confidence values should be compared with other Scottish confidence values only.

Most regions reported positive expectations for the year ahead this quarter, although the confidence level, measured on a scale of 1 to 10, has fallen greatly. This is despite manufacturers consistently underestimating their order books and overestimating their output ability this year. The positive attitude of manufacturers is surely one to be celebrated but firms are becoming more aware of the increasing difficulties of forecasting expectations beyond more than a few months ahead.

However, consistently high optimism may reflect the normalisation of unpredictable disruptions (or what economists call Knightian uncertainty) being built into business models over time. Since the pandemic manufacturers have become significantly more resilient in the face of uncertainty as practices to preserve short-term liquidity for "just-in-case" scenarios have become more prevalent. This, however, can result in a long-term decline in investment activity which is highlighted in the latest survey results.

Despite confidence being high, it is on a downward trend and likely to fall further in 2023 if current expectations for output and orders come to pass. For the first time this year manufacturers are predicting a slow-down in activity and many analysts, including the Bank of England and OBR, are forecasting a long recession.

Confidence is increasingly a less reliable measure of performance due to its volatile nature and the rise of uncertainty in the economic environment has made it more difficult to plan. Additionally, the energy crisis remains the biggest threat to manufacturers in the short term whilst labour and skills shortages will slow down the industry's recovery once the recession does come to an end.

Headline business confidence reported at 5.72, a fall of 0.77 from Q3 2022. This is the largest fall in business confidence recorded since the start of the pandemic.

However, average business confidence has turned negative in some locations for the first time this year. Both the East Midlands (4.71), and Wales (4.63) reported negative business confidence this quarter, whilst the rest of the UK reported positive business confidence.

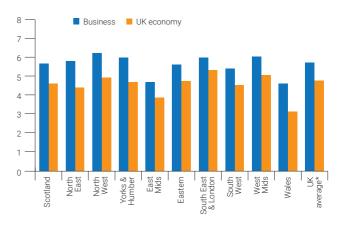
The North West reported the highest business confidence at 6.2, but still reported a fall from last quarter. For the first time this year, no region or nation reported an improvement in business confidence. The smallest change in confidence was reported by the North East where manufacturer's optimism declined by only 0.1.

UK ECONOMY CONFIDENCE

Manufacturer's views of the overall UK economy came in at 4.79. This means, for the first time since the height of the Covid19 pandemic in Q4 2020, more manufacturers believe that the wider economic environment will deteriorate over the next twelve months. This is unsurprising given the number of news stories suggesting the possibility of imminent recession.

Business confidence turns negative for some locations

Confidence in the next 12 months 1 = substantially worse, 10 = substantially better



 Average =/= component parts due to instances of undeclared regionality Source: Make UK Manufacturing Outlook Survey.

Regional summary

% balance of change

	оит	OUTPUT		TOTAL ORDERS		EMPLOYMENT	
REGION	PAST 3 MONTHS	NEXT 3 MONTHS	PAST 3 MONTHS	NEXT 3 MONTHS	PAST 3 MONTHS	NEXT 3 MONTHS	
Scotland	6	24	17	14	13	24	
North East	10	-20	33	44	-10	30	
North West	-10	5	-14	-5	10	19	
Yorks & Humber	-5	25	5	10	10	-15	
East Mids	12	0	-12	6	-24	-12	
Eastern	26	0	11	-16	11	42	
South East & London	-18	-8	-5	-3	-8	-3	
South West	13	-7	-7	-7	-13	-20	
West Mids	4	-31	0	-15	12	0	
Wales	-25	-38	-13	-25	-38	0	

ECONOMIC ENVIRONMENT

If a week is a long time in politics, a fiscal quarter is a lifetime.

When Manufacturing Outlook was last published, Prime Minister Liz Truss had just been sworn in by HM Queen Elizabeth. The UK economy was growing (slightly), and the government opted for a "mini-budget" of £45bn in tax cuts.

Spooked by the unfunded giveaway, financial markets' concern about the country's ability to repay its debts triggered a tanking of the Pound. That pushed the UK's monthly borrowing costs to their second highest since records began, resulting in higher loan repayments for businesses and mortgage holders, and a collapse in the value of pension funds. The IMF warned that HM government's experimental economics threatened global financial stability.

Truss was ousted from office, the shortest serving PM in history. New King Charles II swore in her successor, Rishi Sunak, who moved swiftly in the Autumn Statement to introduce a new era of austerity as the Office for Budget Responsibility (OBR), the independent watchdog for the government's finances, warned the UK faces its longest recession on record.

Weaker Sterling means it costs more for UK manufacturers to import raw materials or component parts. Food and drink firms continue to do everything they can to keep product prices down, but increases in ingredients, energy, and other costs saw grocery inflation alone jump to 14.6% this year.

The tax burden is now at its highest since WWII. Prices are rising at their fastest rate for 41 years, driven by the cost of fossil fuels. Inflation, which measures how the cost-of-living changes over time, is expected to peak around 11.3% by year-end, remaining above 9% in early 2023 – four-and-a-half times the Bank of England's 2% target, despite the Monetary Policy Committee raising rates eight times in a row so far to try to get it back on target. For factories, producer input prices are even higher, up 19.2% in the year, nearly double consumer inflation.

Manufacturers are seeing a sharp fall in industrial activity. Semiconductor supplies continue to be disrupted by ongoing Covid19 lockdowns causing erratic levels of production, a problem likely to worsen as the US and UK step up trade sanctions against Chinese technology firms on national security grounds. So the output gap will probably persist into 2027.

It is now expected that UK interest rates will grow from their current level of 3% to 4.75% next April, but they won't hit the 5.25% that markets had previously predicted.

Nevertheless, thanks to the post-lockdowns rebound in emerging markets, the world economy will grow by 2.2% next year, but global (as well as domestic) factors mean the UK will take longer to recover than other states.

The OECD says that among the G20 economies, only Russia (now subject to economic sanctions) is predicted to fare worse than the UK next year. Germany (which prior to the war in Ukraine was uniquely reliant on Russian trade, especially gas) is the only other major economy expected to shrink but, of these, the UK is forecast to be the only one that will be smaller in 2025 than it was at the start of the global Covid19 pandemic.

UK GDP declined in September raising the risk of recession

Contributions to monthly GDP, percentage points, March 2021 to Sept 2022

3.0
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1.5
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GDP

Construction

Source: ONS

Manufacturing and Other Production

The Bank of England predicts the UK will shrink by 1.4% next year, causing the biggest drop in living standards on record.

ONS data show that while nominal wages are rising at their fastest rate in more than 20 years – 5.7% (excluding bonuses) since January – when adjusted for rising prices, wages have fallen by 2.7% in real terms this year.

The soaring cost of living has helped trigger an unprecedented number of strikes, from railway staff to NHS professionals, university lecturers, postal and dock workers, and approximately 100,000 civil servants. Employers are witnessing a new winter of workers' discontent.

The tightest jobs market for half a century will put pressure on firms to boost pay. The size of the workforce continues to shrink. The unemployment rate is just 3.6%. Labour and skills shortages remain a big challenge for manufacturers, although the amount of vacancies has fallen from a record 97,000 earlier this year to 86,000 at present.

The economic inactivity rate – the proportion of people aged between 16 and 64 not looking for work – is also a record high of 22%, owing to increased early retirement by older workers post-pandemic, and a rise in long-term illness numbers caused by the growing NHS backlog and

UK Economic Forecasts

% change except where stated

	2021	2022	2023
TRADING ENVIRONMENT			
Exchange rate (€/£)	1.16	1.12	1.12
Exchange rate (\$/£)	1.38	1.10	1.12
Exports	-0.4	6.8	4.7
Imports	3.9	14.0	0.2
Current account (% GDP)	-3.0	-5.60	-4.10
OUTPUT			
Manufacturing	6.8	-4.5	-3.2
GDP	7.5	4.4	-0.9
COSTS AND PRICES			
Average earnings	5.8	6.0	4.8
Oil price (Brent Oil \$/bl)	70.7	103	92
EMPLOYMENT			
Manufacturing (000s)	2,533	2,604	2,553
Rest of economy (000s)	34,963	35,649	35,249
Unemployment rate (%)	4.5	3.7	4.4

Source: Oxford Economics and Make UK

the number of people with long-covid.

These twin trends mean the Treasury expect unemployment to almost double by 2025 because of declining economic activity.

International Economic Forecasts

% change

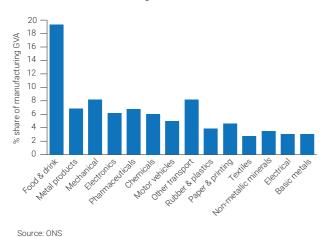
		GDP			INFLATION		
	2021	2022	2023	2021	2022	2023	
US	5.7	1.8	-0.4	4.7	8.1	4.9	
Eurozone	5.2	3.1	-0.1	2.6	20.3	14.1	
France	7.0	2.5	0.2	1.6	5.3	4.8	
Germany	2.8	1.5	-1.1	3.1	8.1	5.1	
Japan	1.6	1.6	0.9	-0.2	2.3	1.4	
China	8.1	3.1	4.2	0.9	2.2	2.4	
India	8.3	7.0	4.4	5.1	6.9	5.5	
World (2015 PPPs)	5.9	2.9	1.3	4.3	7.9	5.3	

Source: Oxford Economics

SECTOR FORECASTING 22Q4

Q4 2022 Manufacturing Sector composition by GVA (% share)

Subsector share of Manufacturing Gross Value Added



NOTE: Most subsector forecasts have turned negative for the 4th quarter of 2022, while this is in keeping with the direction of travel for the sector's performance, the scale of the decline is exaggerated due to a change in the Office for National Statistics methodology for calculating national accounts.

FOOD & DRINK

As the UK's largest subsector in terms of Gross Value Added (GVA), the Food & Drink subsector has the largest influence on overall UK manufacturing performance. The total proportion of manufacturing GVA that the Food & Drink subsector accounts for has increased by a percentage point this quarter compared to last, rising to 19.3%. The subsector is one of only two to retain a positive output forecast for 2022 this year, with a growth of 2.7% in output expected. The forecast for 2023 is less positive, with a small contraction of -1.5% expected. The National Farmers Union (NFU) has warned that the UK is sleepwalking into a food supply crisis next year due to fertiliser, feed and labour shortages. In keeping with output forecasts, the employment outlook is down, with a total growth in employment this year expected to be 1.7%, but with a decline of -3.7% in 2023.

ELECTRONICS

Following an upward revision to the **Electronics** subsector forecast last quarter, the latest and final

forecast for the subsector's output in 2022 stands at -4.6%. While this is a significant downgrade, it is in line with the overall UK manufacturing average output forecast for 2022 which stands at -4.5%. Where some pessimistic divergence occurs is in the 2023 forecast, the electronics subsector is forecast to decline in output by -4.9%, a more negative forecast for 2023 than the overall manufacturing average of -3.9%. Employment is set to decline by -3.6% for the subsector in 2022, and by -4.6% in 2023.

BASIC METALS AND METAL PRODUCTS

Having seen positive revisions to its forecast every quarter this year, the **Basic Metals** subsector endures its first negative revision of the year in this fourth quarter. However, it is one of only two subsectors that have managed to retain a positive output forecast for 2022 despite this downward revision, with the final output forecast of the year for the subsector standing at 2.1%. The 2023 output forecast fails to maintain this positivity, with a decline of -5.3% in output expected, approximately two percentage points below the average manufacturing forecast for 2023. Total employment in the subsector is forecast to have grown this year, with a growth of 9%. This is expected to remain roundly flat in 2023, with only a marginal decline of -0.3% in employment in 2023.

The **Fabricated Metals** subsector often sees its performance trend alongside the Basic Metals subsector. However, in this quarter we see a divergence in the expected output performance. Having held an expansionary forecast only last quarter for output, the latest forecast shows that the subsector is expected to decline in output by -12.8% this year, the most negative output forecast for 2022 out of all UK manufacturing subsectors. The forecast for output in 2023 is far less dramatic, albeit with a contraction in output expected by -2.9%. Counterintuitively, employment is expected to have grown in 2022, by 10.6%, but again with flat expectations for 2023. The employment forecast for next year for the subsector stands at 0.4%.

MECHANICAL EQUIPMENT

The **Mechanical Equipment** subsector once again finds itself falling victim to volatile forecasts. As it is such a significant recipient of both domestic and foreign capital

expenditure ambitions, its prospects can waver when investment intentions go to ground. The latest and final forecast for the subsector's output in 2022 stands at -10.4%. 2023 holds little respite in this trend towards negativity, with output expected to decline by -8.4% next year. Employment, however, remains just slightly positive, with an expansion in 2022 by 1%, and a further increase in 2023 by 0.6% forecast.

TEXTILES

Having experienced the most significant output growth in 2021 out of all manufacturing subsectors in the UK, some contraction in the following year or two was to be expected in the **Textiles** subsector. However, the subsector has tempered expectations by posting a 2022 output forecast that is less negative than the average by just over a whole percentage point, at -3.2%. The forecast for next year is imbued with greater pessimism, with a contraction in output by -6.8% expected in 2023. Employment is forecast to have declined this year by -3.5%, and is set to continue its decline in 2023 by -8.4%.

PAPER & PRINTING

The **Paper & Printing** subsector posted double-digit output growth in 2021, but the prospects for its performance in 2022 have worsened. This latest forecast for the subsector's output this year stands at -3.2%. While a negative forecast, it remains just over a percentage point above the average. The outlook sours a little further in 2023, where the forecasted decline in output is more negative at -5.4%. Employment, on the other hand, has not been subject to negativity, at least this year. The latest forecast shows that employment will have grown in this subsector in 2022 by 4.1%, approximately twice as much growth seen across the manufacturing average in 2022. The 2023 employment forecasts return to negativity, however, with a decline in numbers employed in this subsector by -4.4%

ELECTRICAL EQUIPMENT

The **Electrical Equipment** subsector has seen its output forecast for 2022 drop into deep negativity. It is the second deepest contraction in output forecast this year out of all UK subsectors. Last quarter's forecast for the subsector was also one of the weaker on the field, so it was already starting from an unfavourable footing before this most recent round of downgrades. The final output forecast for 2022 is -12.4%, which is approximately thrice as negative as the average. The 2023 forecast is also

negative, at -9.3%, which in a similar vein is thrice as negative as the average manufacturing output forecast for 2023. Employment, on the other hand, is a starkly different story, with a forecast expansion in 2022 by 7.8%, and by 3.8% in 2023. This subsector's employment forecast represents the focus that businesses are putting on retaining and recruiting labour despite rocky business conditions

NON-METALLIC MINERALS

The **Non-metallic Minerals** subsector is best known for manufacturers that primarily supply the construction market with bricks, mortar, glass and other such materials. The subsector's final output forecast for the year has fared slightly better than the average, albeit remaining contractionary at -4%. However, the outlook for 2023 output is less negative, with a decline of -1.3% expected, approximately two and a half times more positive than the manufacturing 2023 output forecast average. Employment is also forecast to have grown this year, by 6.5%, with the employment forecast for 2023 set to remain flat at 0%.

PHARMACEUTICALS

The **Pharmaceuticals** subsector is unique as it has not seen its 2022 output forecast change despite an overall trend towards contraction seen in the wider industry. Since the start of the pandemic, the performance of the pharmaceuticals subsector has taken a very different path, seeing significant growth in output in 2020 despite across-the-board declines seen in most subsectors, as the demand for Covid-19 related interventions bolstered the subsector's prospects. Now, as demand for those interventions cools, the subsector is declining from those temporary highs but remains somewhat insulated from the full brunt of market forces weighing on other subsectors. Employment is forecast to have contracted in the sector this year, by -8%, with a further decline of -8.4% expected in 2023.

CHEMICALS

The **Chemicals** subsector saw similar, albeit to a lesser degree, trend-bucking performance in 2020 and 2021 akin to the Pharmaceuticals sector due to its provision of Covid-19 interventions. This deviation from the trend continues, as the chemicals subsector sees its final output forecast for the year revised upwards to -3.9%, half as negative as the subsector's forecast for output the previous quarter. However, the 2023 output forecast

stands at -6.2%, which is just under twice as negative as the overall UK manufacturing average output forecast for 2023. Employment in 2022 is set to have declined by -6.6% this year, with a significant further decline forecast for 2023 by -9.5%. This is the most negative 2023 employment forecast out of all UK manufacturing subsectors.

RUBBER & PLASTICS

The **Rubber & Plastics** subsector has also seen a U-turn in its output growth prospects for 2022. Having held a positive forecast last quarter, in this final forecast for the year the expected output change is forecast to be -9.4%, over twice as negative as the UK manufacturing average and placing it as the subsector with the 4th largest output contraction this year. The forecast for 2023 suggests the trend will continue, with a contraction in output by -6% expected, again twice as negative as the UK average output forecast for 2023. As in many subsectors, Employment growth continued despite bleak output performance, with an increase in headcount, up 1.9% in 2022, and a 2023 forecast for further employee growth of 6.3%.

MOTOR VEHICLES (AUTOMOTIVE)

This quarter's revision to the **Motor Vehicles** subsector forecast comes as a disappointment, as the subsector

had only recently moved toward positive output growth having lagged the wider industry's post-covid recovery. The latest and final forecast for the subsector's output in 2022 is -7.7%. There is, however, a silver lining to the cloud as 2023's output forecast is very positive, and is the most positive output forecast for 2023 out of all UK manufacturing subsectors at 9.2%, indicating that output expectations have been pushed into the future as opposed to being cancelled. Employment is forecast to have grown by 3.9% this year, with a -4.1% decline forecast for 2023.

OTHER TRANSPORT

The **Other Transport** subsector, which is comprised of aerospace, defence, shipping and rail industries, is forecast to see a decline in its output this year in line with the manufacturing sector average at -4.5%. Similarly to the automotive industry, the other transport subsector saw almost a year's delay before metrics improved in the post-pandemic recovery period. The output forecast for 2023 is also positive at 1%, bucking the trend toward negativity seen in the wider industry. The employment growth forecast for this year is the third highest out of all manufacturing subsectors at a growth of 8.2%, with the outlook for employment growth in 2023 set to be roundly flat, at -0.2%

Sector growth rates and forecasts

% change

	OUTPUT			EMPLOYMENT		
	2021	2022	2023	2021	2022	2023
Basic metals	1.8	2.1	-5.3	0.9	9.0	-0.3
Metal products	7.0	-12.8	-2.9	0.5	10.6	0.4
Mechanical	14.6	-10.4	-8.4	-3.8	1.0	0.6
Electronics	1.4	-4.6	-4.9	-9.7	-3.6	-4.6
Electrical	8.6	-12.4	-9.3	-1.2	7.8	3.8
Motor vehicles	3.1	-7.7	9.2	-3.1	3.9	-4.1
Other transport	-5.6	-4.5	1.0	-5.6	8.2	-0.2
Food & drink	4.2	2.7	-1.5	4.6	1.7	-3.7
Chemicals	2.0	-3.9	-6.2	0.3	-6.6	-9.5
Pharmaceuticals	3.7	-6.3	0.3	-7.4	-8.0	-8.4
Rubber and plastics	10.9	-9.4	-6.0	-9.1	1.9	6.3
Non-metallic minerals	15.1	-4.0	-1.3	-1.4	6.5	0.0
Paper and printing	13.3	-3.2	-5.4	-8.4	4.1	-4.4
Textiles	18.4	-3.2	-6.8	-13.1	-3.5	-8.4
Manufacturing	6.8	-4.5	-3.2	-2.6	2.7	-2.0

Source: Oxford Economics

Source: Oxford Economics

BDO VIEWPOINT

TAX RELIEF CHANGES – WHAT IT MEANS FOR MANUFACTURERS

Following an optimistic start to the year, our survey has shown a continued slowdown as manufacturers felt the impacts of the challenges they are facing. It is no different this quarter, with the sector experiencing a slowdown across all our key indicators with investment and orders in negative territory.

With the challenges being faced across the sector, manufacturers are having to shift how they are conducting their business, and cash flow continues to be a challenge.

Tax incentives can help boost cash flow and manufacturers should consider conducting a detailed review of their R&D claims to not only reduce current tax liabilities but also to utilise tax benefits that can help drive further innovation and investment in the sector. Additionally, by re-evaluating expenditure in prior years, manufacturers could generate a tax repayment, for example by identifying where R&D claims should have been made or where qualifying costs have been missed.

FOCUS ON R&D CLAIMS

In recent weeks, R&D incentives have been hitting headlines and, for a while now, HMRC has been taking a much closer look at R&D claims in an effort to combat fraudulent and/or over inflated claims. This has highlighted the importance of a review of the R&D regime to ensure that the UK remains internationally competitive and encourages innovative companies in the UK.

Last year's R&D consultation led to reforms and changes from April 2023. These, coupled with the increased publicity in R&D claims and the recent announcements in the Autumn Statement, mark the first step in overhauling R&D incentives in the UK. The government will also be consulting on the design of a single R&D tax relief scheme for companies of all sizes for the future.

WHAT ARE THE CHANGES?

R&D tax relief offers valuable financial support to manufacturers, so understanding exactly how it works and when rules for the available tax relief change, will be of critical importance.

For expenditure on or after 1 April 2023:

- The Research and Development Expenditure Credit (RDEC) rate will increase from 13% to 20%
- The small and medium-sized enterprises (SME)
 additional deduction will decrease from 130% to 86%
- The SME credit rate will decrease from 14.5% to 10%.

However, the impact of these changes are further complicated by changes in corporation tax rates and the company's accounting year end date – so they will need to be considered carefully.

A number of technical and administrative changes are also on the way, but unlike the rate changes, these apply for accounting periods starting on or after 1 April 2023.

In brief, these will:

- Restrict overseas costs, impacting outsourced R&D activities outside the UK as well as overseas workers from staff providers/agencies engaged in R&D projects
- Allow costs for purchasing data sets to use in R&D projects and external cloud computing (as well costs of 'pure maths' R&D)
- Require the name of the agent who has advised the company in compiling the claim to be included in the mandatory digital claim submission which must be signed by a named senior officer of the claimant company. Additionally, where a company is making its first R&D claim, it must notify HMRC in advance of its intention to do so.

With this number of changes, manufacturers will need to consider future expenditure on R&D activities carefully, as this will impact the benefit they will be entitled to receive.

Find out more here: www.bdo.co.uk/en-gb/insights/tax/innovation-and-research-and-development-tax-incent/r-d-tax-relief-rates-changes-how-it-works-in-practice.





IDEAS | PEOPLE | TRUST

Make UK works for the success of more than 2.7 million men and women employed in UK manufacturing. Representing member companies – from small businesses to multinationals – across every industrial sector, we are the most influential voice of manufacturing, enabling our members to connect, share and create opportunities together.

We stimulate success for manufacturing and technology related businesses, enabling them to meet their objectives and goals. We empower individuals and inspire the next generation.

We create the most supportive environment for UK manufacturing growth and success and we represent the issues that are most important to our members, working hard to ensure UK manufacturing remains in the government and media spotlight.

Our extensive knowledge of manufacturing means that we're able to influence policy-making at local, national and international levels. We push for the policy changes that our members want to see. We are the voice of manufacturing.

makeuk.org

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The data used in this survey have been provided by UK manufacturers including members of Scottish Engineering, Manufacturing NI, and Make UK.
Contributing to our surveys helps to accurately reflect trends and behaviours that shape the UK manufacturing sector. If you would like to participate in future surveys, please contact our Information and Research team research@Makeuk.org

Accountancy and business advisory firm BDO LLP is the UK member firm of BDO International, which has more than 1,700 offices in 164 countries. We operate from 18 offices across the UK, employing 6,130 people offering tax, audit and assurance, and a range of advisory services.

Manufacturing is a priority sector for BDO and this focus enables us to tailor the wide range of services we offer and apply our skills and knowledge to help clients achieve their objectives.

We provide real solutions to industry issues, utilising our capabilities in everything from sector-specific tax, audit and business advice to patent box, research and development claims and acquisition opportunities to help our clients grow in the UK and overseas.

We have an excellent understanding of the issues affecting UK manufacturers as an industry sector, but we also focus on specific sub-sectors to improve our knowledge and our service to clients. These include: aerospace, automotive, building products, chemicals and pharmaceuticals, electrical, food and drink, industrials, technology and test and measurement.

Manufacturing remains one of the key industries of the UK economy. We are delighted to be able to play an active role in supporting the businesses that operate in this vibrant, changing and challenging sector.

For further information about our business and services, please visit our website: www.bdo.co.uk

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