
MANUFACTURING OUTLOOK

2018 QUARTER 3



2.7 million
employees



10%

of UK
output



of business
R&D



Average wages
higher than the
rest of the economy



British Craftsmen, taken by Michael Bowden at Spirit Yachts HQ, shortlisted in the professional category of the EEF Photography Competition 2016.

FOREWORD



Lee Hopley
Chief Economist
EEF



Tom Lawton
Head, BDO Manufacturing
BDO LLP

Welcome to the 2018q3 *Manufacturing Outlook* report, in partnership with BDO LLP.

It's felt like a long, hot summer and things haven't slowed down for UK manufacturers according to our latest quarterly survey. Output and orders balances are still very much in the black over the last quarter with manufacturers expecting them to stay there in the coming quarter.

As ever, there are a number of different sector stories running in parallel underneath the positive headline results. Flying out in front is the electronics industry – a sector that is booming, globally. Something of a recent revival in construction activity is holding up activity in sectors such as rubber and plastics, and metal products. In addition, we see basic metals heading to the top of the cycle too, buoyed by higher prices and firm demand at home and abroad.

While these factors have formed the thrust of our manufacturing narrative for the past couple of quarters, the official data on manufacturing has been pointing to a more substantive weakening across a number of manufacturing sectors in the first half of this year.

In our view, the key takeaway from our survey and readings in the official data is that there is some resilience in overall manufacturing activity, but momentum behind the upturn has faded quite considerably.

Moreover, positive expectations registered in our survey do not mean the coming quarters will be plain sailing for all parts of the industry, and in many sub-sectors headwinds are starting to pick up. From the declining consumer demand and regulatory challenges facing the

auto sector, to the uncertainty that continues to weigh on commercial construction projects and cast a shadow over economic confidence more broadly.

While it is positive to see some of this resilience translate into stronger investment intentions, it is important to note that this is not an industry-wide phenomenon, with the sectors that are the most capacity constrained and benefiting from improved affordability, thanks to better margins, driving much of the improvement. The extent to which these plans translate into stronger investment growth in the coming quarters remains one of the biggest areas of uncertainty for us, particularly with respect to the growth outlook for the wider economy in the year ahead.

If, by the time of the next report, we see the UK's Withdrawal Agreement with the rest of the EU done and dusted, with clarity on the direction of the future partnership and the certainty of a transition or implementation period, then confidence in the growth and investment outlook will undoubtedly pick up.

By the next report, we may also have had the autumn budget, in which the government has used some of the fiscal levers available to anchor productive investment in the UK. Further detail on the government's industrial strategy would also help to reinforce any action at the budget. There are a lot of ifs here, so government policy and manufacturers will need clear strategies to navigate challenges and prepare for opportunities. It could feel like a long autumn too.

2018Q3 HEADLINES

Our survey points to trading conditions remaining largely stable for manufacturers going into the second half of 2018. Response balances across our headline output and orders indicators are still rooted in positive territory – a

trend that has been consistent since the beginning of 2017. The results are very much in line with last quarter's expectations, but there have been some new developments in companies' investment plans and in profitability.

INDICATOR	BALANCE	CHANGE	
Confidence	5.7	↓	After recovering in 2018H1, confidence in the UK economy falls back
Output	27 %	↑	Output balance stable in 2018q3 and in line with expectations
UK orders	14 %	↑	Domestic demand edges higher but continues to lag that seen overseas
Export orders	24 %	↑	Europe in the driving seat as export balances regain some momentum
Employment	21 %	↑	Recruitment in most sectors keeps employment balance firmly in positive territory
Investment	20 %	↑	Capacity constrained sectors help to push manufacturers investment plans higher

Source: EEF Manufacturing Outlook Survey

Looking at the industry as a whole, manufacturing remains in good shape with a balance of companies continuing to report expanding output levels and a similarly strong balance securing growth in new orders. While responses on the export orders front are still running ahead of domestic demand balances, the latter has nevertheless picked up compared with three months ago.

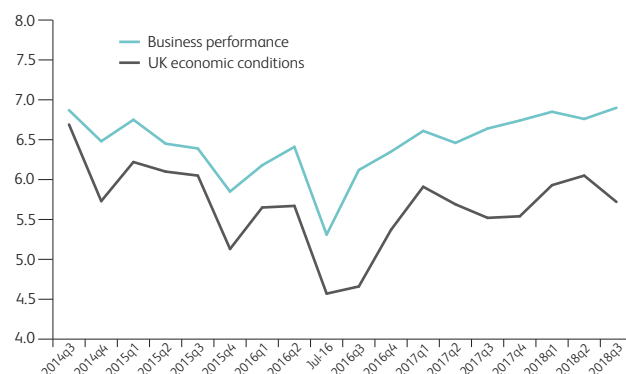
Our survey continues to show that the vast majority of manufacturers are benefiting from improving demand in some parts of the world, with only 17 % of manufacturers unable to identify any export growth opportunities in the past quarter. Demand from European customers, however, was in the driving seat for most sectors once again in the past three months.

Given that order books are still looking healthy across most sectors and production levels are on the rise, it is not surprising that companies have confidence in their firm level prospects over the next 12 months. However, it is not solely this relative optimism in the outlook that has spurred a strengthening in investment intentions. We have noted mounting capacity constraints in some, particularly high growth industries, and additional investment is becoming more critical. Whether this will be sustained is a major area of uncertainty in our outlook.

While firm level confidence has picked up, sentiment about UK economic prospects is moving in the opposite direction, with our confidence indicator falling back this quarter. This is likely a reflection of manufacturers concerns about the UK economy's resilience to a range of Brexit outcomes in the year ahead. Our forecasts chime with this and we are looking at subdued GDP growth this year and next of 1.2 % and 1.3 % respectively.

CONFIDENCE IN UK ECONOMIC OUTLOOK DETERIORATES

CONFIDENCE IN THE NEXT 12 MONTHS 1 = SUBSTANTIALLY WORSE, 10 = SUBSTANTIALLY BETTER



Source: EEF Manufacturing Outlook Survey

OUTPUT

Activity in the manufacturing sector picked up slightly in the third quarter of 2018, with a net balance of 27% of manufacturers reporting an increase in output. This represents the eighth consecutive quarter in which a positive output balance has been recorded, and while down on the heights seen over the back end of 2017, points to a bounce-back in the official data over the coming months and quarter.

Looking ahead, manufacturers expect to expand at a slightly quicker pace over the next three months than the previous period, suggesting that while the peak has passed, activity and order books remain robust across the sector.

PAST THREE MONTHS	↑	27%
NEXT THREE MONTHS	↑	29%

The sectoral picture makes for positive reading with those sub-sectors heavily represented in our survey all recording positive and healthy output balances.

The basic metals sector is perhaps the star performer this time round, building on the momentum seen in the previous quarter to record an output balance of 44%. This may come as a bit of a surprise given rising trade tensions and the risks that President Trump's trade policy poses to the sector in particular. Yet for the time being, this is offset by strong order books, and an upward movement in prices, with the sector approaching the top of its business cycle following past weaknesses. A similar situation is seen in the metal products sector, whose output balance remained broadly stable at 32%.

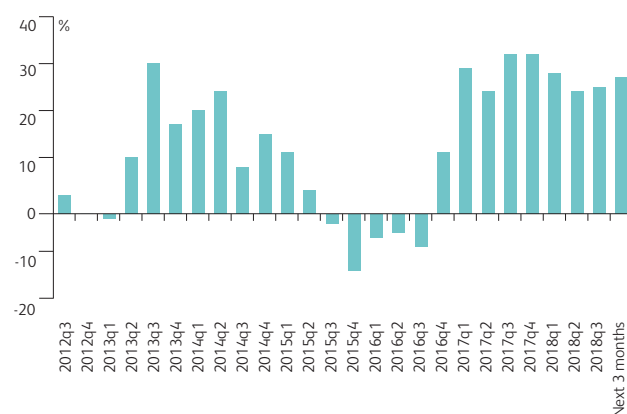
The metal sectors should also be feeling a bit of a boost from the construction industry, which after its travails over the start of the year is expected to see some improvement in activity in H2. The rubber and plastics sector is expected to see the benefits of this next quarter.

Meanwhile capital equipment manufacturers, and in particular the mechanical equipment sector, who had been enjoying a sweet spot over the last 12 months, have

seen its output balance dip back slightly this quarter. After a long period of expansion, and given easing growth in Europe, this is to be expected. Elsewhere the electrical equipment, and electronics sector in particular, have enjoyed a healthy pick-up in activity. Both sectors are likely to be boosted by their diverse demand bases, as well as strong overseas demand from Asia and the US.

OUTPUT BALANCE REVERSES RECENT TREND AND PICKS-UP IN 2018Q3

% BALANCE OF CHANGE IN OUTPUT



Source: EEF Manufacturing Outlook Survey

OUTPUT SUMMARY

% BALANCE OF CHANGE

SECTOR	PAST 3 MONTHS	NEXT 3 MONTHS
Metal Products	32%	30%
Mechanical	20%	25%
Electrical	29%	19%
Electronics	45%	32%
Basic Metals	44%	47%
Rubber & Plastics	7%	36%
TURNOVER		
£0-9m	17%	25%
£10-24m	28%	34%
£25m and over	45%	39%

Source: EEF Manufacturing Outlook Survey

ORDERS

After a slow second quarter, manufacturers' order books picked up in the third quarter of 2018. The total balance moved from 23 % to 27 % confirming that UK businesses are still busy.

The pick-up in orders has been registered in both domestic and export sales. However exports continue to

lead the way as they have done since 2017q1. According to our respondents, the gap should be extremely narrow in the next quarter with export orders losing some momentum and domestic orders set to strengthen a little bit.

UK ORDERS	PAST THREE MONTHS	↑	14 %	NEXT THREE MONTHS	↑	16 %
EXPORT ORDERS	PAST THREE MONTHS	↑	24 %	NEXT THREE MONTHS	↓	17 %
TOTAL ORDERS	PAST THREE MONTHS	↑	27 %	NEXT THREE MONTHS	↑	25 %

UK ORDERS

UK results were better than last quarter with domestic orders reporting a 14 % balance up from 9 % in q2 and in positive territory for the last eight quarters. The last negative balance was reported in 2016q3.

As noted above, domestic order books are weaker than those related to exports and this appears to be a reflection of the resilient but subdued growth - compared to the other major economies - experienced by the UK in 2017 and in the first half of 2018. Moreover, after a long period of sustained inflation and weak real wage growth, UK consumers are still not too confident and have little appetite ready for big-ticket spending.

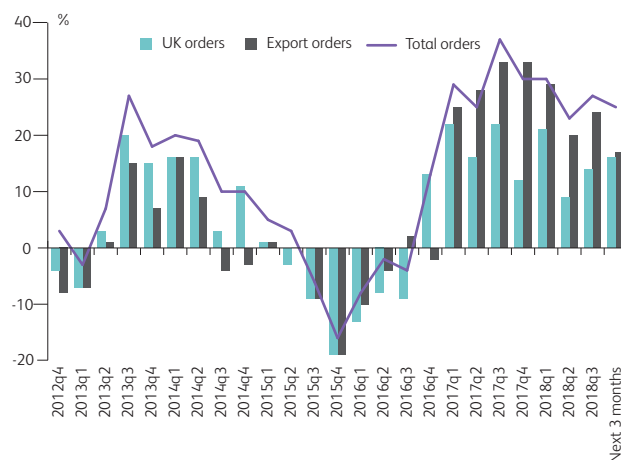
Looking at manufacturing sub-sectors, basic metals continues the positive trend registered in the last *Manufacturing Outlook* followed by metal products and mechanical equipment. The latter sector has order book balances weaker than the previous quarters but demand is nevertheless solid considering the extraordinary growth registered in 2017.

On the other side of the table, electronics and electrical equipment are showing negative balances. However, the negative numbers are telling us very different stories. On one side the electronics market is booming worldwide

and the negative number may just be the consequence of a long period of expansion. On the other side, electrical equipment continues the weak period experienced in the first half of the year and appears to have not enjoyed the construction activity revival yet.

ORDER BALANCE STILL IN POSITIVE TERRITORY AND IMPROVING COMPARED TO LAST QUARTER

% BALANCE OF CHANGE IN ORDERS



Source: EEF Manufacturing Outlook Survey

EXPORT ORDERS

Export orders continue to show positive balances and are significantly higher than those reported in the domestic market. Even if the figures are not as positive as those at the end of 2017, exports continue to give an advantage to companies reliant on non-domestic markets.

As always, the EU remains the main UK customer and the latest *Manufacturing Outlook* shows a rise in the percentage of manufacturers noting a pick-up in demand from this market. The proportion of companies seeing growth moved from 53 % last quarter to 63 %, slightly lower than the peak in q1.

The share of companies citing North America as a source of growing demand also moved from 28 % to 36 % thanks to positive trends in the best performing sector of 2017 – mechanical equipment – and notably for the fastest growth area in 2018 – the booming electronics sector.

Asia completes the podium with a stable 28 % of companies positive about demand from the region. Again, electronics is seeing particularly good prospects there with 50 % of companies in the sector citing this as a growth region.

The expectations for the next three months are positive according to our respondents. Total orders balance is pointing towards 25 % which is just slightly lower than the total balance of this quarter. However, clouds loom over the horizon and the risk of disruption is high.

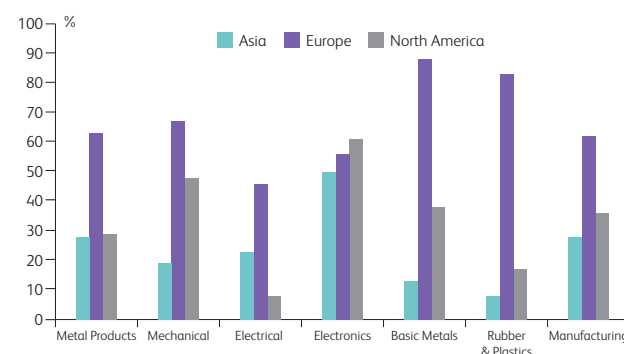
The first and main risk is clearly related to Brexit and the possibility of a “cliff-edge” situation in March 2019. If the October EU summit does not end up with a good deal, supply chains and consequently orders may be highly impacted with companies not able to trade freely next year.

The second is about the tariff situation which may further escalate. Even if the Trump administration puts a lot of energy into resolving the situation in China, a trade war with Europe is not something that can be completely ruled out.

The third risk is again related to the US administration and in this case is about sanctions that hit Iran first and recently Turkey. A quite stable and relatively high oil price should have improved the export order situation in the Middle East, but it actually appears that “secondary sanctions” are putting a break on that and the good performance registered in 2018q1 has not been repeated since.

EU DEMAND STILL IN THE LEAD

% OF COMPANIES REPORTING POSITIVE DEMAND CONDITIONS BY MARKET



Source: EEF Manufacturing Outlook Survey

ORDERS SUMMARY

% BALANCE OF CHANGE

SECTOR	UK ORDERS		EXPORT ORDERS		TOTAL ORDERS	
	PAST 3 MONTHS	NEXT 3 MONTHS	PAST 3 MONTHS	NEXT 3 MONTHS	PAST 3 MONTHS	NEXT 3 MONTHS
Metal Products	29 %	16 %	20 %	19 %	33 %	26 %
Mechanical	12 %	12 %	14 %	17 %	22 %	18 %
Electrical	-19 %	10 %	16 %	16 %	10 %	29 %
Electronics	-4 %	25 %	38 %	17 %	28 %	29 %
Basic Metals	41 %	28 %	36 %	7 %	61 %	42 %
Rubber & Plastics	7 %	31 %	0 %	0 %	7 %	15 %

TURNOVER

£0-9m	14 %	18 %	16 %	15 %	22 %	20 %
£10-24m	11 %	25 %	16 %	10 %	19 %	23 %
£25m and over	19 %	11 %	32 %	37 %	36 %	34 %

Source: EEF Manufacturing Outlook Survey

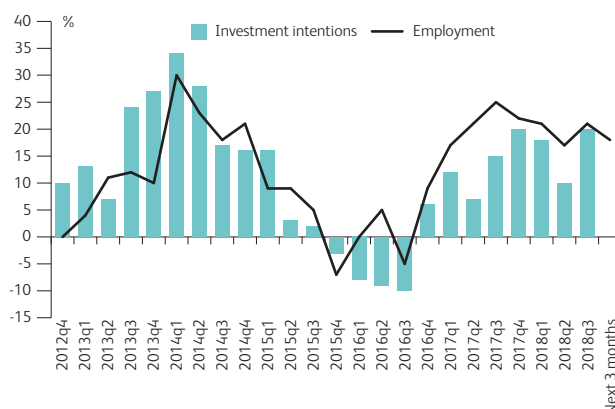
EMPLOYMENT & INVESTMENT

The balance of companies taking on more employees rose this quarter to 21%. This represents the eighth successive quarter that the employment balance has been rooted in positive territory. While this is encouraging, the real bright spot this quarter comes from manufacturers' investment intentions, which have doubled over the last three months, rising to their highest level since 2017q4.

Manufacturers therefore, despite heightened levels of uncertainty, are continuing to increase both headcount and capital expenditure, to meet increased demand requirements.

INVESTMENT INTENTIONS DOUBLE OVER PAST THREE MONTHS

% BALANCE OF CHANGE



Source: EEF Manufacturing Outlook Survey

EMPLOYMENT	PAST THREE MONTHS	↑	21%	NEXT THREE MONTHS	↑	18%
INVESTMENT	NEXT TWELVE MONTHS	↑	20%			

While a rise in the employment balance shouldn't come as too much of a surprise, given recent trends in our survey and the strength of the labour market, a doubling in investment intentions so close to the 2019 Brexit deadline could be seen as counterintuitive. However, digging into the individual sectors helps to unearth some potential reasons behind this.

The basic metals sector, as we have highlighted, enjoyed an excellent quarter with output and order balances both up significantly. This increase in demand is likely to have resulted in growing capacity constraints in the sector, which in turn will have spurred increased investment. Moreover, with prices on the rise, and improving margins (see overleaf) manufacturers in the sector have both the capability and incentives to invest, unlike in recent times. Similarly the electronics sector has seen its investment balance surge from 0% to 32%, as manufacturers take advantage from the global electronics boom, and in particular demand emanating from the US.

Away from these notable stories, manufacturers appear to be continuing on a business as usual approach; investing to meet growing demand requirements, despite uncertainty shrouding the future.

Whether this momentum will be maintained remains to be seen however. Clearly the outcome of the European Council meeting in October will have a significant bearing on investment intentions looking further ahead.

EMPLOYMENT AND INVESTMENT SUMMARY

% BALANCE OF CHANGE

SECTOR	EMPLOYMENT		INVESTMENT
	PAST THREE MONTHS	NEXT THREE MONTHS	NEXT TWELVE MONTHS
Metal Products	20%	28%	12%
Mechanical	26%	14%	18%
Electrical	14%	-10%	15%
Electronics	39%	19%	32%
Basic Metals	22%	26%	32%
Rubber & Plastics	-14%	0%	0%
TURNOVER			
£0-9m	17%	20%	13%
£10-24m	17%	8%	6%
£25m and over	29%	16%	31%

Source: EEF Manufacturing Outlook Survey

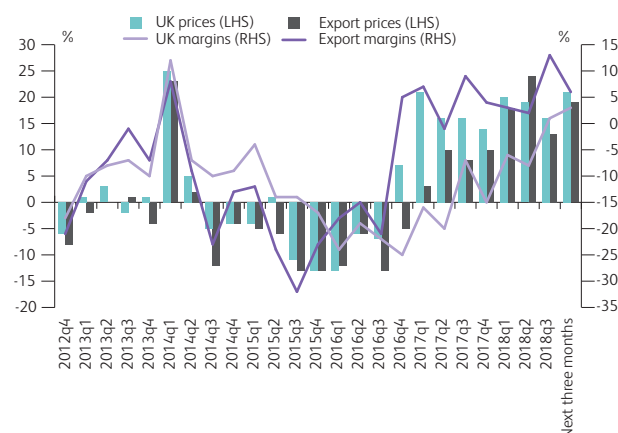
PRICES & MARGINS

Following the path of official inflation, UK prices continued to drift down after the peak registered at the end of 2017.

Export prices are also trending down and, in contrast to what happened last quarter, much faster than domestic ones. The export price balance moved from 24% to 13% and, in both export and domestic markets, manufacturers expect prices to pick up again in the next quarter.

MARGINS PICKING UP SIGNIFICANTLY IN Q3

% BALANCE OF CHANGE



Source: EEF Manufacturing Outlook Survey

UK PRICE	PAST THREE MONTHS	↓	16%	NEXT THREE MONTHS	↓	21%
EXPORT PRICE	PAST THREE MONTHS	↓	13%	NEXT THREE MONTHS	↔	19%
UK MARGINS	PAST THREE MONTHS	↑	1%	NEXT THREE MONTHS	↑	3%
EXPORT MARGINS	PAST THREE MONTHS	↑	13%	NEXT THREE MONTHS	↑	6%

This quarter has clearly been characterised by margins significantly picking up in the UK, and even more so in export markets. As said in the previous section, this flow of cash helped companies to invest more after a period of downward pressure on margins, in particular in the domestic market.

Looking at sub-sectors, most of them registered a slowdown in price balances in line with the whole manufacturing performance. However, a couple of sectors are significantly counter-trending: rubber & plastic, and electronics.

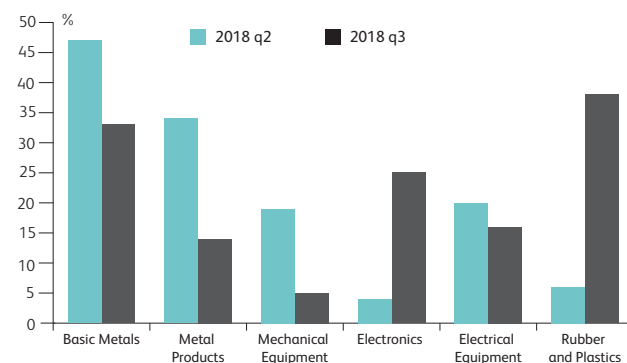
The first seems to have gone back to levels registered at the beginning of the year, whereas the second appears to have increased prices as a consequence of the extremely high level of world demand. Order books are full, capacity constraints are high – not only in the UK – hence the prices are forced up.

On the margins side, basic metals is in the lead on both domestic and international markets. The non-domestic market has also seen electronics building up margins and, according to our respondents, the trend will also continue in the next quarter.

On the other side of the table, chemicals and non-metallic minerals are still feeling the pressure with margin balances negative on both sides of the Channel.

ELECTRONICS EXPORT PRICES RISING OVER HIGH WORLD DEMAND

% BALANCE OF CHANGE IN EXPORT PRICES IN THE PAST THREE MONTHS

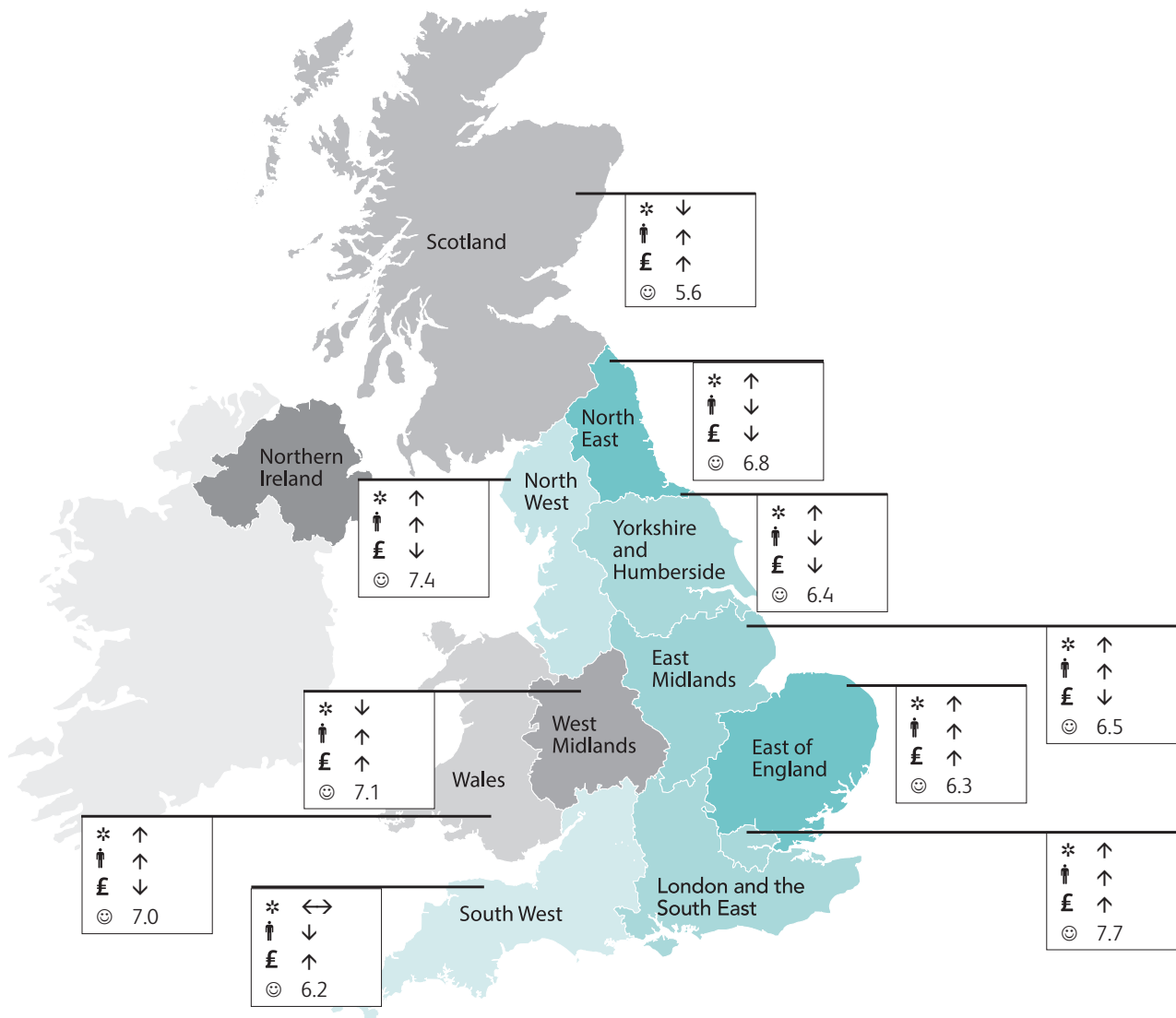


Source: EEF Manufacturing Outlook Survey

REGIONAL

The positive trends our survey highlights across manufacturing at the national level, are happily reflected across the regional economies too. Indeed all regions continued to see positive output balances over the past three months, with seven out of ten regions seeing

increases compared to the previous quarter. This in turn has helped result in the overall confidence indicator amongst businesses rising to a historical high, with a widespread pick-up across regions.



KEY:

↑/↓ INCREASE/DECREASE ON PREVIOUS QUARTER

* OUTPUT

👤 EMPLOYMENT

£ INVESTMENT

😊 BUSINESS CONFIDENCE

Source: EEF Manufacturing Outlook Survey

The broad based improvement in activity across regions once again reflects each region's sector composition. For instance the rise in output balances across the metal industry is apparent in the North East and Yorkshire and Humber in particular - both of which count metal production in their top three industries. These regions saw their output balances surge to 50% and 43% respectively. Meanwhile the South East and London - another leading performer - continues to benefit from the buoyant electronics sector. Conversely the North West and Scotland were the only two regions to see activity slow, the former a likely result of the recent weakness in the dominant automotive sector.

The general improvement in activity across regions is being supported by strong order balances, which should sustain output growth across the regions. In fact total order balances across all regions - barring Scotland - were in double digit territory, and are set to be maintained at healthy levels over the next three months.

The positive output balances, as well as the security of healthy order books, is leading manufacturers across regions to increase both their headcount and capital expenditure. Employment balances are positive in all regions for the second consecutive quarter, and up in every region except the South West, Yorkshire and Humber and North East. The latter remain at healthy levels however, reflecting their recent strength in activity. The investment picture is slightly more subdued, although improved from three months ago with no negative balances recorded.

BUSINESS CONFIDENCE INDICATORS

As has been the case over the last few years, confidence about firm-level prospects continues to outpace sentiment about the UK economic outlook. This is not surprising given the current economic climate and status of Brexit negotiations. But as our survey highlights, manufacturers remain busy, and this has translated into a pick-up in confidence in six out of the ten regions. The boost in the metal industry is likely to have improved firms' outlook in the North East, while the South East and London remains the most confident region. Conversely manufacturers in Scotland are most downbeat about their current prospects, reflecting their weaker performance on the whole.

FIRM LEVEL CONFIDENCE CONTINUES TO OUTPACE OUTLOOK FOR UK ECONOMY

CONFIDENCE IN THE NEXT 12 MONTHS 1 = SUBSTANTIALLY WORSE, 10 = SUBSTANTIALLY BETTER



Source: EEF Manufacturing Outlook Survey

REGIONAL SUMMARY

% BALANCE OF CHANGE

REGION	OUTPUT		TOTAL ORDERS		EMPLOYMENT	
	PAST 3 MONTHS	NEXT 3 MONTHS	PAST 3 MONTHS	NEXT 3 MONTHS	PAST 3 MONTHS	NEXT 3 MONTHS
Scotland	4%	23%	4%	13%	17%	17%
North East	50%	18%	50%	8%	25%	27%
North West	43%	33%	46%	32%	35%	20%
Yorks & Humber	43%	29%	29%	18%	25%	14%
East Mids	21%	37%	37%	21%	21%	16%
Eastern	23%	14%	17%	14%	7%	3%
South East & London	59%	42%	55%	45%	29%	27%
South West	20%	36%	13%	29%	4%	0%
West Mids	9%	39%	11%	28%	14%	6%
Wales	50%	75%	50%	75%	50%	25%

Source: EEF Manufacturing Outlook Survey

ECONOMIC ENVIRONMENT

The UK economy, following a poor opening quarter, picked up in q2 with the first estimate of GDP pointing to a 0.4% expansion. This growth was driven primarily by the revival in the dominant services sector, while the recently struggling construction sector also saw a healthy improvement in activity. The latest data goes some way to confirm that the poor performance in the opening months of the year was indeed a weather related blip.

Nevertheless 0.4% growth is still a fairly modest performance, and with Brexit uncertainty continuing to undermine investment and consumer confidence, and the upturn in the global economy evident last year beginning to moderate, our forecasts are unchanged at 1.2% and 1.3% this year and next.

HEADLINES

- Economy recovers after q1 weather related blip
- Inflation picks up in July on the back of rising energy costs
- Business investment to remain subdued
- MPC raises interest rates for only second time since the financial crisis

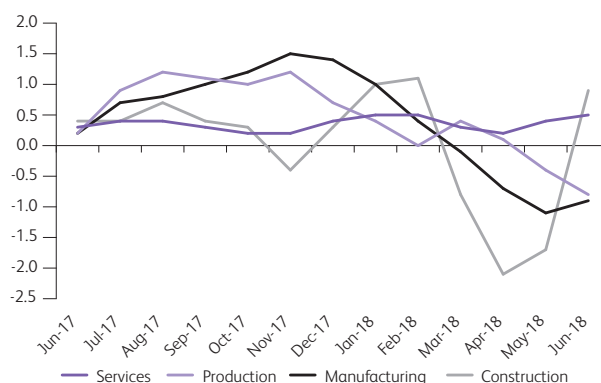
Our underlying assumptions for the economic environment are the same as at the time of our last *Manufacturing Outlook*. We still expect private consumption to remain subdued, business investment to stutter, and net trade to contribute positively to growth. That said, the outcome of the European Council meeting in October will clearly impact on this outlook, given the ongoing uncertainty surrounding the final Brexit deal, and is a key date for our diaries.

PRIVATE CONSUMPTION SET TO REMAIN SUBDUED DESPITE IMPROVED PROSPECTS

Since its peak in November last year at 3.1%, inflation has been steadily receding as the sterling depreciation effect fades. This has been offset in recent months by rising energy costs, which resulted in the CPI picking up to 2.5% in July. However with core inflation continuing to retreat, the Bank of England expects inflation to be back around the 2% target by the end of the year.

GDP GROWTH DRIVEN BY SERVICES AND BOUNCE BACK IN CONSTRUCTION

GROWTH, THREE-MONTHS ON PREVIOUS THREE-MONTHS



Source: ONS (2018)

Meanwhile the labour market continues to thrive, with the employment rate hitting a succession of historical highs in recent months, and the unemployment rate down at 4.0%. With limited slack left in the economy, and inflation receding, this should be good news for consumers' spending prospects. However tempering this is wage growth, which continues to disappoint. While there have been modest improvements, growth has eased in recent months, and there is little in private survey data to suggest a significant acceleration is around the corner. Combining this with Brexit induced uncertainty and low consumer confidence, and we expect consumers to continue to tighten the purse strings for the remainder of the year.

DOWNSIDE RISKS TO BOTH BUSINESS INVESTMENT AND TRADE OUTLOOK

Little has changed in our business investment and trade forecasts. We still expect both to contribute positively to growth, but not by the degree as one would expect given the economic climate. Business investment in particular is expected to be hindered by Brexit uncertainty, with companies more cautious about making large scale investments. Net trade will also continue to contribute to growth, albeit growth in both exports and imports has been weaker in recent quarters as the sterling

depreciation effect fades. Significant downside risks are also present, specifically with regards to the growing move towards trade protectionism across the world. We outline these concerns in our global economy outlook.

GLOBAL ECONOMY

The outlook for the global economy has moderated since the turn of the year, as rising trade tensions, political uncertainty and a tightening in financial conditions eases the pace of growth in Europe and emerging markets in particular. Nevertheless growth is still set to remain robust by historical standards, and we are expecting growth of 3.8% and 3.6% this year and next.

The US remains the driving force behind the solid growth outlook. Indeed the US economy – unlike Europe – rebounded strongly after a blip in q1, expanding by 1% in q2. With President Trump's ongoing spending from his "America First" policy, incoming personal and business tax cuts, and a labour market which continues to go from strength to strength, momentum should be maintained into the second half of the year. We are expecting strong growth for the US of 2.8% this year.

UK ECONOMIC FORECASTS

% CHANGE EXCEPT WHERE STATED

	2017	2018	2019
Trading environment			
Exchange rate (€/£)	1.14	1.12	1.11
Exchange rate (\$/£)	1.29	1.35	1.35
Exports	5.4	1.0	2.6
Imports	3.2	0.5	2.2
Current account (% GDP)	-3.9	-3.3	-2.8
Output			
Manufacturing	2.6	0.9	0.5
GDP	1.7	1.2	1.3
Costs and prices			
Average earnings	2.5	2.5	2.5
Oil price (Brent Oil \$/bl)	54.2	74.6	77.0
Employment			
Manufacturing (000s)	2674	2683	2641
Rest of economy (000s)	32,398	32,543	32,671
Unemployment rate (%)	4.4	4.2	4.3

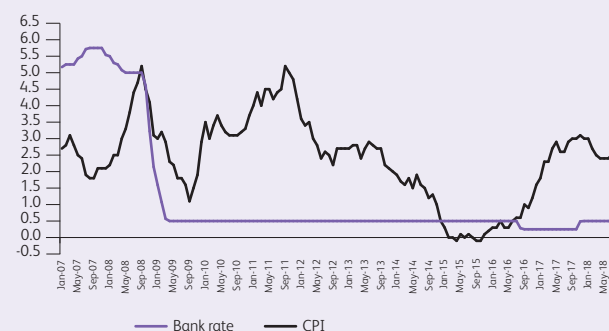
Source: Oxford Economics and EEF

SPOTLIGHT: MPC RAISE RATES

Clearly the greatest domestic economic development since our last *Manufacturing Outlook* came last month when the Bank of England voted unanimously to increase interest rates from 0.5% to 0.75% - their highest level since March 2009, and only the second time rates have been increased since the financial crisis. While the outcome was not a surprise, and the impact of this change to both industry and consumers limited, the unanimous decision does not mean that more rate rises will quickly follow. Indeed with uncertainty shrouding the UK's future trading and economic environment, any future rate hikes are likely to be dependent on gaining some clarity on the final Brexit deal at the European Council meeting in October. Markets do not envisage any further hikes this year.

BANK OF ENGLAND RAISE RATES TO HIGHEST LEVEL FOR A DECADE

BANK OF ENGLAND BASE RATE AND CPI



Source: Bank of England (2018) and ONS (2018)

Reflecting this robust outlook for demand, and the subsequent effects this is having on raising inflation, the Fed has continued to tighten monetary policy this year, with a further two hikes anticipated in H2. This should take US interest rates up to the lofty heights of the 2% mark. This tightening in monetary policy poses a threat to a number of developing economies such as Turkey, Argentina, South Africa, Indonesia and Colombia, who have high levels of dollar denominated debt and as such are seeing an increase in their funding costs. This was highlighted by the Turkish economy's recent struggles. This is all coming against a backdrop of the US's divisive trade and geopolitical policy, which will continue to have a bearing on the global outlook.

Indeed, rising trade tensions between the US and China have seen a series of tariffs imposed by the US on a wide range of Chinese imports. These have in turn been met with reciprocal measures by the Chinese administration in the last month. The direct impact of higher tariffs on bilateral trade will weigh on activity in the US and China in the coming quarters, and elsewhere to a modest extent. More concerning is the prospect of further escalation in this trade protectionism trend - which has already seen US steel and aluminium tariffs extended to the EU, Canada and Mexico after a temporary reprieve. The Trump administration's decision to withdraw from the Iran nuclear deal also sets an uneasy precedent, and is likely to be a factor keeping Brent crude oil at around the \$75 barrel mark, despite OPEC's decision to ease production quotas.

Growth in China meanwhile has remained relatively robust, expanding by 1.8% in q2. However, there are significant (and familiar) downside risks. As mentioned, the growing prospect of trade protectionism could weigh on activity, while concerns still remain regarding the balance between financial stability (given the country's credit fuelled growth), and maintaining current GDP growth rates. These issues are also being intensified by the tightening in US monetary policy.

These trade and political tensions are of growing concerns to the economies of the eurozone where growth is already – while picking up following the poor weather in q1 – subdued. Indeed q2 GDP growth came in at a modest 0.4% and private survey data, including composite PMIs and German factory orders, have fallen back from their 2017 heights. This confirms the belief that growth in the bloc peaked in 2017, with a general unwinding across the continent. There also remains ongoing concerns regarding political uncertainty in Italy, Germany and of course the UK, which has the potential to exacerbate any cyclical slowdown. Nevertheless underlying demand growth in the euro area, supportive labour conditions and ultra-accommodative monetary policy, should mean the eurozone will, overall, have another solid year, expanding by 2.0%.

INTERNATIONAL ECONOMIC FORECASTS

% CHANGE EXCEPT WHERE STATED

	GDP			INFLATION		
	2017	2018	2019	2017	2018	2019
France	2.3	1.6	1.7	1.0	1.9	1.6
Germany	2.5	1.9	1.7	1.7	2.0	1.9
Japan	1.7	1.0	1.1	0.5	1.0	1.1
US	2.2	2.8	2.2	2.1	2.5	2.1
Eurozone	2.5	2.0	1.7	1.5	1.8	1.7
China	6.9	6.5	6.1	1.5	2.2	2.6
India	6.2	7.5	7.1	3.3	5.0	5.2
World (2010 PPPs)	3.7	3.8	3.6	3.0	3.2	3.1

Source: Oxford Economics

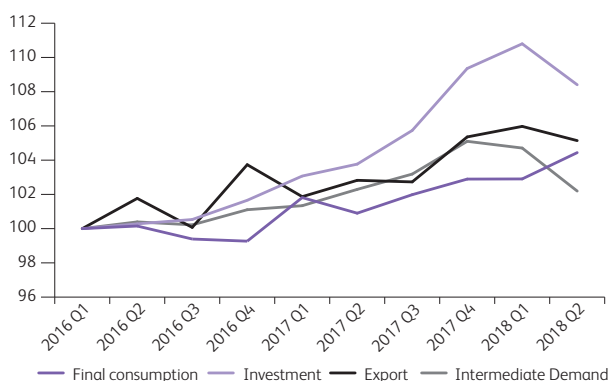
SECTOR FORECASTS

The manufacturing sector - after an excellent year in 2017 in which it expanded by 2.6% - has slowed significantly over the first half of 2018, according to ONS. Indeed following a 0.1% contraction in q1, predominantly due to the poor weather seen across February and March, the sector contracted by a hefty 0.9% in the first estimate of q2 GDP. This puts the sector in to a technical recession, the first time this has happened since late 2015.

While there is a reasonable chance that the small contraction in q1 could be revised away (and hence pull the sector out of recession), the poor performance in q2, is further illustrated by an easing manufacturing PMI. Moreover there was a noticeable shift in the sectors seeing growth, with export and in particular investment intensive sectors which had driven the upturn, fading significantly. Sectors with a strong consumer facing element have conversely picked up over the last three months.

THERE HAS BEEN A SHIFT IN THE SECTORS SEEING GROWTH

REAL GVA GROWTH OF SECTORS MOST RELIANT ON SINGLE DEMAND 2016Q1=100



Source: ONS and EEF analysis (2018)

We did expect the manufacturing sector to slow overall this year, especially given the strong 2017, just not to this extent (we were previously forecasting 1.9% growth for 2018). It should be noted however that there have been significant revisions to 2017 data which has had a carry-over effect into this year, with the basic metals, mechanical equipment and chemicals sectors all seeing large revisions

in 2017 data. We expect the sector to see a bounce back over the second half of the year, especially given the pick-up in the construction sector, and are forecasting growth of 0.9% and 0.5% this year and next.

FORTUNES TURN FOR CAPITAL EQUIPMENT SECTORS

The momentum in the manufacturing sector over the course of 2017, which came on the back of the global upturn and weak level of sterling, had boosted capital equipment manufacturers across the country, with the **mechanical equipment** sector the chief beneficiary. Indeed the sector, as the primary investment good in UK manufacturing (as well as an export intensive one) had seen unprecedented growth, with a 9.3% expansion in 2017 and a strong start to 2018 too. However the sector's fortunes have turned, with a hefty 4.5% contraction recorded in q2. Ongoing uncertainty about the final Brexit deal, along with the sterling depreciation effect beginning to fade, means the sector is beginning to ease, as companies shun making larger investments for the time being. We are forecasting growth of 5.1% this year, which while healthy, reflects the strong 2017 performance, and masks a weaker quarterly profile for the sector. Looking ahead we expect the sector to slow further, given that any upturn is likely to be dependent on large investment decisions being given the go ahead now. We believe this is unlikely given that the peak in eurozone activity has also passed, with a general slowing seen across the bloc. We are pencilling in a 2.0% contraction in 2019.

In a similar position is the **electrical equipment** sector, which has had a torrid time of it recently, contracting by 5.2% and 6.4% over the opening quarters of 2018. As a proxy investment good, the sector is likely to be suffering as demand begins to wane from key sectors, including mechanical equipment. It is hoped that the sector's significant consumer facing element should help the sector see some bounce back in H2 but this will not be enough to turn around its year. We are forecasting a large contraction of 8.0% this year.

Conversely a bright spot in the capital goods segment is **other transport**. This sector, and in particular the aerospace slice, has been a source of good news over the last few years, with huge growth of 8.6% recorded in 2017. We expect the sector to have another strong year, but there are signs that the peak has been reached, with orders cooling. As a result we expect a winding down over this year and next, and are forecasting growth of 5.3% and 3.1% respectively.

SOME CONSTRUCTION RELATED SECTORS SEE A PICK-UP

While capital equipment manufacturers have seen their outlook deteriorate, the construction industry has moved in the opposite direction. Indeed, following a weak opening quarter – a result of the poor weather and liquidation of key contractor Carillion – the industry bounced back in q2 to expand by 0.9%, boosting a number of sectors in its supply chain.

Non-metallic minerals (bricks, mortar, glass) is the sector which has benefited most from this turnaround. In fact with almost three quarters of demand going into either

the construction sector or back into the non-metallic minerals sector itself, the sector's performance is strongly correlated with construction's fortunes. This is illustrated in the sector recovering from a 4.3% contraction in q1 to expand by 2.2% in the latest three months. There are still some concerns regarding the demand for commercial office work given ongoing Brexit uncertainty, as well as the void left by Carillion in a number of larger scale projects, but the sector should pick up over the rest of the year. Nevertheless the large contraction in q1 means the sector will struggle to record growth this year, and we are forecasting a 1.9% contraction this year.

Rubber and plastics, where nearly a third of its intermediate demand comes from construction, is also set to feel a boost from the improved outlook. This combined with the fact that manufacturers are beginning to grasp the opportunities on offer from the move to single use and recyclable plastics means the sector's outlook has improved since last time round. We are forecasting growth of 1.4% for the sector this year.

While the upturn in construction is likely to have boosted **basic metal** manufactures in the UK, there are a number

SECTOR GROWTH RATES AND FORECASTS

% CHANGE

	OUTPUT			EMPLOYMENT		
	2017	2018	2019	2017	2018	2019
Basic metals	1.1	-7.4	0.6	-0.6	1.1	-3.1
Metal products	1.9	1.0	0.3	4.8	2.9	-1.4
Mechanical	9.3	5.1	-2.0	4.2	2.7	0.0
Electronics	4.2	10.4	1.1	3.5	-1.2	-2.1
Electrical	4.3	-8.0	4.6	-0.4	-2.7	4.1
Motor Vehicles	1.1	-2.2	0.3	5.6	1.7	-0.3
Other transport	8.6	5.3	3.1	-1.7	0.0	-1.9
Food and drink	1.1	1.0	1.0	-0.8	-1.9	-2.2
Chemicals	1.9	-1.9	0.3	1.2	-7.0	-5.4
Pharma	-5.5	3.1	0.8	8.4	2.0	-4.3
Rubber and plastics	-0.4	1.4	-0.7	-0.3	3.1	0.0
Non-metallic minerals	0.8	-1.9	2.3	-5.5	-6.1	-1.9
Paper and printing	1.9	1.0	-0.8	-0.6	0.3	-2.6
Textiles	2.3	0.1	-2.6	-11.4	0.6	-6.1
Manufacturing	2.6	0.9	0.5	1.1	0.4	-1.5

Sources: EEF and Oxford Economics

of issues - originating from across the Atlantic - which are hindering the sector's longer-term outlook. However, it is the large contractions in output in the official statistics that are playing a bigger role in our forecasts for this year. With hefty falls at the start of 2018 and some uncertainty, the outlook is not bright, and we are forecasting a 7.4% contraction this year.

Linked to the basic metals sector is the **metal products** sector. Again, construction should support the sector, given 20% of its intermediate demand is destined for the industry. However overall the sector follows the wider manufacturing trend, and given the weakness in a number of "core" manufacturing markets it serves – including mechanical equipment and automotive – the sector is set to have a subdued year. We are forecasting growth of 1% and 0.3% this year and next.

MIXED BAG FOR CONSUMER FACING SECTORS

Food and drink, following the weather related disruption in q1, picked up in q2 to expand by 1.1%. The sector tends to be fairly stable, given the nature of its products. Moreover the sugar levy does not appear to have materially weighed on manufacturers who were well prepared for its introduction. As a result we are forecasting growth of 1.0% this year and next.

Textiles also saw a turnaround in q2, expanding by 1.3%. However a fundamental lack of demand, as well as a growing skills gap in the sector, means it is unlikely to wrestle back significant market share from South East Asia. Weak retail sales figures also don't paint a promising outlook for the rest of the year, and as a result we expect only a small expansion this year.

Pharmaceuticals on the other hand is on course for a strong year, having expanded by 3.1% in q2. The sector is one of the most volatile in UK manufacturing, and given its unusual input structure does not tend to follow wider manufacturing trends. There remain concerns surrounding the future of regulatory alignment with the EU, so much so that major manufacturers and the NHS have started to stockpile pharmaceuticals. For the time being though, the sector is set to bounce back after a poor year last to grow by 3.1% in 2018.

Similarly positive in its growth prospects this year is **paper and printing**. Demand for packaging, driven by growth in e-commerce as well as industry consolidation and some new innovations to support packaging and supply chain solution should help the sector expand again this year, by 1%.

Finally we come to the **motor vehicle** sector. Following a number of years of healthy expansion in the wake of the financial crisis, the sector has been easing in recent quarters. This easing accelerated somewhat in q2 when the sector contracted by 4.0%. The media narrative continues to highlight Brexit uncertainty as the main reason for this, but there are likely to be a number of other factors at play. Indeed a general saturation effect is likely to be impacting the sector, with domestic demand in particular suffering this year as consumers decide to hold off purchasing new cars. We expect the sector to see some bounce back over the remainder of the year, but this won't be enough to stop the sector contracting by 2.2%, its first contraction since the financial crisis.

BDO VIEWPOINT

GETTING YOUR BUSINESS 4IR READY

For mid-sized manufacturers, the road to 4IR is probably less one of massive digital transformation at huge initial cost than it is of making focused incremental changes linked to business value. However, before embarking on any 4IR developments, it is important for it to be underpinned by a clear strategy tailored to the business. We would suggest four key areas to think about:

DEFINE YOUR VISION

Instead of focusing on specific features or tools, define your vision and set KPIs based on value to the business. The end goal of 4IR is about creating value from your data and processes. Prioritise 4IR investments based on where you see the biggest gaps and greatest opportunities.

The best enterprise technology innovations are those that are developed to solve existing customer and supplier challenges or provide your business with a competitive advantage to better serve them.

SET UP YOUR PILOT

Fail to act quickly, and you fall behind; act too fast, and you risk messing up. Failure is a necessary part of the innovation process. But to make failure profitable, you not only need to fail fast, you need to fail smart. For most mid-sized manufacturers, that means dreaming big but starting small and then scaling up what works fast.

That's where the three I's of innovation come in. Iterative, incremental innovation ('incrovation') in small pilots enables faster decision-making and implementation, as well as the ability to adapt or change course at any point. The goal is to learn quickly and apply those learnings to the next experiment and/or scale the solution.

ENGAGE EXTERNAL STAKEHOLDERS

Even if total value chain integration is a faraway goal, you will still need to think about external interoperability and processes for collaboration. Sharing sensitive data

to an external network is easier said than done. Doing so requires a fundamental shift in relationships between suppliers and customers, and raises new questions about data privacy and information security.

Collaborative planning with key customers and suppliers early on in your 4IR journey will help accelerate implementation and lay the groundwork for secure co-creation of value. And it will also tell your customers and suppliers that you are engaged in moving positively towards 4IR. This will be an increasingly important requirement for multi-national OEMs.

PREPARE YOUR PEOPLE

Even as processes become automated and AI might start to take over some data-driven decision-making, change still needs to start with people. You need your employees to understand why they need to leave the status quo behind, believe in the strategic vision and feel engaged in the process. Most importantly, they need to understand what's expected of them and have the resources, training and development to get to the new destination. Training for the age of 4IR is going to be one of the key factors in the success of your company – and indeed UK manufacturing generally.

The BDO network firm in the USA have produced 'The Middle Market Manufacturer's Roadmap to Industry 4.0' that will provide further comment and background – [https://www.bdo.com/insights/industries/manufacturing-distribution/the-middle-market-manufacturer-s-roadmap-to-in-\(1\)/the-middle-market-manufacturer-s-roadmap-to-indust](https://www.bdo.com/insights/industries/manufacturing-distribution/the-middle-market-manufacturer-s-roadmap-to-in-(1)/the-middle-market-manufacturer-s-roadmap-to-indust)



Tom Lawton

Partner and Head,
BDO Manufacturing
0121 352 6372
tom.lawton@bdo.co.uk



EEF is dedicated to the future of manufacturing. Everything we do is designed to help manufacturing businesses evolve, innovate and compete in a fast-changing world. With our unique combination of business services, government representation and industry intelligence, no other organisation is better placed to provide the skills, knowledge and networks they need to thrive.

We work with the UK's manufacturers from the largest to the smallest. As we understand manufacturers so well, policy makers trust our advice and welcome our involvement in their deliberations. We work with them to create policies that are in the best interests of manufacturing, that encourage a high growth industry and boost its ability to make a positive contribution to the UK's real economy.

Our policy work delivers real business value for our members, giving us a unique insight into the way changing legislation will affect their business. This insight, complemented by intelligence gathered through our ongoing member research and networking programmes, informs our broad portfolio of services; services that unlock business potential by creating highly productive workplaces in which innovation, creativity and competitiveness can thrive.



Accountancy and business advisory firm BDO LLP is the UK member firm of BDO International, which has more than 1,500 offices in 162 countries. We operate from 18 offices across the UK, employing 3,600 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, food and drink, industrials, marine, test and measurement and technology.

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

To find out more about this report, contact:

Lee Hopley
Chief Economist
lhopley@eef.org.uk

Martyn Jenkins
Economist
mjenkins@eef.org.uk

Francesco Arcangeli
Economist
farcangeli@eef.org.uk

EEF Information Line
0808 168 5874
research@eef.org.uk

The data used in this survey has been provided by EEF members. 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 Amanda Norris in our Information and Research team anorris@eef.org.uk

To talk about any issues your manufacturing business may be facing please contact:

Tom Lawton
Head, BDO Manufacturing
0121 352 6372
tom.lawton@bdo.co.uk

Baljit Bhamra
Marketing and Business Development Manager – BDO Manufacturing
0121 352 6296
baljit.bhamra@bdo.co.uk

We foster enterprise and evolution to keep your
business competitive, dynamic and future focused
www.eef.org.uk
