In partnership with:

BDO

MAKE uk
The Manufacturers' Organisation

MANUFACTURING OUTLOOK

2019 QUARTER 1

2.7 million employees

10% of UK output

66% of business R&D

Average wages higher than the rest of the economy

MakeUK.org

Drossing superhero, taken by Diane Winterton at Meridian Technologies, shortlisted in the amateur category of the EEF Photography Competition 2016.

FOREWORD

Seamus Nevin
Chief Economist
Make UK

Tom Lawton
Head, BDO Manufacturing
BDO LLP

It has been a busy start to the year for British manufacturers.

With only days to go before the UK leaves our largest trading partner, the risk of a no-deal Brexit looms large and is playing into business performance. Some companies are activating their contingency plans in preparation for a potential disorderly Brexit.

Honda Motor Co Ltd.'s decision to close its factory in Swindon, combined with Nissan Motor Co Ltd.'s announcement that it will not build its X-Trail utility vehicle in Sunderland, have been high profile blows to the UK's manufacturing industry in recent weeks.

As uncertainty remains, many firms have been stockpiling goods and machinery, some have shifted operations abroad, while others have adjusted supply chains and begun checking the Brexit readiness of their suppliers and customers. Customs preparations are intensifying too with manufacturers building new information technology systems to handle potential extra tariffs and paperwork on imports and exports.

Yet it is not all doom and gloom. There are many positive signals too.

Sterling is the barometer of Brexit risk and so far this year it has held higher than in 2018.

A strong labour market has also defied the general economic slowdown since 2016.

Positive employment statistics, with unemployment at 4%, its lowest rate since 1975, has seen employers start to raise pay for staff at the fastest pace in a decade.

One explanation for the 'jobs miracle' appears to be that, given the highly uncertain economic and political outlook, firms have cut investment in equipment, preferring to flexibly hire extra workers instead. Investment may pick up once the uncertainty around our future trade relations has, hopefully, been removed after March 29th. Indeed, our latest survey shows employment and investment intentions for the coming year are positive.

With skills shortages still the biggest non-Brexit concern facing UK manufacturers, signs of nervousness among businesses might yet appear. The latest ONS data showed a fall in the number of EU workers, largely driven by a decline in eastern Europeans although encouragingly the number of non-EU workers rose by a larger margin, showing the UK remains an attractive destination for global talent.

The current jobs boom has in turn provided uplift to the wider economy as consumer spending stayed stable while January saw the biggest monthly surplus for the UK's public finances since the 1990s, as self-assessment tax returns piled in.

Weak productivity nevertheless puts long term pay growth in jeopardy and risks pushing up inflation. The Bank of England has said it may need to raise interest rates gradually to offset these pressures.

Another warning headed our way is that neither our forecasts nor responses from manufacturers point to renewed momentum on the demand front as growth continues to moderate.

The important European market is divesting itself of reliance on UK business as the Brexit D-Day approaches and risks to world trade continue with trade disputes between the US and China disrupting global supply chains.

The impact of this is demonstrated in this quarter's *Manufacturing Outlook* figures which show output and orders balances remain positive though trending down. Output is still above its long term average, but orders decreased a lot since last year as businesses brace for Brexit.

So, with a long list of mixed signals the consequences of this uncertain environment can already be seen in the real economy. Yet whatever form Brexit takes resilience will be key and British manufacturers will work to make a success of it.

2019Q1 HEADLINES

After the slowdown experienced between q3 and q4, the output and order situation remained broadly untouched this quarter. Output is still over its long-term average however, as was the case in the last quarter, the marked gap between orders and output seems once again to hint that part of the production is related to stockpiling activities rather than customer's demand.

Total orders are two points better than in q4 2018 and for the first time since 2016, domestic orders are stronger than export orders.

On a positive note, this is the ninth quarter with output, export and domestic balances all in positive territory.

INDICATOR	BALANCE	CHANGE	
Confidence	5.2	↓	Confidence in the UK economy falling at the lowest level since 2016
Output	22%	↔	Output balance stable over its long-term average
UK orders	14%	↑	Domestic orders overtaking export orders for the first time since q4 2016
Export orders	12%	↔	Export orders stable after q4 plunge. For the first time since q3 2016 balance for demand from Europe lower than 50%
Employment	22%	↑	Recruitment balance picking up since q4 2018
Investment	12%	↑	Investment intentions slightly higher than q4, but steadily lower than those for employment

Source: Make UK Manufacturing Outlook Survey

In the next three months expectations are for softer balances in all the major categories continuing the downward trend started at the end of 2017.

Employment balances had a positive pick-up after the drop in q4 and they are now back at the level seen for large part of 2017 and 2018. However, it also appears that the balance for the next quarter will go down once again showing how this increase may just be temporary.

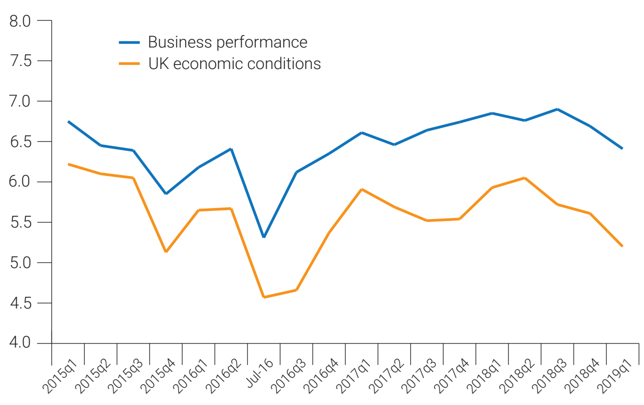
Investment intentions are also higher than last quarter even if steadily lower than those for employment. This confirms once more how companies prefer to hire more than invest in a period full of uncertainties.

Demand from Asia is no longer in one of the top three positions due to China showing less and less appetite for imports. The third place is now held by Middle East with North America and Europe completing the first three places with the latter stable at the top. However, the balance for demand emanated from the continent is lower than 50% – the first time since q3 2016 – reflecting how uncertainty due to Brexit is putting orders on hold.

Both business confidence and UK economic conditions are trending down with the second at its lowest level since the end of 2016 with manufacturers extremely worried about the status of the economy currently facing the great Brexit uncertainty. There is more bad news coming from several European economies and the trade war between both sides of the Pacific. Our GDP forecast for 2019 is pricing in these concerns and show a 1.1% growth in 2019 and a faster growth in 2020 at 1.7%.

Confidence in UK economy and business confidence continue to point down

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



Source: Make UK Manufacturing Outlook Survey

OUTPUT

The balance of activity in the manufacturing sector in q1 remained stable at 22, the same performance reported in q4. The balance is significantly lower than the one registered at the end of 2017 – the business cycle peak – but it is still fairly positive. This result represents the tenth consecutive quarter of positive output balances and exceeded the expectation of 19 from last quarter.

Looking at the next three months, our respondents are still seeing a positive balance trending down once again with a slowdown continuing to persist. As was the case in the last quarter, it appears that the gap between orders and output is a reflection of precautionary stockpiling activities with production not fully driven by orders.

PAST THREE MONTHS	↔	22%
NEXT THREE MONTHS	↓	17%

Looking at single subsectors, almost all of them report positive balances. As always subsector performance is not perfectly aligned, however more homogenous than we saw in the last quarters.

After three quarters of slowdown in official statistics, the mechanical sector saw a pick-up in activity at 35. This was the strongest performance since q4 2017. The sector expects a slowdown in the next three months possibly related to the extreme exposure that the sector has to the export market.

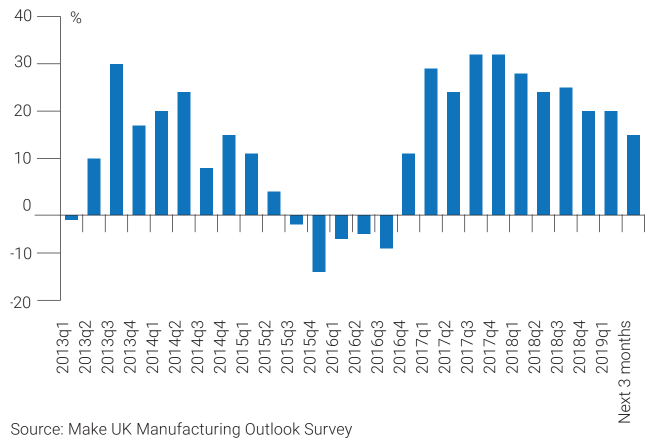
Electronics – the top performer of the year – continues to report a positive balance, which is not as buoyant as those seen at the peak of the second half of 2017 and first half of 2018, but higher than the one reported in q4.

The metal family, in particular metal products, reported a weak output in this quarter, which is probably a reflection of the sharp slowdown experienced by one of its key customers, the motor vehicles sector. Basic metals' respondents are also particularly gloomy about the next quarter with a balance at -18 for the next three months.

The rest of the construction sector suppliers – rubber & plastics, electrical equipment, non-metallic minerals – reported a positive balance. In particular, bricks and mortar (not in the table) makers were very happy with their performance. Electricals, after a very difficult year, continue to show signs of recovery with a balance expected to get even better in the next quarter.

Output balance stable in the first quarter of the year

% 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	12%	-18%
Metal Products	7%	17%
Mechanical	35%	23%
Electronics	21%	25%
Electrical	22%	29%
Rubber & Plastics	11%	56%
TURNOVER		
£0-9m	14%	22%
£10-24m	34%	27%
£25m and over	35%	24%

Source: Make UK Manufacturing Outlook Survey

ORDERS

Total order balance was slightly up in q1 at 16 but far from the average of 28 that characterised the period between q1 2017 and q3 2018.

The pick-up in the latest quarter was once again driven by UK domestic orders which remain higher than the five year average.

In the last edition of *Manufacturing Outlook*, we discussed how the wide gap between export and domestic orders was almost completely filled. This time domestic balances were even higher overtaking export balance for the first time since q4 2016.

This is the ninth quarter in a row with positive balances for UK, export, and total orders. However, expectations for the next three months are quite grim with only a slight majority of respondents having a positive view for both domestic and non-domestic orders.

UK ORDERS

UK orders returned to where they were in q3 with a balance of 14%. Domestic orders did not enjoy the same boom that exports did in 2017 and early 2018. Nevertheless, this is the tenth consecutive quarter in positive territory and the longest joint positive streak since records began in 1998.

Looking at subsectors, almost all of them reported order balances slightly greater than those in q4 2018. In particular, electronics saw a remarkable pick-up after a couple of weak quarters for the domestic market. The only exception was rubber & plastics which contracted since last quarter but remained in positive territory despite our respondent predictions of a negative result.

The next three months appear to be not very positive with domestic orders just slightly over the zero threshold. Most of this performance is related to the basic metals sector which is showing a very negative balance, a possible reflection of the troubles the UK automotive sector is experiencing.

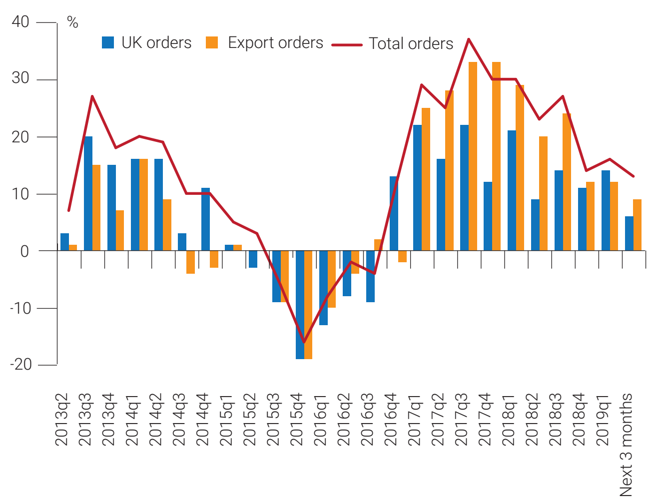
EXPORT ORDERS

The big story behind *Manufacturing Outlook* in q4 was centred on export orders and their sharp decline after a long period of expansion which was the main driver of the 2017 manufacturing expansion.

UK ORDERS	PAST THREE MONTHS	↑	14%	NEXT THREE MONTHS	↓	6%
EXPORT ORDERS	PAST THREE MONTHS	↔	12%	NEXT THREE MONTHS	↓	9%
TOTAL ORDERS	PAST THREE MONTHS	↑	16%	NEXT THREE MONTHS	↓	13%

Total balance slightly up with domestic overtaking export orders

% balance of change in orders



Source: Make UK Manufacturing Outlook Survey

This quarter the balance remained the same as q4 with domestic orders showing a stronger balance. This confirms how exporters are no longer enjoying the effect of the 2016 sterling devaluation and how the potential delays and disruption at borders related to Brexit are constraining the appetite of customers on the other side of the channel.

Last time respondents were expecting a pick-up in orders from abroad due to more clarity on Brexit. As we know this did not happen and as a result, the next three months balance are mired in uncertainty. Expectations for the next quarter are for a balance of 9 which would be the weakest result since 2016.

Looking at subsectors, basic metals remained in negative territory confirming how US trade tariffs and automotive troubles in Europe are affecting the sector. Electronics balances remained positive but weak as a reflection of the previous rapid expansion, some capacity constraint that the sector continues to face, and the threat of a global trade war.

When examining international markets, the EU is always at the top of the podium. Despite holding first place, the balance of companies seeing a pick-up in demand from across the channel dropped by 10 points to 48%; it was 65% exactly a year ago. Electrical equipment saw the most pick-up in demand from Europe with almost three quarters of the companies in this sector reporting it.

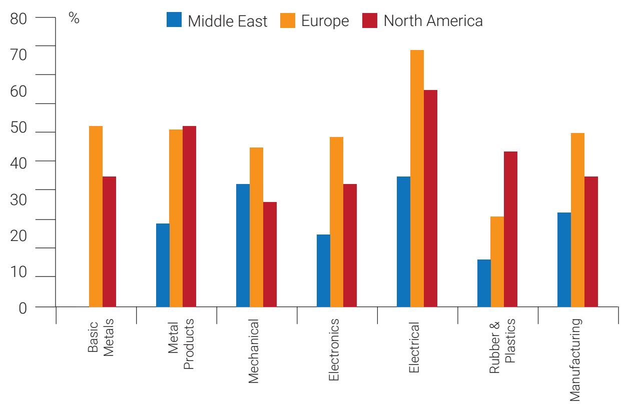
After a long period of no-news in terms of the podium composition, something has changed. North America remains stable in its second position at 36%, however in third place Middle East overtook Asia. This is a reflection of a slight pick-up from the Middle Eastern market and a drop from Asia. In particular, official stats pointed out how exports to China has recently contracted for several manufactured goods.

Brexit will be the key factor for next quarter's performance. If a "cliff-edge" situation is not avoided, we will be likely to see a sharp contraction in exports.

This uncertainty is not helping businesses already dealing with a global slowdown. The low appetite for imports that the Chinese market is showing, the threats coming from the US administration and the potential expansion of the trade war the US is currently fighting mostly with China all remain key risks.

External demand slowing down while Middle East overtakes China

% of companies reporting positive demand conditions by market



Source: Make UK Manufacturing Outlook Survey

Orders summary

% balance of change

	UK ORDERS		EXPORT ORDERS		TOTAL ORDERS	
SECTOR	PAST 3 MONTHS	NEXT 3 MONTHS	PAST 3 MONTHS	NEXT 3 MONTHS	PAST 3 MONTHS	NEXT 3 MONTHS
Basic Metals	12%	-47%	-8%	-42%	0%	-41%
Metal Products	10%	9%	21%	-4%	16%	19%
Mechanical	7%	13%	15%	23%	19%	14%
Electronics	25%	4%	8%	25%	14%	21%
Electrical	22%	29%	29%	13%	28%	33%
Rubber & Plastics	11%	63%	33%	11%	22%	33%
TURNOVER						
£0-9m	15%	16%	8%	5%	21%	16%
£10-24m	20%	16%	24%	34%	16%	23%
£25m and over	8%	11%	31%	13%	30%	25%

Source: Make UK Manufacturing Outlook Survey

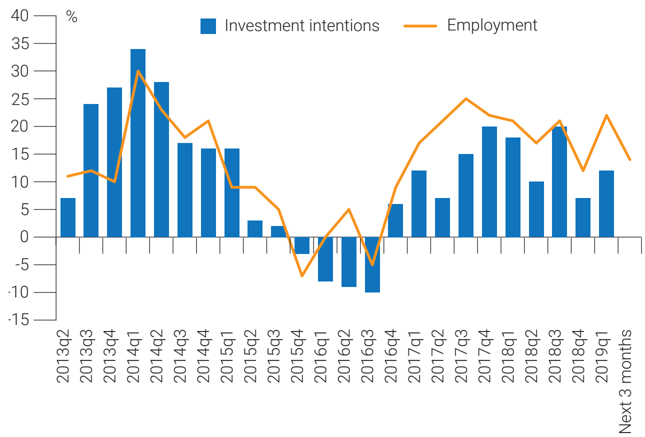
EMPLOYMENT & INVESTMENT

After the sharp drop in the last quarter of 2018, employment balances saw a sudden pick-up moving from 12% to 22% which is the highest level for a year.

It appears this growth can be attributed to the good performance of some sectors including mechanical equipment but also to stockpiling activities with some companies hiring temporary staff. Expectations in the next quarter are for another drop in line with the trend started since the peak in 2017. Once again, the basic metals sector seems to be suffering the slowdown the most with the slowdown in output reflected in the negative employment balance.

Investment and employment intentions picking up after last quarter drop

% balance of change



Source: Make UK Manufacturing Outlook Survey

EMPLOYMENT	PAST THREE MONTHS	↑	22%	NEXT THREE MONTHS	↓	14%
INVESTMENT	NEXT TWELVE MONTHS	↑	12%			

As has been consistently since the EU-referendum of 2019, employment balances remain much higher than investment intentions despite those intentions slightly picking up since the score reported in the last quarter of 2018.

Looking at subsectors, the recovery of the electrical sector is contributing to the positive investment balance. The sector balance moved from 8% of last month to 17%. The two sectors showing the highest balance in q4 – electronics and basic metals – have reduced their intentions with the former moving from 21% to 11% and the latter to 26% to 6%.

The electronics sector also showed a pick-up in employment over the last three months in line with what was predicted in q4 2018 *Manufacturing Outlook*.

For the next quarter and year, the outcome of the Brexit process will be crucial. The year concluded showed a negative result for business investment with companies not confident enough to push investment as also reported by our latest *Investment Monitor* published in October 2018.

Employment and investment summary

% balance of change

	EMPLOYMENT		INVESTMENT
SECTOR	**PAST THREE MONTHS**	**NEXT THREE MONTHS**	**NEXT TWELVE MONTHS**
Basic Metals	6%	-6%	6%
Metal Products	17%	4%	9%
Mechanical	26%	24%	11%
Electronics	21%	14%	11%
Electrical	22%	24%	17%
Rubber & Plastics	44%	22%	0%
TURNOVER			
£0-9m	15%	23%	10%
£10-24m	20%	13%	5%
£25m and over	25%	-8%	14%

Source: Make UK Manufacturing Outlook Survey

PRICES & MARGINS

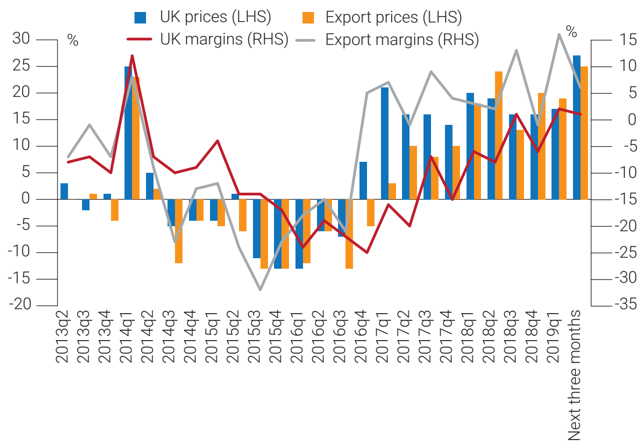
In the first quarter of the year, UK and export prices remained stable at a level very similar to those observed in q4 2018 with domestic price balance at 17% and exports at 19%.

Expectations are for a further pick-up in prices – in particular domestic prices – which is likely related to manufacturers absorbing a potential pick-up in prices after March 29th.

Margins turned positive once again in q1, particularly those in the export markets which, in the last couple of years, have been constantly higher than those for the domestic market.

Price and margins up in the UK and foreign markets

% balance of change



Source: Make UK Manufacturing Outlook Survey

UK PRICE	PAST THREE MONTHS	↑ 17%		NEXT THREE MONTHS	↑ 27%	
EXPORT PRICE	PAST THREE MONTHS	↓ 19%		NEXT THREE MONTHS	↑ 25%	
UK MARGINS	PAST THREE MONTHS	↑ 2%		NEXT THREE MONTHS	↓ 1%	
EXPORT MARGINS	PAST THREE MONTHS	↑ 16%		NEXT THREE MONTHS	↑ 6%	

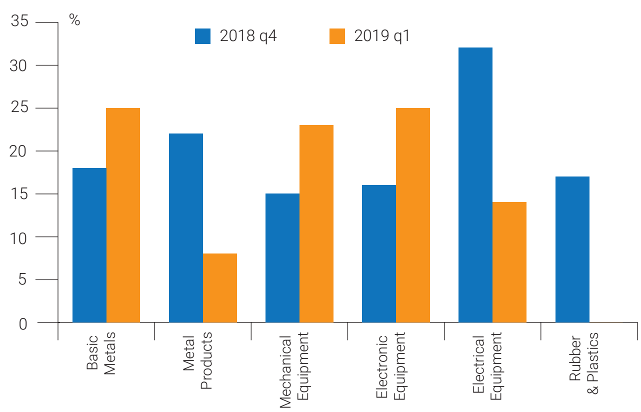
In the last *Manufacturing Outlook* edition, we pointed out the growth in price balances were not followed by a growth in margins. The opposite occurred with margin balances turning negative due to important price pressures coming from the oil price increase between the first and third quarter of 2018.

In the last quarter of the year, Brent price went into reverse and moving from the $85 per barrel in October to $55 in December. This radically changed producer prices which moved from a double digit annual growth rate to a more manageable rate between 2% and 3%. Thanks to oil price pressures easing, manufacturers were able to build up on margins. However, they are not very positive about this trend continuing and they expect a lower result in the next quarter.

Looking at the subsectors, it appears that export margins picked up for most manufacturing subsectors. Mechanical equipment, basic metals, electronics and electricals were all able to increase prices and obtain better margins after a long period where only electronics was able to achieve this target.

Trending up with some exceptions

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

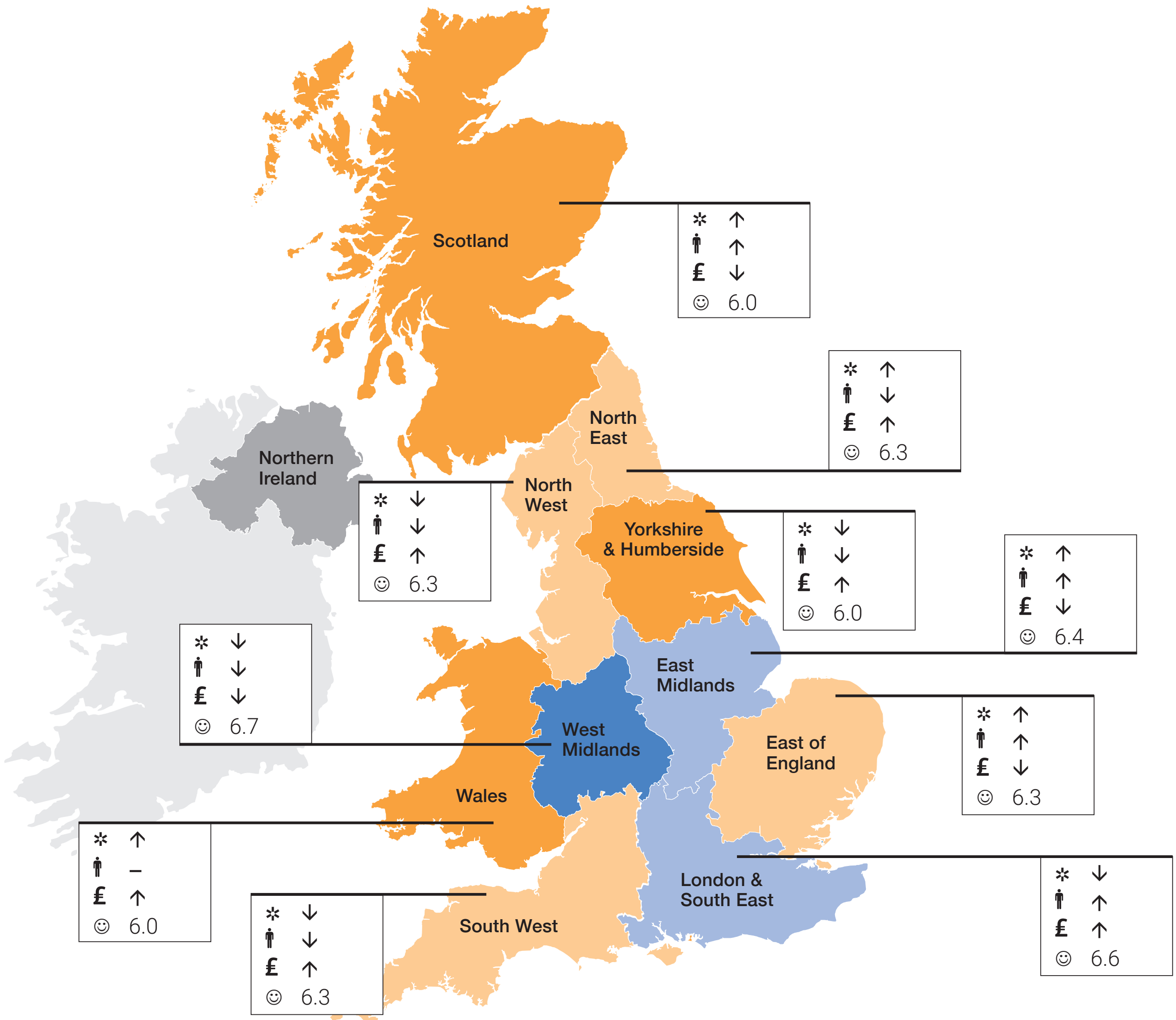


Source: Make UK Manufacturing Outlook Survey

REGIONAL

The regional picture is a mixed bag this quarter. Although business confidence is positive in all regions, six of the ten regions have seen a decrease in confidence since the last quarter. We see a similar picture with output, increasing in all regions but half of those regions seeing growth lower compared to last quarters' report.

Manufacturers in the West Midlands had many of their negative predictions from last quarter come to fruition



KEY:

↑/↓ INCREASE/DECREASE ON PREVIOUS QUARTER
✲ OUTPUT
EMPLOYMENT
£ INVESTMENT
☺ BUSINESS CONFIDENCE

Source: Make UK Manufacturing Outlook Survey

as this region had the most loss quarter-on-quarter with our output, employment and investment indicators all lower than in our last Manufacturing Outlook. It is the only region which has shown no growth in total orders and investment intentions in this region are in negative territory. The high concentration of metal and motor vehicle manufacturers in the region may somewhat explain the downturn here. The press has been alight with the concerns of the automotive sector and these seem to be playing out in the rest of the automotive supply chain in the West Midlands. Although many will point to Brexit, we have seen car registrations continue their downward trend in the UK and demand for imported cars in China continues to decrease as they move towards being more self-reliant.

Looking forward, the region's manufacturers defy expectations; they remain confident and expect things will pick up, however, recent announcements about plant closures and job losses in the automotive sector came at the end of our survey period so we may have to take the prediction of our respondents with a pinch of salt.

It's not all bad in middle England as the East Midlands registered on the opposite end of the spectrum this quarter with strong growth in output, employment and investment. Although somewhat susceptible to the automotive sectors woes, the East Midlands has likely been protected by the steady hand of the food and drink sector and the smörgåsbord of other subsectors that make up the rest of the regions' manufacturers. The region did see a dip in orders last quarter but companies correctly predicted this would be short lived and the region saw the highest growth in export orders of any region this quarter.

More generally we saw positive output growth in all regions over the past three months, but with output outstripping orders in many regions this may be a further sign of stockpiling rather than a positive sign of increased business. Scotland saw a reassuring growth in orders after a drop last quarter and although the North East saw a bounce back in orders employment falls into the red, as do investment intentions.

BUSINESS CONFIDENCE INDICATORS

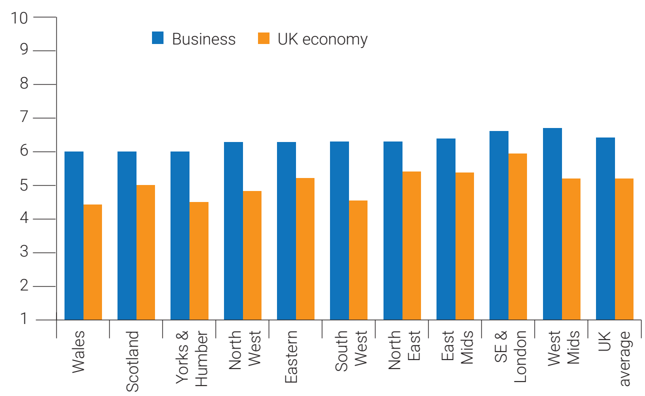
Firm-level confidence stayed positive (above five) for all regions this quarter. Scotland remains at the back of the pack on the confidence indicator but has seen an increase since last quarter bringing it level with Wales as well as Yorkshire and Humber. The South East & London continues to sit toward the top of the charts in confidence, likely propped up by the consistent demand of the inelastic food and drink sector as well as the electronics, aerospace and pharmaceutical sectors.

As always these data should also be looked at in the light of previous data, and that paints a far less rosy picture. Only Scotland and the aforementioned East Midlands have seen confidence increase from last quarter, and although the South East & London stays higher than most of the regions, it also saw the largest drop in confidence, quarter-on-quarter.

We consistently see confidence in one's own business outpacing confidence in the UK economy (a common survey phenomenon), and this quarter four of the ten regions see their confidence in the UK economy slip into the bottom half of the scale. This is reflected in the overall view for the sector, which places confidence in the UK economy only marginally above the tipping point.

Firm level confidence remains positive but down on last quarter for many

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



Source: Make UK Manufacturing Outlook Survey

Regional summary

% balance of change

	OUTPUT		TOTAL ORDERS		EMPLOYMENT	
REGION	PAST 3 MONTHS	NEXT 3 MONTHS	PAST 3 MONTHS	NEXT 3 MONTHS	PAST 3 MONTHS	NEXT 3 MONTHS
Scotland	21%	25%	17%	20%	20%	20%
North East	25%	0%	33%	0%	-8%	-8%
North West	19%	24%	24%	14%	10%	-5%
Yorks & Humber	32%	14%	32%	5%	9%	9%
East Mids	30%	10%	40%	26%	30%	21%
Eastern	15%	26%	26%	22%	15%	-4%
South East & London	28%	26%	21%	28%	26%	8%
South West	24%	56%	12%	47%	24%	35%
West Mids	23%	26%	0%	10%	23%	17%
Wales	56%	11%	67%	0%	0%	11%

Source: Make UK Manufacturing Outlook Survey

ECONOMIC ENVIRONMENT

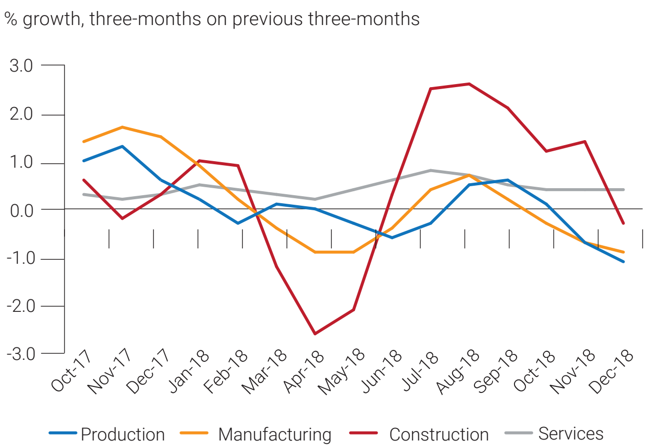
After the pick-up registered in the third quarter of 2018, the year ended on a soft note with a 0.2% expansion. Survey data for January also confirmed how the economy slowed down in the first quarter of 2019 thanks to uncertainties over the Brexit situation and a more general slowdown seen all over Europe.

Looking ahead, we expect the economy to slow further in 2019 and gradually pick up in 2020. We pencilled in an expansion of 1.1% and 1.7% respectively, however, it should be noted that our forecast is predicated on a "soft Brexit".

HEADLINES:

— Modest grow in 2019 due to global slowdown and Brexit uncertainty. Gradual pick-up in 2020
— Inflation mostly on target in 2019 and 2020, if cliff-edge scenario avoided
— Monetary policy cycle to see less tightening than expected and wages moderately rising
— Investment to contract in 2019 due to sharp slowdown at the end of 2018. Set to recover in 2020 if clarity made on Brexit

All the main sectors are trending downwards



Source: ONS (2018)

At the time of writing, we still don't know what Brexit will look like. Our assumptions are still for a smooth Brexit with a "cliff-edge" to be avoided on March 29th and a transition period ending up with trade conditions similar to those we currently enjoy.

Despite assumptions to the contrary, Brexit, and the uncertainties surrounding it, have already had an effect on the real economy, in particular on business investment which suffered a year of contraction in 2018. As we highlighted already in the previous *Manufacturing Outlook*, we expect a pick-up in investment once uncertainty around Brexit dissipates. However, it is likely we will need to wait for several months before this pick up starts to show up in the statistics. In particular manufacturing business investment usually takes a while to show up in the data considering the size and the time needed to complete and deliver a piece of machinery. As a result, we expect to see positive signs only in 2020.

Households will also continue to be cautious and, despite disposable income growing thanks to the pick-up in real wages, they won't splash out. Our forecasts see private consumption as a positive contributor to growth in 2019 and 2020 but at a much slower pace than the historical long-term trend.

Net trade, after being a positive contributor in 2017, went into reverse in 2018 and it is expected to have a negative, but very small impact in 2019 and 2020.

The Bank of England in its last monetary policy committee continued its "wait-and-see" approach. Its current assumptions foresee a more relaxed tightening cycle with only one rate rise by the end of 2020. Once again, a lot will be decided by Brexit with the Bank in the difficult position of potentially managing high inflation and slowing demand in a "no-deal" scenario.

HOUSEHOLDS ARE CONTINUING TO FOLLOW A WEAK SPENDING PATH

Household consumption represents more than 60% of UK GDP and British consumers have been quite keen on spending in recent years also thanks to the great performance of the labour market which characterised the UK economic recovery in the aftermath of the Global Financial Crisis.

2018 private consumption ended with a performance better than expected (+1.9%) but lower than any year since 2012 when the eurozone crisis affected also the UK economy.

Disposable incomes have grown since the end of 2017 thanks to wages running faster than inflation which instead retracted in 2018 and finally got under the 2% BoE target in January 2019. However, in our opinion the modest disposable income growth won't be enough to offset the negative contribution coming from very weak consumer confidence, the low saving ratio, and an employment rate which, already at an historical high, won't be able to expand much more.

As a result of these factors, we forecast an expansion of 1.4% in both 2019 and 2020.

WAGES TO CONTINUE TO FOLLOW THE INFLATION PATH

If 2017 was characterised by inflation running fast with wages struggling to catch-up, the same cannot be said for 2018. Real wages turned positive almost from the start of 2018 and since then, earnings growth continued to be sustained thanks to the summer rise in public wages, to a labour market almost completely out of residual slack and despite the poor performance in terms of productivity growth.

For the year ahead, we expect inflation to be under control and close to the 2% Bank of England target. This should have an effect on wage growth which should start to slowdown in the second half of the year and into 2020. However, once again, uncertainties over Brexit may create a very different scenario with inflation running fast if sterling depreciates and supply suffers shortages in the event of a no-deal scenario.

UK Economic forecasts

% change except where stated

	2018	2019	2020
TRADING ENVIRONMENT			
Exchange rate (€/£)	1.13	1.15	1.16
Exchange rate ($/£)	1.34	1.34	1.41
Exports	0.2	1.0	1.4
Imports	0.8	1.0	1.5
Current account (% GDP)	-4.2	-3.5	-3.1
OUTPUT			
Manufacturing	0.9	-0.3	1.4
GDP	1.4	1.1	1.7
COSTS AND PRICES			
Average earnings	2.9	3.0	2.7
Oil price (Brent Oil $/bl)	71.1	61.4	65.6
EMPLOYMENT			
Manufacturing (000s)	2,719	2,693	2,658
Rest of economy (000s)	32,377	32,633	32953
Unemployment rate (%)	4.1	4.2	4.1

Source: Oxford Economics and Make UK

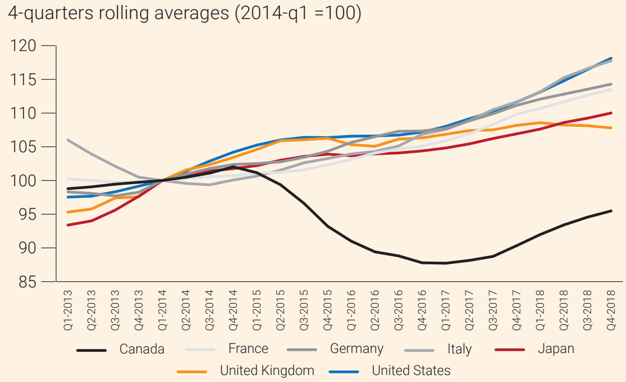
BUSINESS INVESTMENT SLOWDOWN, A UK STORY

Business investment was the big loser of 2017. However its poor performance is not new and it started in 2015 with several analysts connecting it to the EU Referendum Act, the piece of law allowing a vote on the permanence in the EU of the UK. UK business investment in q4 2018 was 2% lower than in q2 2015. This won't help the UK to fill its productivity gap against several other international competitors.

As the UK slowed down, the rest of the G7 invested heavily in these years thanks to the synchronised world expansion of 2017. Moreover, in the last two years Italian and US companies pushed their investment high thanks to a set of new laws allowing them to have an accelerated depreciation of investment. Looking at the other side of the Atlantic, Canada also enjoyed a pick-up in investment after the big drop of oil prices, a major factor for the Canadian economy.

UK did not invest as much as our partners

Real private non-residential and government fixed capital formation, 4-quarters rolling averages (2014-q1 =100)



Source: OECD (2018)

INVESTMENT AND TRADE SHOWING THE UNCERTAINTY SCARS

The last GDP publication of 2018 confirmed how business investment was the big loser of the year, reporting four quarterly contractions. Overall business investment was down by 0.9% with a particularly bad performance in the second half of the year. As reported in our latest Investment Monitor and Executive Survey political uncertainty were the main causes of this slowdown with companies holding off and waiting for more clarity about the future relationship with the EU.

Net trade also suffered a slowdown in 2018 after the positive contribution it gave to the UK economy in 2017. The sterling devaluation effect that improved international competitiveness in 2017 almost completely faded away in 2018 and Brexit had also the effect of delaying some important orders with importers scared of potential delays at borders.

We expect investment to pick-up in the year. However, since the lead time for investment is quite long and 2017 was extremely bad in its second half, we anticipate a 1.2% contraction this year and a 2.4% increase in 2020.

Our vision for trade is for import and export growing at the same pace and net trade contributing slightly negatively to overall GDP.

GLOBAL ECONOMY:

- Global economy still growing but at a slower pace
- Italy fell in recession in q4 and Germany avoided by an inch
- US probably peaked and concern over budget disputes
- China slowdown affecting several markets

According to Oxford Economics estimates (official data yet to come), the world economy has expanded by 3.7% in 2018, the same result achieved the previous year. However, the direction of travel has changed and in the latest quarter's economic activity slowed down almost everywhere.

This weak growth is a reflection of the end of another business cycle after the very good expansion of 2017 but is also the consequence of uncertainties regarding the wider global trade picture and fears of a world becoming a less-open place.

The eurozone, after a very positive 2017, has started to show once again the problems of the past. In particular the second half of the year was a difficult one with the third economy of the eurozone – Italy – slipping once again into a technical recession (two consecutive quarters of negative GDP growth). The country is showing its traditional weaknesses linked to low productivity, a tight labour market, and an extremely high level of public debt. The election of its new populist coalition government frightened the markets which are

International Economic forecasts

% change

	GDP			INFLATION		
	2018	2019	2020	2018	2019	2020
France	1.5	1.5	1.6	1.9	1.3	1.4
Germany	1.5	1.3	1.6	1.9	1.5	1.8
Japan	0.8	0.9	0.3	1	0.9	1.3
US	2.9	2.5	1.9	2.4	1.7	2
Eurozone	1.8	1.4	1.6	1.7	1.3	1.6
China	6.6	6.1	5.8	2.1	2.1	2.4
India	7.4	7.3	7.0	4.2	5.4	5.4
World (2010 PPPs)	3.7	3.7	3.3	3.2	3.2	3.2

Source: Oxford Economics

now asking for a higher return to buy Italian bonds, but also consumers and businesses which are now investing less after a long period of expansion. The German economy is also not in the same position it was a year ago. A technical recession was nearly avoided after a 0% growth in q4 and a 0.2% contraction in q3 which was largely connected to some one-off factors. However, q4 data and PMI for January confirmed that the economy is not heading in the right direction and, not last, a Brexit no-deal scenario may hit really hard the huge German car sector which has the UK as a fundamental customer and supplier. Despite this bad news, the eurozone is still expected to grow by 1.4% in 2019 and 1.6% in 2020 also thanks to its fourth economy – Spain – continuing to grow at a sustained pace (2.3% in 2019 and 2.0% in 2020 after the 2.5% expansion of 2018).

The US is at a later stage in the business cycle compared to Europe and 2018 saw the American economy running fast thanks also to the fiscal boost it received from a generous Federal Budget. However, several economists agree that the peak was likely touched between the second and third quarter of 2018. At the time of writing we still don't have the official numbers for q4 and the entire 2018. This delay was due to the long "government shutdown" started just before Christmas and ended after 35 days. Expectations are for the US to have concluded 2018 with a 2.9% up from the 2.2% of 2017. However, some more disputes over the Budget and the construction of the wall between Mexico and US may increase tensions between the government and the lower house now controlled by the Democrats after the mid-term elections. Moreover, trade disputes with China will continue to create a risky environment for both countries and the entire global economy.

The Chinese economy has already shown some important signs of slowdown with the latest official data pointing to a 6.6% growth in 2018, the slowest in 28 years. The latest PMI index is also pointing to weak (by Chinese standards) growth in 2019. This is not great news for the global economy which has largely benefited from Chinese import appetite in recent times.

SECTOR FORECASTS

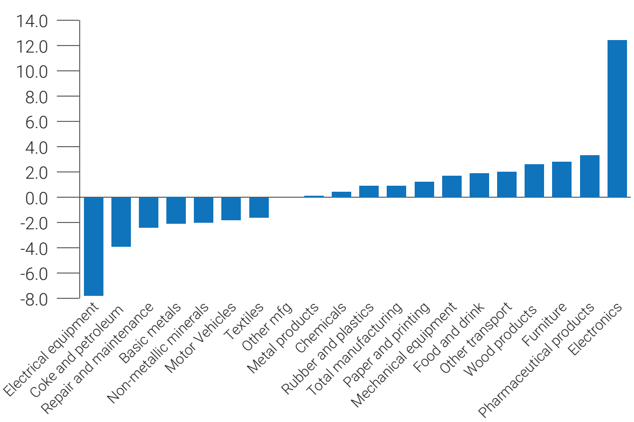
In 2017, the 2.6% manufacturing expansion was characterised by the very good performance of almost all its subsectors with only the erratic pharmaceuticals sector reporting an important contraction. For 2018, the story was very different.

Manufacturing slowed down and reported three quarters of contraction out of four. However, thanks to the peak reached in the second half of 2017, manufacturing was still able to conclude 2018 with a 0.9% growth. This time, as the graph shows, the subsector picture is a very heterogeneous one. Electronics was the star of 2018 with an astonishing 12.4% growth and, despite being not even 5% of UK manufacturing, its expansion contributed to two thirds of total growth.

On the other side of the table electrical products contracted by almost 8% due to a very bad start of the year and automotive contracted just under 2%.

Electronics sector heavy lifting in 2018

Annual % change in output in 2018



Source: ONS (2019)

The 2017 performance was also characterised by the expansion of those sectors mostly reliant on export and investment. As highlighted in the "Economic Environment" section, those two expenditure categories have suffered in 2018 with exports not being able to increase much more due to the fade away of the sterling depreciation bonus and appetite for investment hit by the uncertainty surrounding the Brexit process.

Our forecast assumes a smooth Brexit transition, but several sectors have already been damaged and this coupled with the global economic slowdown are pointing to a year of contraction in 2019 and a small pick-up in 2020. Our predictions are for a -0.3% growth this year and a +1.4% in 2020.

In this edition, we also decided to highlight Brexit specific issues that each subsector may face in a no-deal scenario.

A MIXED BAG FORECAST FOR CONSUMER GOODS PRODUCERS

As highlighted in the economic environment section, private consumption had a fairly positive growth in 2018 and we expect household to continue spending in the next two years but at a moderate pace due to low confidence.

The **food & beverage** sector, the largest UK manufacturing subsector, concluded the year with its best performance since 2014. The sector is reliant on domestic demand and it is usually not subject to large boom and bust. The sector also appears to be at the forefront of innovation in terms of new trends with the UK topping the world ranking for new vegan and vegetarian product launches. We expect it to expand by 1% in 2019 and 1.9% in 2020.

No-deal concerns: stockpiling activities are running but space is limited and perishable goods cannot be stored for very long periods of time. Despite being domestically focused, a large share of inputs come from continental Europe and rules of origin may create important barriers to trade.

After a positive 2017, **textiles** restarted its long-term trend of decline. The sector continued to face price reduction pressures coming from retailers and increased foreign competition. Moreover, concern about the environmental impact of "fast-fashion" is on the rise and influencing consumer behaviour. We forecast a contraction around 3.5% for both 2019 and 2020.

No-deal concerns: the sector continues to suffer a shortage of skilled young workers and is heavily reliant on EU-workers. Automation is not an easily applied alternative. Fabrics and materials imported from the EU are a big share of total inputs.

The **paper & printing** sector experienced two positive years with the paper side of the sector almost overtaking printing in terms of size thanks to online shopping. The sector is also enjoying the move from plastic packaging to more environmentally friendly paper. Expectations are for a small pick-up this year and a small contraction in 2020.

No-deal concerns: inputs for paper products (pulp) are heavily imported from the EU. Companies are stockpiling but they are facing space availability issues.

The erratic **pharmaceuticals** sector, after being the only subsector experiencing a sharp downturn in 2017, reported a positive 3.3% growth in 2018. The sector is facing issues related to the shortage of generic drugs and the difficulties of stockpiling goods. We believe that the sector will see a small contraction this year (-0.5%) and a bounce back in 2020 (+1.9%).

No-deal concerns: stockpiling reached its limit for such delicate goods. The sector is export and import intense with 40% of total demand coming from abroad.

Electricals had a very difficult year reporting the worst contraction since 2009. The sector suffered contagion from the weakness of the construction sector at the beginning of 2018, the delays for some important power plants projects and the low consumer appetite to buy major appliances. We expect some pick-up, but due to the poor performance of the last four quarters we predict another year of contraction followed by growth in 2020.

No-deal concerns: several electrical companies have already or hinted that they will relocate from Britain in the event of a hard Brexit.

WEAK INVESTMENT PERFORMANCE CONTINUES TO AFFECT SEVERAL MANUFACTURERS

The expansion of 2017 was an investment and export story. The story did not repeat in 2018 where investment contracted in the UK and export did not expand at the same level. We expect this trend to continue into 2019.

The name may be similar, but the **electronics** story is very difficult than the one of electricals. The sector performance benefitted greatly from the rush towards automation and new technologies. For the year ahead we do not expect a similar expansion due to the possible disruption that Brexit and the US-China trade war may create to a sector which has the most globalised supply chain. However, we have pencilled in a growth close to 1% for 2019 and 2020.

No-deal concerns: global supply chain disruption. It is the most import intensive sector, with a quarter of final demand coming from abroad and a large number of foreign companies working in the sector.

Mechanical equipment experienced the greatest growth rate in 2017 amongst manufacturing subsectors and despite three quarters of contraction in a row was able to expand also in 2018. However, the downward trajectory will have an effect this year and we expect a contraction before bouncing back in 2020.

No-deal concerns: the sectors recent fortunes have been associated with export and the ability to fully exploit the sterling devaluation of 2016. In this case, if another devaluation happened, it might not be a bonus due to trade delays and tariffs.

DESPITE A BAD Q1 CONSTRUCTION WAS ABLE TO END THE YEAR WITH THE POSITIVE SIGN

The **non-metallic mineral** sector is mostly reliant on construction activity. The year concluded with the negative sign due to its poor performance in q1 2018 when the “Beast from the East” disrupted construction activities. Since then the sector recorded three quarters of growth and the good performance should continue in 2019 and 2020.

No-deal concerns: the sector is domestically focussed however if Brexit triggers a recession, construction may be the sector which will suffer the sharpest declines.

Rubber & plastics is another important supplier for construction, but also for motor vehicles which is not enjoying a great period. Moreover, environmental issues continue to hit the sector with consumers and businesses trying to move away from single-use plastics. We expect a contraction this year.

No-deal concerns: other than the construction reliance, export is 20% of total demand.

Basic metals had a worse year than **fabricated metals** also thanks to the US tariffs hitting steel and aluminium. Both sectors may head toward difficult years on the back of a poor q4 2018. Weak motor vehicles sales in the UK and worldwide and trade war tensions will continue to loom over the sector.

No-deal concerns: more than 40% of final demand for basic metals comes from export and the EU is the top destination. Fabricated metal is in the middle of the super-integrated EU car supply chain.

THESE SECTORS ARE THE MOST EXPOSED TO BREXIT WITH MOTOR VEHICLES ALREADY PAYING THE CONSEQUENCES OF PROLONGED UNCERTAINTY

The **chemicals** sector is composed of several subsectors that do not always show correlation in their growth. The second biggest subsector – soaps and detergents – was the top performer of the year and boosted the industry's overall performance, offsetting the contraction in three other subsectors and the weak growth in the petrochemicals subsector (the largest subsector). We expect a 1% growth this year and in 2020.

No-deal concerns: due to its nature, the sector is heavily regulated by EU rules (REACH) and the no-deal scenario may have serious repercussion to the sector with the inability to trade with its main market by far – the EU.

Motor vehicles has not been a sector synonymous with good news in recent months. Several big companies announced plans to shut down factories, make redundancies and cut future investment and production. The sector contracted 5% in the last quarter due to car registration hitting the brake in UK and Europe and a sharp slowdown of exports to China. We forecast an important contraction in 2019.

No-deal concerns: the automotive supply chain is fully integrated in the EU with companies pushing just-in-time to the extreme with an endless queue of lorries delivering parts to one side of the border and cars on the other side. A no-deal scenario will hit the sector in the UK very hard, but it would also impact firms in continental Europe too.

Other transport is not growing as fast as it did in 2017, however it completed another positive year despite aerospace components contracting by 4.5%. The current level of order books is still high with production guaranteed for several months. We currently expect two years of sustained growth at 3% and 3.8%.

No-deal concerns: Airbus has been very vocal on the nightmare a no-deal scenario would be and how some production may be redirected to continental Europe. Bombardier is the biggest employer in Northern Ireland and the border issue may create a very difficult situation for them. Even if WTO tariffs do not apply to civil aerospace, inputs would be impacted with clear consequences for producers.

Sector growth rates and forecasts

% change

	OUTPUT			EMPLOYMENT		
	2018	2019	2020	2018	2019	2020
Basic metals	-2.1	-1.5	0.8	4.4	-2.7	-0.8
Metal products	0.1	-2.6	1.2	4.4	0.0	-0.6
Mechanical	1.7	-2.1	1.8	3.5	-0.7	0.7
Electronics	12.4	0.9	1.2	-0.2	-6.9	-3.7
Electrical	-7.8	-1.6	1.8	0.0	-5.5	-3.4
Motor Vehicles	-1.8	-4.1	2.4	2.1	2.3	-0.1
Other transport	2.0	3.0	3.8	-3.1	-0.6	-1.7
Food and drink	1.9	1.0	1.9	2.2	0.7	-1.2
Chemicals	0.4	1.1	1.2	-0.9	-3.0	-4.2
Pharma	3.3	-0.5	1.9	-2.9	-5.0	-4.9
Rubber and plastics	0.9	-1.0	1.4	6.0	-0.1	0.7
Non-metallic minerals	-2.0	3.5	0.9	-2.6	-1.3	-1.4
Paper and printing	1.2	0.8	-0.6	-0.7	-2.2	-2.7
Textiles	-1.6	-3.4	-3.5	-0.1	-6.1	-5.5
Manufacturing	0.9	-0.3	1.4	1.3	-1.0	-1.4

Sources: Make UK and Oxford Economics

Source: Oxford Economics

BDO VIEWPOINT

AI IN MANUFACTURING: CHANGE BRINGS OPPORTUNITY

The overall outlook for UK manufacturers at the end of 2018 was one of slowdown driven by uncertainty. This uncertainty has continued into 2019 but manufacturers continue to show their resilience with the Q1 survey results showing an uptick in investment and employment intentions with domestic orders in the driving seat.

The UK has a bold and successful manufacturing history, stemming from the birth of the first industrial revolution in Britain. Today we are in the early stages of the fourth industrial revolution (4IR). Manufacturers have a unique opportunity to utilise new technologies and ideas to add real value to their businesses, their customers and their supply chain.

As well as driving productivity and improving quality control, 4IR will also enable the automation of connections to the supply chain and customers. Over time artificial intelligence (AI) built into automation will start to control and drive all aspects of the manufacturing process – with less human intervention.

AI will become increasingly important as the Internet of Things further develops. AI algorithms will have the ability to gather and analyse an immense amount of data (Big Data) and present solutions to users. AI and Big Data are in their infancies at the moment but many companies are starting to use these tools to gain competitive advantage – think Facebook and Google who are busy collecting a massive amount of data about us, and for free.

AI will form an increasing part of manufacturing in the years ahead. The long-term value lies in a business being able to operate constantly with maximum accuracy, ensuring minimum waste of effort, time and resources – driving overall productivity growth. And as computing power continues to grow, 4IR and AI is within the reach of more manufacturers.

A key concern for many is whether 4IR and AI is a threat to jobs. Unfortunately, we think that the answer might well be yes – particularly for workers that perform repetitive tasks that machines can do for longer and with more reliability. There might be a growing need for people that develop and programme the AI and the machine environment – but these will be differently skilled people. This is why a sustainable industrial strategy is so important.

The announcement in February of a new joint government-industry package to improve skills in the AI sector to boost productivity and create high-skilled jobs as part of the modern Industrial Strategy was positive news. Supported by industry funding and up to £110m Government investment, it will help deliver the next generation of artificial intelligence talent trained in UK universities. However, this level of spending is simply not sufficient to support the training needs for the future and there needs to be a joined up policy for education, skills training and also retraining.

If properly supported, Britain's historic strengths in innovation, design and service provide the right foundations for a successful development of 4IR and AI. My concern is that the sector is not being properly supported during what is potentially a pivotal time for UK manufacturing within a very competitive global market.

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

We're delighted to introduce Make UK, the new name for EEF, and our family of new brands including Make Business and Make Venues. Together they will support the needs and requirements of our vibrant sector and ever-changing marketplace.

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 that means 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

To find out more about this report, contact:

Francesco Arcangeli
Economist
farcangeli@MakeUK.org

Seamus Nevin
Chief Economist
snevin@MakeUK.org

Make UK Information Line
0808 168 5874
research@MakeUK.org

The data used in this survey have been provided by UK manufacturers including members of Scottish Engineering 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 1,600 offices in 162 countries. We operate from 17 offices across the UK, employing 5,000 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 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

The Manufacturers' Organisation

MakeUK.org

Make UK is a trading name of EEF Limited.
Registered Office: Broadway House, Tothill Street, London, SW1H 9NQ.
Registered in England and Wales No. 05950172

Ref: 19.02.POL.SN.NB