In partnership with:





MANUFACTURING OUTLOOK

2018 QUARTER 4











Average wages higher than the rest of the economy



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

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FOREWORD



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Welcome to the final edition of *Manufacturing Outlook* for 2018, in partnership with BDO.

In many respects, economic conditions have evolved much as we expected this year. The economy has continued to chug along at a steady pace. Consumers have largely been in the driving seat, but with real wages only picking up pace in recent months, they've hardly had their foot on the gas with the exception of a short-term summer splurge. Construction has had its downs – weather and Carillion related – and some ups, as activity bounced back after spring's snowy disruptions.

Official statistics however, pointed to a more disappointing year for manufacturing. With a rather bumpy monthly profile, the latest data points to output levels holding at those seen at the end of 2017. While our *Manufacturing Outlook* survey has continued to report positive output and orders balances throughout this year, there has been a clear moderation in the strength of those response balances – a trend that seems to have accelerated in our latest report.

Also apparent again this quarter, and chiming with the official data, is the divergent performance of manufacturing sub-sectors covered in our report. Construction-related industries continue to recover after an extremely disappointing start of the year and capital goods such as electronics start to slow down after a period of vertiginous expansion.

However, neither our forecasts nor responses from manufacturers point to renewed momentum in global demand as growth continues to moderate – particularly in important European markets – over the next year and risks to world trade from more protectionist policies remain.

One stand out development this quarter is the more reliant domestic orders picture compared to exports. This follows

increased anecdotal evidence of companies putting in plans to increase inventory levels ahead of the UK's exit date from the European Union. On the other hand, exports, which have boosted the manufacturing sector for almost the last two years, have hit the brakes.

After the increase in q3, future investment plans are back on trend with a small majority of companies reporting an increase in capital expenditure in the next 12 months. Indeed, the ongoing weakness in the outlook for investment is not unique to manufacturing, as we forecast a contraction of business investment this year and a moderate pick-up in 2019.

Clearly, manufacturers' plans and our forecasts will continue to be dependent on the UK's smooth passage out of the EU, the terms of which, at the time of writing, were yet to be determined as negotiations were still on-going. Recognising the risks on this front, the autumn Budget sought to take action to counteract business caution, providing a substantial increase in the tax free allowance for business investment (the Annual Investment Allowance) and introducing new support for investment in buildings. The intent here, as well as the additional investment in infrastructure and additional resources for the Industrial Strategy, are welcome in terms of both timing and scale, but only time will tell if it will be enough to get the investment motor running.

A huge amount of uncertainty continues to hang over the sector and our forecasts for the UK economy over the next year. If everything that can go right does, regarding Brexit negotiations and the critical implementation period, then business and consumer confidence should start to gather some steam through next year, with a corresponding strengthening in the main components of growth. That's the backdrop we're working to, let's hope it's the right one.

2018Q4 HEADLINES

After the pick-up noticed in the third quarter of the year, our survey points to deteriorating trading conditions for manufacturers in the last three months of 2018. Balances across our headline output and orders indicators remain in positive territory but they continue to trend down at a level not seen since the end of 2016. Output is still trending over its long term average, but orders are reporting a decrease at a sharper rate. In particular, export order balances – the major reason behind last year's expansion – have significantly decreased from 24% to 12%.

INDICATOR	BALANCE	CHANGE	
Confidence	5.6	\checkmark	Confidence continue to trend down, but still higher than long-term trend
Output	22%	\checkmark	Output balance positive but at the lowest level for the last 2 years
UK orders	11%	\checkmark	Domestic orders closing the gap with exports
Export orders	12%	\checkmark	Europe remains the main market, but export balance halved compared to q3
Employment	12%	\checkmark	Recruitment balance remains higher than investment, but lowest level since 2016
Investment	7 %	\checkmark	After the pick-up in q3, capex sharply drops due to high level of uncertainty

Source: EEF Manufacturing Outlook Survey

In the next three months balances are expected to remain in positive territory but continue to trend down. As a consequence, the increase in investment intentions reported in the last quarter has reverted with only a small majority willing to increase their capital expenditure in the next 12 months.

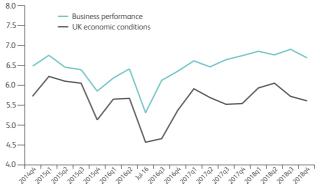
Employment balances also appear less buoyant, however they are still positive and exceed investment intentions. The gap between the two indicators started since mid-2016 and now appears to be a stable characteristic of our survey with companies opting for a more flexible solution to keep up with their production.

On a positive note, export order balances contracted in the last quarter, but only 18% of respondents were not able to identify any export growth opportunities in any foreign market with Europe remaining the main source of revenues from abroad.

After the small pick-up in q3, business confidence is now slightly lower than reported in q2 this year. The indicator still remains over its long-term average and above the one for confidence in the UK economy which has contracted since the first half of 2018. Business confidence tends to be higher than UK economic conditions, however, since the EU referendum, the gap increased substantially hinting that manufacturers are concerned about the status of the economy in light of the uncertainty around Brexit and the future trade landscape. Our forecast, in line with these concerns, continues to point to a slow GDP growth at 1.3% for both 2018 and 2019.

CONFIDENCE IN UK ECONOMY CONTINUES TO BE WAY BELOW BUSINESS CONFIDENCE

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



OUTPUT

After the slight pick-up in q3, activity in the manufacturing sector drifted down in the last quarter of 2018, with a net balance of 22% of manufacturers reporting an increase in output. Even though the balance is lower than those reported in the last few quarters, it represents the ninth consecutive quarter of positive output balances. The result points to a slower but continuous expansion which, translated into official data, will represent the third year of manufacturing output expansion in a row.

Looking at the next three months, manufacturers do not expect to expand at a quicker pace hinting that the slowdown may persist. Moreover, the current output may be more a reflection of the more and more reported precautionary stockpiling rather than production driven by demand.

PAST	THREE MONTHS	22%
NEXT	THREE MONTHS	19%

Moving our attention to single sectors, the vast majority of these still report positive balances with a few sub-sectors performing better than others, particularly when looking at the next three months.

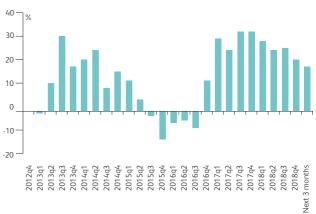
The strongest performer of the year – the electronics sector – reported a balance at 11%, much weaker than the 45% of q3. However, in the next three months a pickup is expected and the slower result of q4 may be more a blip related to capacity constraints rather than an actual slowdown in activity.

The cluster of sectors related to construction – namely electrical equipment, rubber & plastics, and basic metals – showed some good results on the back of the recent bounce-back of building activities after the beleaguered first quarter of the year characterised by bad weather and Carillion's collapse. With the exception of electrical equipment, which is expected to continue the recovery, the other two construction suppliers are pointing to a contraction in the first quarter of 2019. The basic metal sector is also clearly affected by the steel and aluminium tariffs approved by the Trump administration which are denting export opportunities, but also by the difficulties that the motor vehicles sector is suffering.

The top performer of the month was the mechanical equipment sector, which after a few difficult months on the back of the great 2017 expansion, was able to rise its output balances to 27% from the 20% reported in our previous *Manufacturing Outlook*.







Source: EEF Manufacturing Outlook Survey

OUTPUT SUMMARY

% BALANCE OF CHANGE

SECTOR	PAST 3 MONTHS	NEXT 3 MONTHS
Metal Products	26%	0%
Mechanical	27%	22%
Electrical	27%	48%
Electronics	11%	29%
Basic Metals	16%	-5 %
Rubber & Plastics	31%	-10%
TURNOVER		
£0-9m	12%	13%
£10-24m	24%	34%
£25m and over	27%	8 %

ORDERS

After the good performance of q3, manufacturers' order books reverted to the downward trend seen since the peak registered between the end of 2017 and the beginning of 2018. Total balance moved down from 27% to 14% due to a particular slowdown in the export orders balances.

After a long period of sustained growth coming from foreign markets and a wide gap between domestic and

export balances, the difference between the two has now almost completely disappeared.

On a positive note, this is the eighth quarter in a row with positive balances for UK, export, and total orders. Moreover, expectations for the next three months are for a pick-up in all the orders categories.

UK ORDERS	PAST THREE MONTHS		NEXT THREE MONTHS	
EXPORT ORDERS	PAST THREE MONTHS		NEXT THREE MONTHS	
TOTAL ORDERS	PAST THREE MONTHS		NEXT THREE MONTHS	

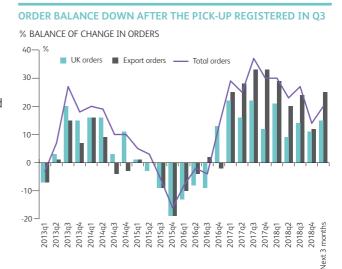
UK ORDERS

UK results drifted down compared to the last quarter, with domestic orders reporting an 11% balance, a drop from 14% in q3. However, even if down-trending, it is important to underline that they have been in positive territory for the last nine quarters.

Domestic orders continue to be resilient: they did not experience the same boom as export did in the last two years, but they have reported a subdued but constant growth. After a 2017 and 2018 characterised by sustained inflation, weak real wage growth, and a low saving ratio, UK consumers are still not that confident and with little appetite for splashing out.

Moving to sub-sectors, the positive construction sector results in the months after the dreadful winter, characterised by the aforementioned Carillion collapse and the "Beast from the East", had a notable positive effect on balances for construction's suppliers such as rubber & plastics, electrical equipment, and non-metallic minerals.

The positive picture should continue in the next quarter with two exceptions, firstly rubber & plastics which foresee a contraction in domestic orders, and secondly the reduction predicted by basic metals, another important supplier for construction. The metal products sector also reported a fairly positive balance in this latest *Manufacturing Outlook*. However, possibly related to the weaknesses of the motor vehicle sector, the forecast for the next three quarters is not positive, with a negative balance at -4%.



EXPORT ORDERS

ORDERS SUMMARY

% BALANCE OF CHANGE

One of the biggest stories in this latest edition of our *Manufacturing Outlook* is the one related to export orders. The appetite for UK goods from abroad has been the key theme of our reports in the last two years. We have underlined quite a few times how a great export performance was behind the very good expansion of manufacturing in 2017.

However since the peak registered in the second half of 2017 manufacturers have indicated that orders from abroad have been slowing on the back of a fading sterling devaluation effect and some capacity constraints. However, the situation reported this quarter shows they have plunged, with export orders balance only a notch above domestic orders. This was the steepest decline since the third quarter of 2014.

On the sub-sector side, the revival of the electrical equipment sector continues to bring good news which can also be detected in the export markets, with very positive results in the last three months and even better prospects for the next quarter.

Looking at markets, the EU remains the main source of opportunities for manufacturers with 59% of respondents reporting positive demand conditions from the continent. In particular, capital goods, such as those produced by mechanical equipment and the electronics sector, are showing particularly good export balances.

The podium is completed, as always, by North America (34% balance) and Asia (26%). When looking at the other side of the Atlantic, as much as on this side, electronics and mechanical equipment respondents are the most positive, even if their balances are also trending down compared to our previous results.

Expectations for the next three months are more positive and manufacturers are expecting a pick-up in orders which would send

export balances back at the level they used to be three months ago.

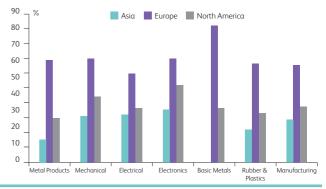
The actual balance will undoubtedly be correlated to the final outcome of the Brexit saga with the vast majority of exporters hoping for a frictionless trade system which will guarantee a minimum amount of disruption after March 2019.

A "cliff-edge" situation on the other hand would be extremely disruptive for supply chains with several sectors at risk of wasting months of production and losing a large amount of orders from abroad.

As always, Brexit is not the only risk looming. The potential US trade war situation remains in our focus considering how disruptive and quickly this may escalate. For the moment, the trade war has just been between US and China, but this does not mean that other countries may be involved in the future. This is even more pertinent when you consider the large trade surplus Europe has with the US.

EU DEMAND STILL IN THE DRIVING SEAT

% OF COMPANIES REPORTING POSITIVE DEMAND CONDITIONS BY MARKET



Source: EEF Manufacturing Outlook Survey

	UK OI	RDERS	EXPORT	ORDERS	TOTAL ORDERS		
SECTOR	PAST 3 MONTHS	NEXT 3 MONTHS	PAST 3 MONTHS	NEXT 3 MONTHS	PAST 3 MONTHS	NEXT 3 MONTHS	
Metal Products	14%	-4 %	0%	11%	18%	11%	
Mechanical	4%	18%	17%	29%	14%	25%	
Electrical	20%	41%	37%	41%	27%	37%	
Electronics	7%	21%	8%	40%	-4 %	21%	
Basic Metals	6%	-11%	-18%	0%	-11%	0%	
Rubber & Plastics	23%	-10%	17%	10%	15%	8%	
TURNOVER							
£0-9m	4%	13%	6%	14%	6%	14%	
£10-24m	17%	27%	13%	37%	15%	33%	
£25m and over	11%	6%	33%	23%	25%	21%	

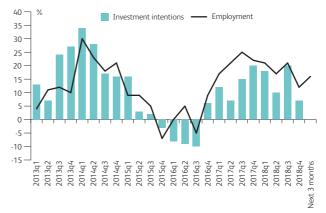
EMPLOYMENT & INVESTMENT

After the good results of q3, employment and investment balances reverted to the trend seen in our previous *Manufacturing Outlook*. Employment balance decreased from 21% to 12% and investment intentions in the next 12 months decreased from 20% to 7%.

Despite the weaker results, both balances have been positive for the last eight quarters and the employment balance reports additional positive signs for the next three months where manufacturers expect a better result compared to the one of this quarter.

INVESTMENT AND EMPLOYMENT INTENTIONS DOWN AFTER LAST QUARTER INCREASE

% BALANCE OF CHANGE



Source: EEF Manufacturing Outlook Survey

EMPLOYMENT	PAST THREE MONTHS		NEXT THREE MONTHS		
INVESTMENT	NEXT TWELVE MONTHS				

As we have observed since the aftermath of the EUreferendum, employment intentions remain firmly over those for investments. Moreover, if the gap was close to zero in q3, it is now back to levels we have seen throughout the entire post Brexit vote period. This is also in line with what we reported in October in our *Investment Monitor* where companies confirmed how they prefer to hire more and invest less to satisfy current demand – a clear hint of how uncertainty is having a detrimental effect on investment (as reported in the following economic environment section).

The sub-sectors story has some interesting highlights. The good performance of the electrical equipment after the harsh start to the year is reflected in employment numbers with robust balances but not by the same extent in the investment side with only a very soft positive balance at 8 %.

Electronics, the top performer of the year, did not have a quarter as amazing as those previously experienced. However, looking at employment in the next three months, the high investment intentions balance in the next twelve, and the current solid order book, it appears that q4 performance may just be a blip and a reflection of some capacity constraints. Looking ahead, the final outcome of Brexit will be crucial for investment and for employers who will understand if they will be able to access foreign labour in the nearby future.

EMPLOYMENT AND INVESTMENT SUMMARY % BALANCE OF CHANGE

	EMPLOY	(MENT	INVESTMENT
SECTOR	PAST THREE MONTHS	NEXT THREE MONTHS	NEXT TWELVE MONTHS
Metal Products	14%	4%	0 %
Mechanical	16%	18%	8 %
Electrical	23%	27%	8 %
Electronics	4%	43%	21%
Basic Metals	5%	-11%	26%
Rubber & Plastics	-15%	8%	0 %
TURNOVER			
£0-9m	6%	17%	13%
£10-24m	21%	20%	3 %
£25m and over	13%	7 %	4%

PRICES & MARGINS

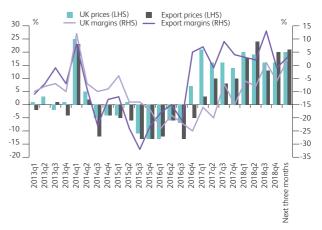
Price balances in q4 are lower than those registered at the peak in the first half of 2018. However, they are currently counter trending compared to those seen in the previous version of our *Manufacturing Outlook*.

In particular, export price balance is up to 20% from the 13% of q3. UK prices remained stable at 16%.

In the next three months a small pick-up is still expected in both domestic and foreign markets.

MARGINS DOWN IN Q4 ON INPUT PRESSURES

% BALANCE OF CHANGE



Source: EEF Manufacturing Outlook Survey

UK PRICE	PAST THREE MONTHS		NEXT THREE MONTHS	\checkmark	20%
EXPORT PRICE	PAST THREE MONTHS	20%	NEXT THREE MONTHS		
UK MARGINS	PAST THREE MONTHS		NEXT THREE MONTHS		
EXPORT MARGINS	PAST THREE MONTHS		NEXT THREE MONTHS		3 %

Despite the pick-up in prices, margins contracted significantly in both markets. After a quarter of positive balances, we again see a negative sign in both markets and it appears that input cost pressures are increasing at a faster rate than price increases.

This is in line with official statistics which have seen input producer prices running much faster than prices at the factory gate. In the recent period of sustained inflation, companies have not been able to transfer the pressure felt especially from oil prices. Brent price has increased substantially in 2018 despite the recent downward trend.

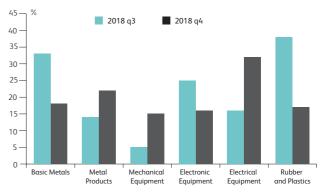
Looking at sub-sectors, we find a mixed bag of results. Even though export prices are up almost everywhere, sub-sectors are trending in different directions with rubber & plastics, electronics, and basic metals less able to increase their prices when compared to q3.

On the margins side, several sub-sectors are reporting a negative balance on both domestic and international markets. Margins for heavy users of oil and energy

(chemical, basic metals, rubber & plastics) are significantly negative. The only sub-sector which appears to be able to improve its situation is the electrical sector, which after a very troubled start of the year is getting back on the right track.

BALANCES ARE POSITIVE BUT TRENDING IN DIFFERENT DIRECTIONS

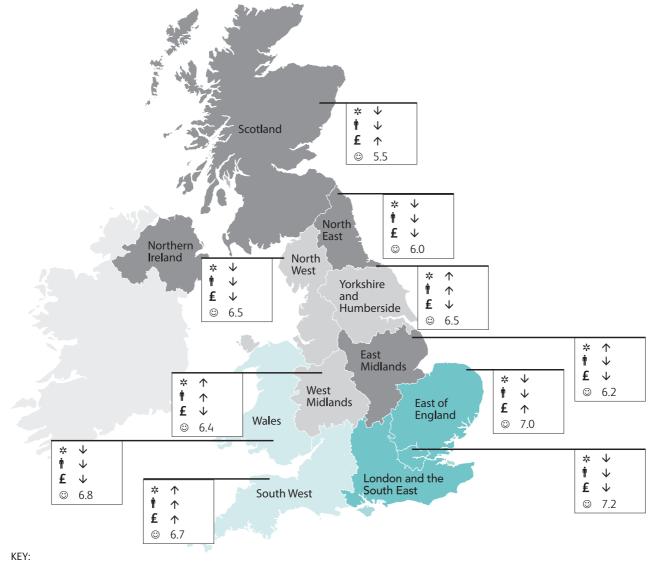
% BALANCE OF CHANGE IN EXPORT PRICES IN THE PAST THREE MONTHS



Source: EEF Manufacturing Outlook Survey

REGIONAL

The regional picture mostly mirrors that of the national, with almost all regions showing positive output balances over the past three months (the North East being the one exception). However, much like the national picture, these positive figures have to be taken in the context of the previous quarter, with six out of the ten regions seeing their output balances dropping compared to last quarter. Business confidence remains positive for all regions, however, only three regions see an improvement on q3.



 \wedge/ \downarrow INCREASE/DECREASE ON PREVIOUS QUARTER

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

The North East is looking like the biggest loser this quarter with output falling into negative territory, business confidence positive but falling, and new orders showing no improvement. When you consider that the mechanical equipment and basic metals sectors are both looking to hit a bit of a slump this year, and that these two sectors make up a large portion of the manufacturing base in this region, it might not be all that surprising that the North East is looking a bit worse for wear.

Another region with strong representation from these two sectors, the West Midlands, has also suffered a noticeable drop in business confidence this quarter, and is the only region expecting output to drop in the next three months. It looks like manufacturers in the metals sector may be starting to feel the sting of the US tariffs on steel and aluminium, and even more the problems related to the motor vehicle sector, a crucial player in the economy of the region.

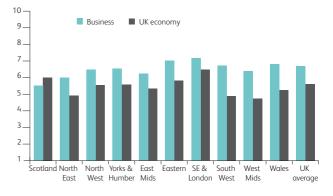
Generally there are still plenty of positive figures, but we're slowly seeing more regions slip into negative balances. Output remains positive in all regions, bar the previously mentioned North East. Orders were also positive in most regions in the past three months, but the East Midlands and Scotland have dropped into negative balances. The struggles of the motor vehicles sector likely explains the drop in orders for the East Midlands and north of Hadrian's Wall it may be the metal sectors again causing a drag.

BUSINESS CONFIDENCE INDICATORS

Unsurprisingly we once again see that confidence at firmlevel is outstripping the confidence in the UK economy as a whole. Without trying to sound like a broken record, once again, we see that confidence is remaining positive, however, seven out of the ten regions saw their confidence levels drop quarter-on-quarter. Eastern manufacturers are one of the few to see a reassuring rise however, the South East & London keeps its spot at the top of the confidence chart, likely due to the prominence of the electronics sector. Unfortunately we see Scotland at the bottom once more, with business confidence at its lowest since the end of 2016, and the only region whose confidence in the national economy is higher than at firm level.

FIRM LEVEL CONFIDENCE STAYS POSITIVE BUT SOME REGIONS SHOWING NERVOUSNESS

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



Source: EEF Manufacturing Outlook Survey

	TUO	PUT	TOTAL	ORDERS	EMPLOYMENT	
REGION	PAST 3 MONTHS	NEXT 3 MONTHS	PAST 3 MONTHS	NEXT 3 MONTHS	PAST 3 MONTHS	NEXT 3 MONTHS
Scotland	1%	10%	-7%	16%	-2%	13%
North East	-18 %	36%	0%	36%	0%	0%
North West	25%	10%	31%	25%	13%	25 %
Yorks & Humber	52%	13%	12%	7%	37%	0%
East Mids	23%	5%	-9%	19%	0%	14%
Eastern	3%	20%	16%	16%	-3%	16%
South East & London	36%	33%	38%	39%	16%	29%
South West	33%	50%	29%	47 %	53%	42%
West Mids	24%	-3%	24%	5%	24%	-14%
Wales	0%	75%	20%	20%	0%	60 %

REGIONAL SUMMARY

% BALANCE OF CHANGE

ECONOMIC ENVIRONMENT

Following a poor start to the year, the UK economy has continued to pick-up in the third quarter, expanding by 0.6%, its strongest growth since 2016q4. This acceleration has once again been driven by the dominant services sector, on the back of the good summer weather. Over the same period, the construction sector has also seen an impressive turnaround after its well-documented struggles at the start of the year.

Despite the improvement in the official data, this probably exaggerates the underlying strength of the economy, given the uncertain outlook we still face. Indeed our base assumptions are little changed from our last *Manufacturing Outlook*. Private consumption is still set to be held back by uncertainty and weak consumer confidence (despite the recent upturn in wages), and business investment contracting after three quarters of negative growth. Net trade's contribution to growth is also expected to be positive this year and marginal over the coming year.

As a result our forecasts have been slightly revised at 1.3% (from 1.2%) for this year and kept stable at 1.3% for the next despite the possible boost coming from the latest Budget. Clearly the outcome of the Brexit negotiations, and how these are implemented over the coming months, will have a significant bearing for next year in particular.

HEADLINES

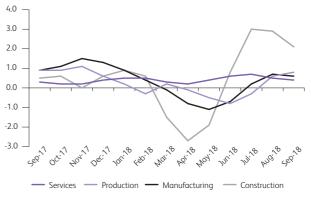
- UK economy expanded by 0.6% in 2018q3
- Wage growth at decade high in September
- Business investment contracting on the back of elevated levels of uncertainty
- Outcome of Brexit negotiations will have significant bearing on economy over the coming year

HOUSEHOLD SPENDING CONTINUES TO BE CONSTRAINED

Average CPI inflation was at 2.7% in 2017, its highest rate in five years, causing a sharp squeeze on household spending power. Since its peak at 3.1% in November of that year, inflation has slowed as the impact of the 2016 sterling depreciation fades. While higher oil prices as well as renewed weakness in sterling has kept prices above the Bank's 2% target, we expect inflation to recede further in the coming months and be back below target by mid-2019.

GDP GROWTH DRIVEN BY SERVICES AND BOUNCE BACK IN CONSTRUCTION

GROWTH %, THREE-MONTHS ON PREVIOUS THREE-MONTHS



Source: ONS (2018)

This is good news for consumers, and is further supported by a labour market which continues to thrive, and which is finally translating into higher pay packages for workers. Indeed with the labour market tightening, a result of both competition and scarcity for workers, wages grew by 3.2% in the three months to September. This growth was supported by the government's decision to scrap the 1% public sector pay cap, and grant wage increases for up to one million public sector workers in June.

These two effects – inflation receding, and a pickup in wages – should mean improved prospects for consumers. However, the strength of the recovery in household spending power is set to be constrained. Uncertainty regarding the UK's future standing in Europe is weakening consumer confidence, as well as softer employment growth in the coming months. These factors will mean consumers will continue to tighten the purse strings in the coming months.

BUSINESS INVESTMENT TO FEEL THE CHILL

Brexit related uncertainty has been weighing on business investment for the best part of 18 months now. This of course will be having a detrimental effect on firms' investment intentions, with many more companies now deciding to postpone extra capital expenditure, until complete clarity is gained on the UK's future economic and trading relationship with the EU. This was highlighted in our *Investment Monitor*, and is of growing concern given the UK's long standing productivity issue. For now we are keeping our base assumption that by the time of publication, clarity will have been gained on some key points of contention, allowing for a small recovery in investment next year. Business investment contracted for three quarters in a row and by 1.2% in q3 and it is now expected to show a negative growth in the year.

TRADE OUTLOOK REMAINS UNCERTAIN

Positive net trade will continue to contribute to economic growth this year, albeit marginally given growth in exports has slowed as the sterling depreciation effect fades. Looking at the year ahead, significant downside risks remain, specifically the growing move towards trade protectionism across the world, as well as the prospect of the introduction of trade barriers with the EU. These downside risks are contributing factors to the MPC's decision to keep interest rates on hold at 0.75 % in their November meeting.

GLOBAL ECONOMY

Global economic growth has lost some steam since the turn of the year, with rising trade tensions, heightened political uncertainty and a tightening in financial conditions easing the pace of growth in Europe and China in particular. Nevertheless, for the time being, global growth should remain resilient, and we are predicting growth of 3.7% and 3.4% for this year and next. There are significant risks to this outlook however.

HEADLINES

- Momentum in global economy eases, but remains resilient
- US driving force behind global expansion, but the peak has (probably) already passed

SPOTLIGHT: DIVERGENCE IN WAGE PATHS

The last few months has seen pay growth finally begin to pick-up, as the labour market tightens and we see some (weak) signs of the re-emergence of the Phillips Curve. However it is still a little too soon to be sure whether worker scarcity (both in terms of numbers and skills) will continue to drive wage growth upwards over a longer period, given the notable divergences between different sectors' wage paths.

Manufacturing pay has followed a different trajectory to the rest of the economy, rising at the start of the year but now easing notably (manufacturing pay was stable at 2.3 % in the three months to September). This is considerably lower than those workers in the construction sector for example, whose pay packages grew by 3.8 % in the same time period after the peak of 5.7 % in the three months to May despite the collapse of Carillion. Moreover, the service sector enjoyed a 3.3 % rise in the same period with a particular boost coming from distribution and hotel services with salaries growing by 4.4%



- Concerns remain regarding rising trade tensions between the US and China
- Heightened political uncertainty in eurozone represents further risk to outlook

The US, as has been the case throughout 2018, has been the driving force behind the global economy. Buoyed by fiscal stimulus measures, a labour market which continues to go from strength to strength, and improving consumer confidence, the US economy expanded by 0.9% in q3, and we are expecting healthy growth of 2.9% for 2018. This impressive performance has resulted in the Fed embarking on monetary policy tightening schedule, with three rate rises so far in 2018, and a fourth anticipated towards the end of the year.

While the strength of the US economy has been a source of good news this year, we are likely to have approached the peak of the cycle. Indeed, economic momentum in the US is set to slow down due to the fading impact of tax cuts, and employment gains in the labour market easing. Moreover, the latest data showed weaker growth in q3 and, considering some one-off factors and the business profit trajectory, this probably means that the expansion's peak was reached in q2. More concerning however, is the risk of escalating trade tensions between the US and China, and the potential knock-on effects this will have across the globe. We have already seen a series of retaliatory measures between the two nations, and while the US has reached an agreement with Canada on a modified NAFTA agreement, President Trump shows no sign of toning down his trade rhetoric.

The impact of which has already been felt in China. The Chinese economy, unusually, fell short of its projections according to recent growth figures, amidst rising trade disputes and subdued industrial production. In order to combat this the Chinese authorities have loosened credit conditions, and relaxed anti-pollution measures. The former is of particular concern giving the ongoing need to balance financial stability and growth in the country, a risk continually highlighted by economic institutions such as the IMF.

Meanwhile growth in the eurozone, while easing from the heights of 2017, has been steady. A tightening labour market and accommodative monetary policy continue to boost the region, reflected by the unemployment rate falling to a fresh multi-year low in August. A notable downside however has been the manufacturing sector, which has been weak, and is reflected in the PMIs trending downwards this year. Nevertheless we expect to see steady growth of 1.9% this year. The concern looking ahead relates to heightened levels of political uncertainty. Aside from the possibility of a no deal Brexit, the prospect of a weakened German leadership following Bavarian and Hesse elections and the consequent step-down of Angela Merkel as party leader, as well as the Italian populist government challenging the EU fiscal balance rules, all have the potential to weaken the region, at a time when stability is of the upmost importance.

		GDP	INFLATION			
	2017	2018	2019	2017	2018	2019
France	2.3	1.6	1.7	1.0	1.9	1.5
Germany	2.5	1.6	1.6	1.7	2.0	1.9
Japan	1.7	1.0	1.2	0.5	1.1	1.3
US	2.2	2.9	2.5	2.1	2.5	2.1
Eurozone	2.5	1.9	1.6	1.5	1.8	1.7
China	6.9	6.5	6.0	1.5	2.2	2.5
India	6.2	7.6	7.2	3.3	4.5	5.0
World (2010 PPPs)	3.7	3.7	3.4	3.0	3.4	3.5

INTERNATIONAL ECONOMIC FORECASTS

% CHANGE EXCEPT WHERE STATED

- 41	-
	/
	-

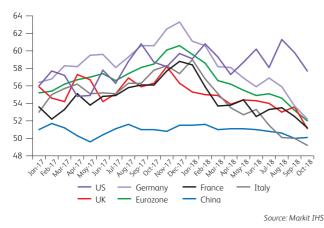
Source: Oxford Economics

SECTOR FORECASTS

After a very positive 2.6% expansion registered in 2017, the manufacturing sector has slowed down in 2018. In particular, the negative performance of the first two quarters of 2018 (-0.1% and -0.7%) have affected the growth path. However, thanks to the small bounce-back registered in q3 (+0.6%) and the positive revision of q2 data, we expect manufacturing to grow by 1.1% in 2018, and by 0.3% in 2019 with risks skewed on the down-side.

The poor performance projected for 2019 is related to high level of uncertainty which is already affecting the sector. The Brexit saga is potentially close to a final outcome, however, the very long and still pending definite decision has flattened investment with a clear effect on the manufacturing sector. Moreover, it may have a chaotic and detrimental effect on supply chains in the UK and Europe.

PMI FIGURES ARE TRENDING DOWN AFTER THE 2017 PEAK MANUFACTURING PMI



Brexit is not the only issue. The major factors behind the good performance of 2017 have started to disappear. The 2017 world synchronised growth has tapered off this year and the global economy overall has started to slowdown. With the slowdown of the global economy, the appetite for investment, which has characterised 2017, has also faded away. Recent PMI figures are trending down in all the major economies with the exception of the US, which, as said in the economic environment section, is in a different stage of the business cycle but it might have actually peaked in the last quarter.

The sterling depreciation following the EU referendum has almost entirely ended its positive effect and the sectors basing their great performance on exports are now facing difficulties to keep the growth pace of 2017.

Compared to last year, where almost every manufacturing sub-sector reported growth, this year the divergence is much clearer with just a few able to expand healthily and several others struggling or contracting. The divergence is set to persist through 2019.

CONSTRUCTION IS RECOVERING BUT Q1 DAMAGED LINKED SECTORS TOO HEAVILY TO GROW IN THE YEAR

As pointed out in the economic environment section, construction is continuing its recovery after the bad start of the year characterised by bad weather and Carillion's collapse. After the 1.6% contraction in q1 and the small bounce back in q2 (+0.8%), the sector expanded by 2.1% in q3 thanks to the very good weather which usually has a positive effect on construction due to the minimisation of disruptions.

The recovery is having a positive effect on the sectors heavily reliant on construction demand. **Non-metallic minerals** – namely glass, bricks and mortar – relies almost completely on construction demand and after the bad downturn of q1 (-4.7%) has experienced growth at 2.2% in both q2 and q3. The expansion is likely to continue, however due to the result in q1, the sector is set to contract 1.4% this year before growing by 2.7% in the next one.

Electrical equipment is also heavily reliant on a healthy construction sector. The start of the year has been very difficult with the sector contracting by 5.8% in the first six months on the back of weak construction data but also the weakness in the automotive sector which is another important revenue source for wires' makers. ONS has heavily revised up their figures for the first two quarters

and, as a consequence, we are now forecasting a 4.3 % contraction which is less pronounced than our forecast in the previous quarter. On a positive note, we expect a 1.5 % expansion next year largely due to some important power generating projects which should start in 2019.

Rubber & plastic is an important supplier for construction, automotive, and has also reported a weak start of the year. Moreover, the continuous attacks related to the environmental damages plastics create are likely to affect its medium and long term performance. We expect the sector to contract both this year and the next, respectively by -0.5% and -0.6%.

CONSUMER FACING GOODS DOING GOOD ENOUGH

Paper is seen as the environmental friendly alternative to plastics. It may also receive a boost from the vertiginous expansion of online shopping. We expect **paper & printing** to stay flat this year and to grow by a little bit more than 1% in the next one. However, the printing side, which accounts just over half of the sub-sector, may suffer more from the move towards digital content.

Food & beverage is usually seen as a "safe bet" considering how their products are necessary even in time of troubles. However, the sector is facing an unprecedented challenge with the possibility of shortages due to Brexit. The sector, which is heavily domestic focused, uses a lot of inputs coming from abroad. As a result, several companies are planning to boost their inventories to make sure that their production plan won't be stopped. The sector is set to end a positive 2018 with a 1.9% growth with 2019 seeing an expansion of 0.7%.

Pharmaceuticals have seen their inventories rising sharply with companies trying to avoid Brexit related disruption. Pharmaceuticals is seen as a stable bet due to the need for drugs and an ageing population, however the growth pattern followed is usually much more erratic compared to the one followed by food & drink with a constant succession of booms and busts. The sector is highly affected by the performance of a few big companies and the departure of the EMA (European Medicine Association) from London may reduce the incentive to invest in the UK for the near future. We expect a growth of 3.4% this year followed by an almost flat line in 2019.

THE DROP IN INVESTMENT AND CONFIDENCE IS AFFECTING SEVERAL SECTORS

In 2017, **mechanical equipment** was the top performer amongst manufacturing sub-sectors with a 9.5 % expansion. This year the situation has not been as good. Indeed, the sector is set to end the year with a 3.7 % expansion which is the result of the great expansion seen last year but we pencilled in a 1.9 % contraction next year. The sector performance, as underlined in our *Sector Bulletin* is highly correlated to sterling valuation. Last year's bonanza has been heavily affected by exports which did the heavy lifting in the context of the global investment revival.

The metal sector is also not having a great year and the outlook is not rosy for 2019. **Basic metals** is contracting sharply on the back of the steel and aluminium tariffs approved by the Trump administration and the weakness of the automotive sector which is also denting the growth of **fabricated metals**. This sector is also touched by the performance of construction and mechanical equipment. We expect **basic metals** to contract by 3.4% this year and 1.4% in 2019. The **fabricated metals** are otherwise set to grow this year by 1.2% and contracting by 0.5% in 2019.

We already mentioned above how the **motor vehicles** sector is not having a great year and how the near future appears highly problematic. The sector is suffering from the issues related to the "diesel-gate", the sharp decrease of car registrations after a long period of expansion due to a low level of consumer confidence, and the worries around Brexit which may create massive disruption to a very intricate and fully integrated supply chain. Related to this last point, a few big manufacturers have already announced that they will move their scheduled August maintenance shut-down period to April to avoid any possible disruption. This may possibly affect the data in q2 and q3 next year. All the above considered, we forecast a contraction this year and the next one – respectively at -1.2% and -1.9%.

KEEP GROWING BUT NOT AS FAST

The **other transport** sector was one of the top performers in 2017 thanks to the very good performance of all its components: aerospace, ships & boats, and other equipment. In 2018 the situation has been less homogeneous with the sector still expanding especially due to the other section – namely trains, military vehicles, and motorcycles. Conversely, aerospace is experiencing a period of contraction after a long expansion period, however order books still look healthy and output should start to pick-up again in the next year. We expect the sector to expand by 3% this year and in 2019. We kept the top performer for the conclusion. **Electronics** had a buoyant year after the very positive expansion recorded in 2017. The sector is set to grow by almost 13% thanks to the run towards automation happening worldwide and in the UK, as highlighted in our latest *4IR Factard*. Even though the sector accounts for just 5% of total manufacturing, it has done most of the heavy lifting accounting for half the growth of manufacturing in 2018. For the next year, we still expect the sector growing but a slower pace at almost 1%.

SECTOR GROWTH RATES AND FORECASTS

% CHANGE

		OUTPUT			EMPLOYMENT			
	2017	2018	2019	2017	2018	2019		
Basic metals	0.7	-3.4	-1.4	-0.6	3.1	-5.1		
Metal products	2.0	1.2	-0.5	4.8	3.8	-1.2		
Mechanical	9.3	3.7	-1.9	4.3	3.0	-0.2		
Electronics	4.3	12.8	0.9	3.5	-1.9	-1.9		
Electrical	4.7	-4.3	1.5	-0.4	0.1	1.7		
Motor vehicles	1.2	-1.2	-1.9	5.6	2.2	0.2		
Other transport	8.5	3.0	3.0	-1.7	-1.9	-1.8		
Food and drink	1.0	1.9	0.7	-0.8	0.0	-0.9		
Chemicals	2.4	-0.6	0.9	3.5	-2.9	-3.9		
Pharma	-5.4	3.4	0.3	8.6	-1.7	-4.2		
Rubber and plastics	-0.4	-0.5	-0.6	-0.2	1.4	-0.1		
Non-metallic minerals	0.9	-1.4	2.9	-5.4	-6.3	-0.4		
Paper and printing	1.8	0.1	1.1	-0.6	0.5	-0.6		
Textiles	2.8	-3.0	-0.6	-11.5	-1.0	-5.6		
Manufacturing	2.6	1.1	0.3	1.1	0.8	-1.1		

Sources: EEF and Oxford Economics

GREATER INNOVATION AND DIGITISATION KEY TO MANUFACTURERS' PRODUCTIVITY GROWTH

The UK economy is at a crossroads. New technology, new international relationships, new markets and new politics are all contributing to uncertainty for UK businesses. And this uncertainty, particularly around Brexit, is impacting UK manufacturers with the q4 survey results showing a downward trend across the key indicators.

The UK has a bold and successful manufacturing history and even today it is the 9th largest manufacturing nation in the world, employing 2.7 million people and accounts for 45% of UK exports (EEF UK Manufacturing Facts 18/19). Manufacturing is a sector critical to the success of the UK economy – the Government and policymakers must do all they can to ensure that everything possible is done to create an environment where manufacturers can flourish.

To enable UK manufacturers to move in the right direction with confidence we need to see the emergence of a 'new economy' – an economy which helps the UK thrive post-Brexit by making the most of its midsized entrepreneurial manufacturers; businesses which we feel are too often overlooked and undervalued by policymakers.

We believe policymakers must focus on fuelling the growth of sector powerhouses like manufacturing, and our New Economy report suggests some detailed policies with a particular focus on helping the manufacturing sector grow.

At the centre of our policies is the urgent need to address Britain's productivity puzzle and for UK manufacturer's greater digital transformation is key to improving productivity.

The pace of change towards more automation, digitisation and 4IR (fourth industrial revolution) technologies over the next five to 10 years will be rapid and manufacturers will need to change how they do business to cope with the new digitised environment. The drive towards digitisation will require education, investment and strong leadership to keep pace with global competitors and meet the increasing demands of consumers. When BDO first questioned manufacturers about 4IR processes two years ago, only 8% of UK firms surveyed said they had a significant understanding despite the majority recognising that the fourth industrial revolution would have a major impact on the sector. Time has moved on, yet UK manufacturing is still not getting the level of support it needs to realise the significant benefits digital transformation could offer.

We believe that the Government needs to do more to actively encourage innovation and digitisation and provide financial support and know-how on the implementation of 4IR technologies.

The 'Made Smarter Review' makes excellent recommendations that will help accelerate the adoption of digital technologies in UK manufacturing. In his 2018 Budget, the Chancellor committed up to £121 million for the Made Smarter programme and it is crucial the Government continues to commit to making the longterm investments outlined in this review.

We believe funding for the High Value Manufacturing Catapult and similar innovation centres should be increased to ensure sufficient resource is available to educate and advise manufacturers on how digitisation and 4IR technologies can impact their business, more importantly advising where to start and progress their digital transformation journey.

For more information on BDO's New Economy report go to www.neweconomy.bdo.co.uk.



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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.

To find out more about this report, contact:

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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



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

Published by EEF, Broadway House, Tothill Street, London SW1H 9NQ Copyright ©EEF November 2018 To talk about any issues your manufacturing business may be facing please contact:

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