In partnership with:

MANUFACTURING OUTLOOK

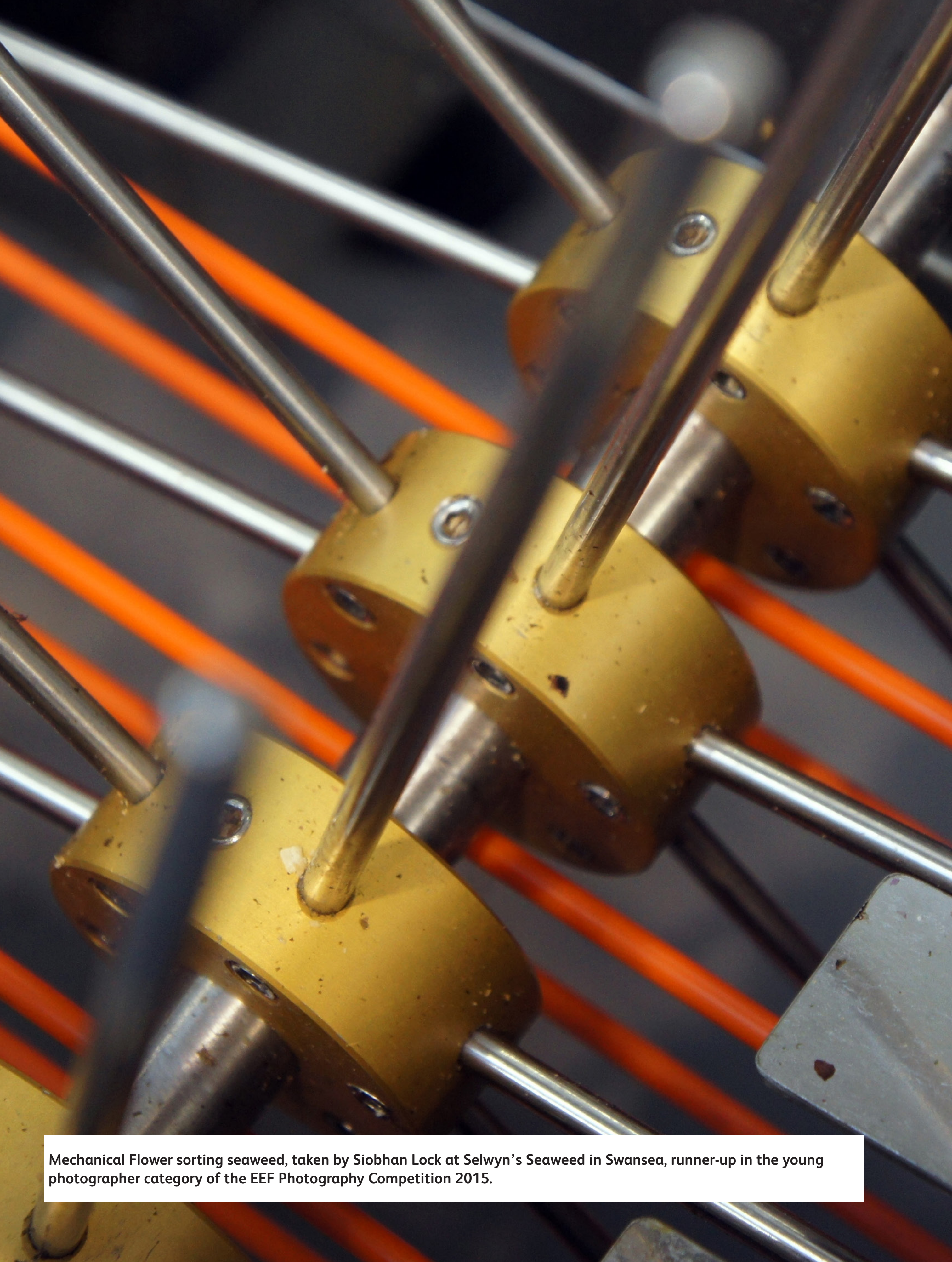
2016 QUARTER 4

2.6 million employees

1/2 of UK exports

72% of business R&D

Average wages higher than the rest of the economy



Mechanical Flower sorting seaweed, taken by Siobhan Lock at Selwyn's Seaweed in Swansea, runner-up in the young photographer category of the EEF Photography Competition 2015.

FOREWORD

Lee Hopley
Chief Economist
EEF

Tom Lawton
Head, BDO Manufacturing
BDO LLP

Welcome to the 2016q4 *Manufacturing Outlook* report, in partnership with BDO LLP.

If a week is a long time in politics, three months is an eternity in post-referendum economic analysis. Since our last report we've had the first tranche of official data on the performance of the UK economy since the referendum. In contrast to the slump in confidence in July, growth has proved resilient, thus far. In the three months to September we saw positive contributions to GDP growth from households, net trade and business investment.

The policy debate in the UK is also moving apace, with numerous statements from the New Prime Minister and her cabinet outlining their focus on priority areas such as industrial strategy, corporate governance reform and the indicative timing for the triggering of Article 50. The ink is also only just dry on the Chancellor's Autumn Statement, which reiterated the growth risks next year, the rather larger challenge to the public finances and a package of measures to shore up long term growth.

But, how has manufacturing been faring over this period? In our 2016q3 *Manufacturing Outlook* report we saw a continuation of the subdued activity indicators from earlier in the year. While this was a weaker outturn than manufacturers' had been expecting, a turnaround was nevertheless still predicted. We, therefore, interpreted the feedback from industry as recovery delayed by the referendum rather than a recovery that had been completely derailed.

Responses from manufacturers confirm this to be the case. Our latest survey points to early signs that recovery in manufacturing activity is underway, with the drags from the low oil price and stuttering global growth finally subsiding. The output and orders balances over the final months of this year posted positive readings for the first time in six quarters. While UK demand seems to be doing more of the work this quarter, export demand is expected to pick up the baton next quarter, keeping the recovery momentum going into 2017.

All this means that confidence about business performance over the coming 12 months is regaining the ground lost after the referendum and improvements in trading conditions are spurring a rebound in investment intentions to fulfil customer requirements and secure productivity gains. This has also led us to be somewhat more upbeat in our forecasts, with a much more modest contraction in manufacturing output of 0.2% pencilled in for next year.

Clearly, there is much to be positive about in our latest survey findings. But, the detail of our research also confirms that inflationary pressures are building and while confidence has picked up, it's far from soaring. This highlights the fact that manufacturers also acknowledge that there are still some downside risks in the year to come – some stemming from the path of Brexit negotiations and some from potential bumps in the road for global growth.

2016Q4 HEADLINES

It's been all change over the past three months for UK manufacturers, with output and orders balances returning to positive territory for the first time since 2015q2. The rebound was slightly stronger than the previous quarter's expectations. However, the good news is tempered by another weak quarter on exports and a continuing squeeze on margins.

INDICATOR	BALANCE	CHANGE	
Confidence	5.4	↑	Confidence about UK prospects picks up but remains below pre-referendum level
Output	13%	↑	Outlook balance stronger than forecast, hitting highest level since 2015q1
UK orders	13%	↑	Strong rebound in UK new orders beats expectations
Export orders	-2%	↓	Overseas new orders lagging, but turnaround predicted in the next three months
Employment	9%	↑	Improving orders and confidence fuel a pick up in new recruitment
Investment	6%	↑	Investment intentions take a turn for the better, reaching a seven quarter high

Source: EEF Manufacturing Outlook Survey

Conditions in manufacturing appear to have brightened considerably in 2016q4, with output and orders balances rising to 13% from -7% and -4% respectively last quarter. Manufacturers' confidence about the UK outlook has gained some ground following the sharp falls in the aftermath of the referendum; no doubt a consequence of the larger than anticipated pick-up in domestic sales this quarter.

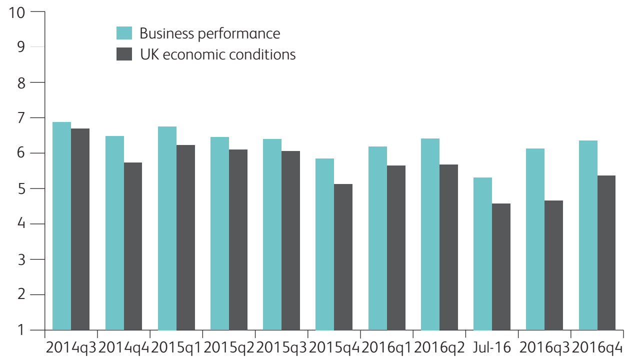
The export recovery is taking rather longer to materialise. Despite a gradual improvement in demand conditions from key overseas markets over the course of this year, the balance of responses on new export sales this quarter tipped back into negative territory. This is expected to be temporary with stronger growth in overseas markets and the weak exchange rate forecast to boost export demand at the start of next year.

Importantly, improvements in trading conditions appear broad based across a range of manufacturing sub-sectors, although for some – notably mechanical equipment – the gains weren't sufficient to push the output balance into the black. We have, therefore, seen sentiment about manufacturers' business performance in the next year improve again this quarter – edging back towards the levels reported prior to the EU referendum. On the back of this, companies are reporting increased recruitment activity and the investment intentions balance has increased for the first time in more than a year.

The fly in the ointment is rising input costs following Sterling's depreciation. The next three months will see more manufacturers seek to pass these on, particularly to domestic customers, but margins are set to remain under some pressure. The positive set of results and our revised outlook for the UK economy has led us to nudge up our forecasts for manufacturing to 0.2% growth this year and a modest 0.2% contraction in 2017.

CONFIDENCE IN THE UK OUTLOOK EDGES HIGHER

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



Source: EEF Manufacturing Outlook Survey

OUTPUT

The outlook for the manufacturing sector has improved considerably compared to three months ago. This is illustrated by a significant pick-up in output, with the balance of companies reporting growth increasing from -7% to 13% in 2016q4. This is the first time the overall balance has recorded a positive reading since 2015q2. Encouragingly, this trend is set to be sustained, with the overall upswing in market conditions expected to continue to support growth in manufacturing output for the first quarter of 2017.

PAST THREE MONTHS	↑	13%
NEXT THREE MONTHS	↑	16%

The improvement in the output balance was widespread, with only a handful of sectors reporting a negative outturn. Metal products was the star performer over the past three months, with the expectation of a significant improvement in output, flagged up in our q3 survey, fully coming to fruition. As a partly commoditised sector, the gains are likely to reflect the benefits from a weaker exchange rate filtering through relatively fast to support exports. Solid growth in the motor vehicles sector, one of its key supply markets, has also helped to cement these gains.

Moreover, the price-sensitive basic metals sector has seen somewhat of a resurgence in the final quarter of the year. The output balance turned positive after some hefty contractions in previous quarters, capitalising on the competitiveness boost from the pound depreciation. Nevertheless, a significant reduction in production capacity following the almost two-year long recession is likely to constrain output growth in the sector during 2017q1.

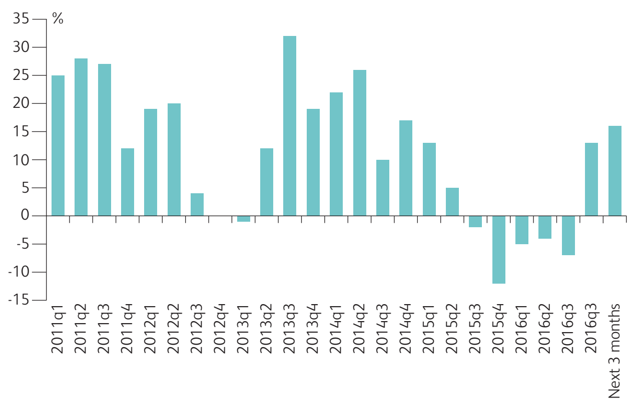
The electronics and electrical equipment sectors, two of the best performing sectors in 2016q3, continued on a solid growth path, driven by brightening demand conditions across its main export markets, as well as a better than expected performance in capital investment so far this year.

The sectors which bucked the trend were food and drink, non-metallic minerals and mechanical equipment. The food and drink and non-metallic minerals sectors have been hit by the flipside of the weaker exchange rate and the higher input costs that come with it. The latter also continues to be weighed down by a stuttering construction industry.

The mechanical equipment sector, despite recording a negative output balance, continued to see steady improvement. However, with uncertainty about businesses' investment plans still at play, there are downside risks to the expectation of positive growth in 2017q1.

OUTPUT BALANCE TURNS POSITIVE IN 2016Q4

% BALANCE OF CHANGE IN OUTPUT



Source: EEF Manufacturing Outlook Survey

OUTPUT SUMMARY

% BALANCE OF CHANGE

SECTOR	PAST 3 MONTHS	NEXT 3 MONTHS
Basic metals	4	-8
Metal products	23	9
Mechanical	-2	9
Electrical	24	38
Electronics	30	50
Rubber & Plastics	24	13
Other transport	31	38
TURNOVER		
£0-9m	11	14
£10-24m	16	23
£25m and over	10	24

Source: EEF Manufacturing Outlook Survey

ORDERS

Manufacturers' order pipeline has sprung back into life in 2016q4. After five consecutive quarters of contraction, the total orders balance has recovered to 13% from -4% in the previous quarter, mainly down to better demand conditions in the domestic market. And while the export orders balance unwound to -2% from +2% in 2016q3, prospects for 2017q1 look bright. This is consistent with our view that the bulk of the export boost from the pound depreciation will take place next year. At the same time, the paring back in expectations about UK orders in the next three months is likely to reflect concerns about rising inflation and slowing consumer demand in 2017.

UK ORDERS	PAST 3 MONTHS	↓	13%	NEXT 3 MONTHS	↔	6%
EXPORT ORDERS	PAST 3 MONTHS	↑	-2%	NEXT 3 MONTHS	↑	15%
TOTAL ORDERS	PAST 3 MONTHS	↓	13%	NEXT 3 MONTHS	↓	15%

UK ORDERS

The balance for UK orders moved back into positive territory with a shout in 2016q4, after a persistent period of negative prints. This improvement is mainly down to a turnaround in two of the hardest-hit manufacturing sectors over the past two years, basic metals and mechanical equipment.

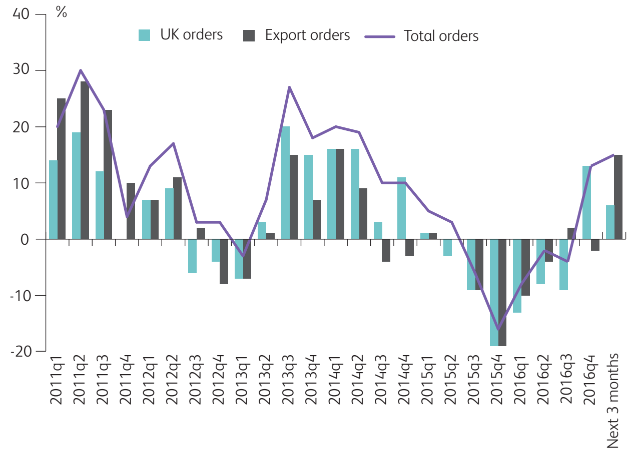
The former is a highly commoditised industry, which means that the pound depreciation is translating quickly to new orders. In combination with anti-dumping measures for Chinese imports, this has prompted an element of import substitution, with UK companies more likely to source basic metals domestically. The latter has come steadily off the bottom over the course of 2016 with oil prices recovering and an upswing in overall manufacturing activity pushing through some demand for capital equipment.

The motor vehicles sector has continued to pile up the orders and the benefit is trickling down to sectors in its supply chain, like metal products and rubber and plastics, which also reported positive balances on UK orders for the past three months. On the other hand, the slowdown in construction activity in the second half of the year has weighed on demand for non-metallic minerals, reflected in a large deterioration in domestic orders.

However, conditions look less rosy in the next three months; while the balance of UK orders is still positive, it has halved to 6%. This is most likely down to expectations for slower household consumption, sluggish construction activity and weaker investment in the UK economy. In particular, the outlook for basic metals and non-metallic minerals – both construction supply-chain sectors – is negative, while consumer-facing sectors like motor vehicles are also less optimistic.

ORDERS STAGE A SOLID RECOVERY IN Q4 2016

% BALANCE OF CHANGE IN ORDERS



Source: EEF Manufacturing Outlook Survey

EXPORT ORDERS

The balance of orders from overseas clients fell back to -2% in 2016q4, after a positive print in the previous quarter bucked a trend of a year's worth of negative balances. Once more, the main culprits are basic metals and mechanical equipment, only this time for less positive reasons.

The Sterling depreciation, while helping to improve the competitiveness of basic metals domestically, has failed to improve its export performance in 2016q4. For the mechanical equipment sector, while the recovery in global manufacturing activity and investment has been gaining momentum, it has been slow to get off the ground. What's more, the sector produces high-value capital equipment, which means price differentials are less likely to filter through quickly to improvements in demand. This also applies to the other transport sector, where demand is driven by long order books rather than price. Here, the pound depreciation is unlikely to have any impact at all on export orders.

In the rest of manufacturing, the picture is more positive. For sectors on the high value-add spectrum – like motor vehicles, electronics and electrical equipment – improving demand over the course of the year, especially from Europe and North America, has provided significant support to export sales. In addition, the more commoditised sectors, such as rubber and plastics and chemicals, have recorded some of the highest balances for export orders in 2016q4.

Crucially, manufacturers expect a significant intake of new export orders over the next three months. The balance on overseas sales has jumped to 15%, a level not seen since 2014q3. No doubt, this optimism reflects the expectation of a continuing improvement in demand from key overseas markets and the impact of the pound depreciation starting to filter through to most manufacturing sectors in 2017. Indeed, positive expectations about export orders in the next three months are universal across all sectors and business sizes.

DEMAND FROM EUROPE AND NORTH AMERICA DRIVING EXPORT ACTIVITY

% OF COMPANIES REPORTING POSITIVE DEMAND CONDITIONS BY MARKET

Source: EEF 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	4	-9	-19	10	0	4
Metal products	36	9	7	5	32	5
Mechanical	-6	4	-16	10	-7	12
Electrical	14	18	12	31	32	36
Electronics	15	5	17	39	20	32
Other transport	-8	8	0	23	-8	31
TURNOVER						
£0-9m	13	7	6	19	13	9
£10-24m	11	18	9	20	19	24
£25m and over	13	10	11	26	12	28

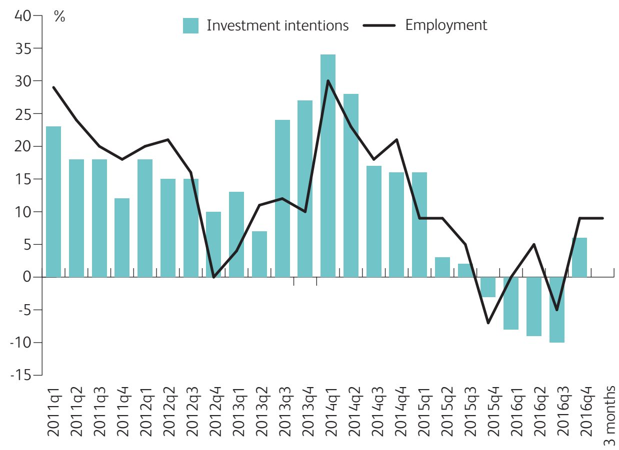
Source: EEF Manufacturing Outlook Survey

EMPLOYMENT & INVESTMENT

One of the most encouraging turnarounds in 2016q4 has been the return to growth for manufacturing employment and investment. Better demand conditions have prompted manufacturers to put some additional capacity in place and take on more staff to churn out output. As a result, both balances are back into positive territory, after lacklustre growth in employment and consecutive contractions in investment over the past year or so. Promisingly, gains in employment are expected to continue into 2017q1.

INVESTMENT INTENTIONS COME OFF THE BOTTOM, EMPLOYMENT STABILISES

% BALANCE OF CHANGE



Source: EEF Manufacturing Outlook Survey

EMPLOYMENT	PAST 3 MONTHS	↑	9 %	NEXT 3 MONTHS	↑	9 %
INVESTMENT	NEXT 12 MONTHS	↑	6 %			

The employment balance turned positive in 2016q4 to 9 %, along the lines of last quarter's expectations. The trend was broad-based across sectors, with metal products, motor vehicles, and electronics reporting the greatest increases. This is consistent with a rise in output and orders for these sectors, and the brighter outlook in the economy compared to three months ago.

The overall increase in the employment balance was however partially offset by the non-metallic minerals and food and drink sectors. A worsening demand outlook and significant upward pressures on input costs are taking their toll on recruitment in these sectors. For the food and drink industry, a continuous drive for automation is likely to have compounded this drag.

On the investment side, prospects have greatly improved, with the balance for planned capital expenditure jumping from -10 % to 6 %, the first positive balance since 2015q3. The overall improvement in new order intake in q4 is likely to have prompted manufacturers to invest in some extra capacity on their production lines. This backs up our recent Investment Monitor report, which showed that despite the uncertainty overhang in the UK economy, manufacturers recognise the need to invest to satisfy existing customer demand.

EMPLOYMENT AND INVESTMENT SUMMARY

% BALANCE OF CHANGE

	EMPLOYMENT		INVESTMENT
SECTOR	**PAST 3 MONTHS**	**NEXT 3 MONTHS**	**NEXT 12 MONTHS**
Basic metals	4	-8	-8
Metal products	23	16	4
Mechanical	-6	-2	2
Electrical	11	21	24
Electronics	35	25	0
Other transport	23	15	31
TURNOVER			
£0-9m	15	11	5
£10-24m	6	5	1
£25m and over	11	8	14

Source: EEF Manufacturing Outlook Survey

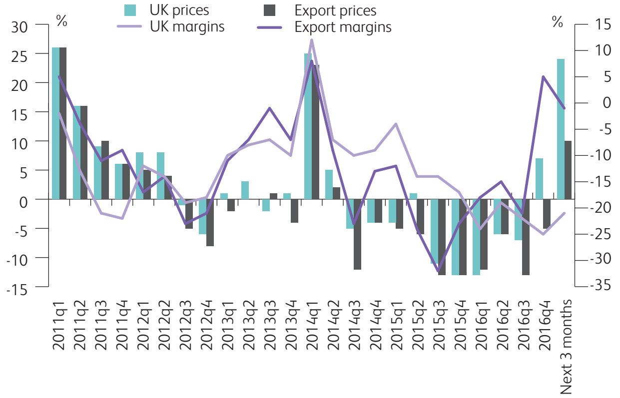
PRICES & MARGINS

Manufacturers' profit margins on domestic sales have been squeezed further in 2016q4, reflecting the surge in input costs following the Sterling depreciation. Forward looking balances suggest this trend is unlikely to reverse over the next quarter despite manufacturers expecting a significant pickup in UK prices early next year.

By contrast, manufacturers were able to preserve profit margins on overseas sales in 2016q4, as the expected fall in export prices failed to materialise. Looking forward, this trend is unlikely to prevail, reflecting difficulties in passing the increase of input costs onto export prices.

PRESSURE ON UK MARGINS LEAPS TO SEVEN-YEAR HIGH

% BALANCE OF CHANGE



Source: EEF Manufacturing Outlook Survey

UK PRICE	PAST 3 MONTHS	↑	7 %	NEXT 3 MONTHS	↑	24 %
EXPORT PRICE	PAST 3 MONTHS	↓	-5 %	NEXT 3 MONTHS	↑	10 %
UK MARGINS	PAST 3 MONTHS	↓	-25 %	NEXT 3 MONTHS	↓	-21 %
EXPORT MARGINS	PAST 3 MONTHS	↑	5 %	NEXT 3 MONTHS	↓	-1 %

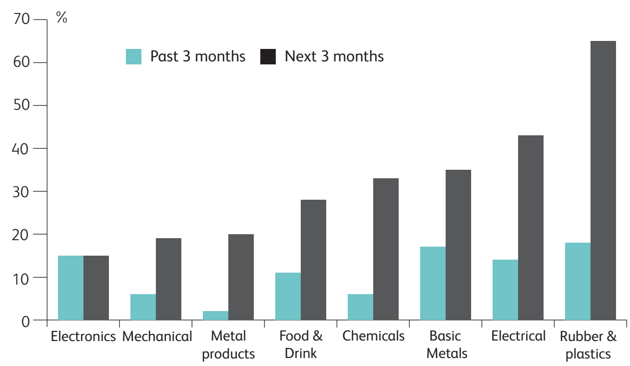
Profit margins on domestic sales tightened in 2016q4, with balances plunging to their lowest level since 2009q3. The trend reflects the surge in input costs following the Sterling depreciation in the wake of the Brexit vote. This has prompted manufacturers to increase output prices, with balances coming in positive for the first time since 2015q1. Yet the squeeze in profit margins implies that the pass-through of the exchange rate depreciation has been so far incomplete.

Price pressures are set to intensify significantly early next year. Expectations for UK prices in 2017q1 leapt to their highest level in three years, suggesting that the rise in production costs will be feeding through into higher output prices, providing some relief to manufacturers' profit margins on domestic sales. Yet the pass-through is uneven across sectors, with the most import-intensive industries such as chemicals and electronics expecting further deterioration in margins.

By contrast, export margins improved in 2016q4, surpassing manufacturers' expectations three months ago. This is likely to reflect a lower-than-expected drop in export prices, suggesting that the rise in input costs has also had an impact on manufacturers' pricing strategy abroad. Forward looking balances, however, imply that this could be short lived.

MORE COMMODITISED SECTORS SEE THE LARGEST PRICE INCREASES

% BALANCE OF CHANGE IN UK PRICES

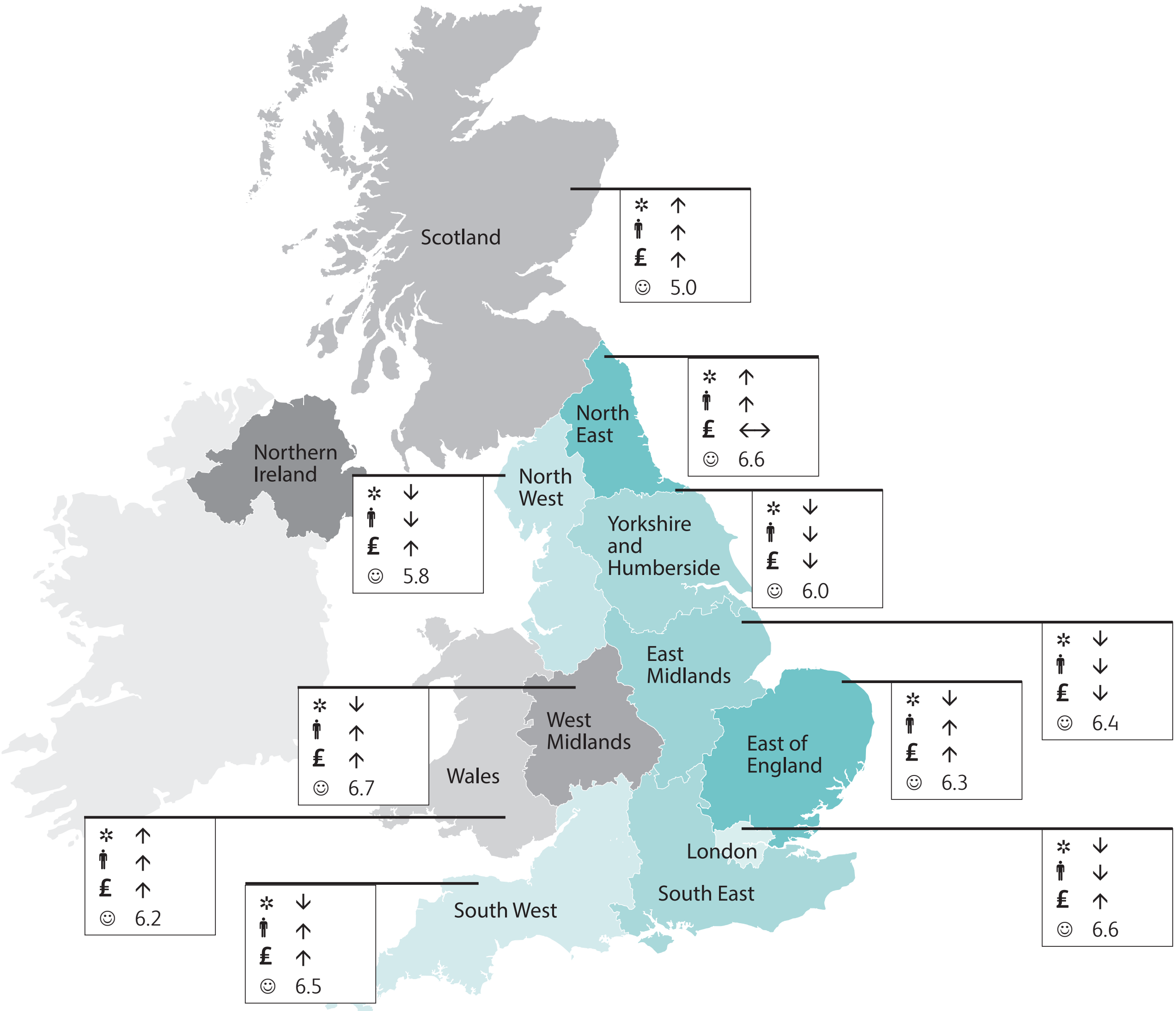


Source: EEF Manufacturing Outlook Survey

REGIONAL TRENDS

The expansion in manufacturing output appeared to be a common feature of UK regions in 2016q4, although gains from the previous quarter were slightly uneven. Looking forward, most UK regions expect a pickup in new orders early next year, and plan to increase headcount and investment.

These developments translated into a boost in the confidence of manufacturers across all regions, both in the UK economy and in their business performance, recovering from their lows following the UK's vote to leave the EU.



KEY:

↑/↓ INCREASE/DECREASE ON PREVIOUS QUARTER

✲ OUTPUT

🕴 EMPLOYMENT

£ INVESTMENT

☺ BUSINESS CONFIDENCE

Source: EEF Manufacturing Outlook Survey

The spike in manufacturing activity appeared widespread across UK regions this quarter, with manufacturers reporting positive balances for output and new orders across the UK.

Output balances remained strong in the West Midlands and the South West this quarter, although slightly sliding back from higher levels in the third quarter. This performance is likely driven by solid expansion in the dominant automotive industry in each of these regions, offsetting the drag from slower growth in mechanical equipment in the West Midlands and the food and drink industry in the South West.

Solid gains in output from the previous quarter were reported in Scotland, Wales and the North East, likely down to an expansion in the metals industry, with output balances in the sector climbing back into positive territory. This trend was further sustained by an improvement in transport and chemicals in the North East, both recovering from lacklustre growth in the third quarter. On the other hand, growth prospects eased in the South East and London along with the North West, as a result of the poor performance in the food and drink industry.

Expectations for output in the next quarter are positive in eight out of ten regions. This reflects a nationwide pickup in new orders early next year, with all regions expecting a boost in demand both domestically and from abroad.

BUSINESS CONFIDENCE INDICATORS

The confidence of all regions about the performance of the UK economy has moved in a positive direction, recovering from the low levels seen immediately after the EU referendum. The solid expansion of GDP growth in the third quarter is likely to have helped alleviate manufacturers' concerns over the UK economic outlook for the year ahead. Manufacturers' confidence about their business performance continued to edge higher, outpacing pre-referendum levels in six out of ten regions.

CONFIDENCE ABOUT UK OUTLOOK RECOVERS FROM POST-REFERENDUM LOWS

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

Source: EEF Manufacturing Outlook Survey

REGIONAL SUMMARY

% BALANCE OF CHANGE

SECTOR	OUTPUT		TOTAL ORDERS		EMPLOYMENT	
	PAST 3 MONTHS	NEXT 3 MONTHS	PAST 3 MONTHS	NEXT 3 MONTHS	PAST 3 MONTHS	NEXT 3 MONTHS
Scotland	10	12	4	6	8	8
North East	6	25	13	19	13	-19
North West	5	5	10	5	5	-2
Yorks & Humber	10	-5	19	0	10	0
East Mids	14	-12	7	11	-4	11
Eastern	14	19	19	29	14	5
South East & London	9	41	16	37	23	19
South West	15	34	26	27	18	13
West Mids	15	28	20	20	15	18
Wales	17	17	25	25	42	8

Source: EEF Manufacturing Outlook Survey

ECONOMIC ENVIRONMENT

The first estimate of GDP growth in the third quarter of this year dissipated market fears of a major collapse of the UK economy in the wake of the Brexit vote. Activity expanded by 0.5 % quarter on quarter in the three months to September, driven by solid growth in services. Similarly, labour market conditions have held up, with the unemployment rate reaching an eleven-year low at 4.8 % in October.

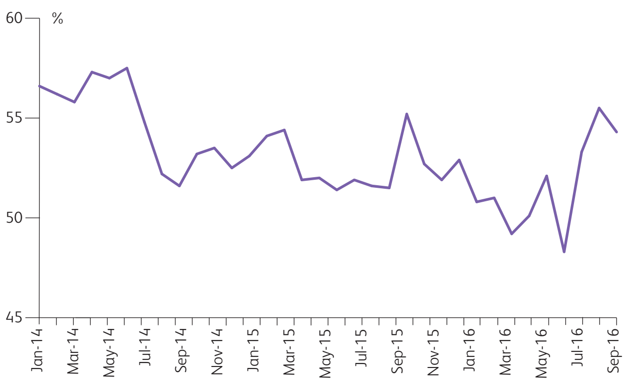
Yet the UK economy is projected to slow down next year. Rising inflation and high uncertainty following the EU referendum are expected to drag on GDP growth for the year ahead.

UK HEADLINES

– Growth holds up this year but moderates in 2017
– Rising inflation will weigh on households' disposable income
– Heightened uncertainty and slower domestic demand damping business investment
– Weak Sterling and improvement in major export markets to boost trade
– Government announces fiscal stimulus in the Autumn Statement

PMI BOUNCED BACK AFTER SHARP DECLINE IN THE WAKE OF BREXIT VOTE

MANUFACTURING PMI INDEX



Source: Markit/CIPS

As economic indicators confirmed the resilience of the UK economy post-referendum, markets have continued to stabilise since our last Manufacturing Outlook, with FTSE indices now outpacing pre-referendum levels. Similarly, business sentiment bounced back to multi-year highs after its collapse in the aftermath of the Brexit vote. The Sterling exchange rate, however, has remained weak against major currencies with significant day-to-day volatility.

INFLATION DYNAMICS TO BE WATCHED CLOSELY

Clearly the most significant economic development for the year ahead is the trend in consumer price inflation. Firstly, inflationary pressures are coming through the pipeline as a result of the ongoing recovery in oil and commodities prices from their trough a year ago. In addition, the sharp depreciation in Sterling has pushed up manufacturers' input costs. This will be gradually feeding through into higher consumer prices in the year ahead, although the pass-through might not be immediate nor complete, intensifying pressures on manufacturers' margins in the short term.

With inflation rising to 2.7 % in 2017, upward pressures on wages will be building up progressively. Yet the scope for wage growth is rather limited. In fact, the pick-up in inflation will still be unfolding in January when pay increases are agreed at the major bargaining round of the year. Heightened uncertainty and persistent weak productivity should also hold back pay settlement levels, as suggested by the upward shift in pay freezes from EEF pay survey data.

Consequently, households' disposable income is projected to fall sharply in real terms in 2017, underlying inflation and wage growth dynamics. As a result, private consumption is expected to slow significantly, while households' savings rates will deteriorate further in 2017.

The drop in domestic demand, together with the persistence of high uncertainty about the future UK/EU relationship, will continue to dampen investment intentions in the year ahead. But rather than a major collapse, business investment is likely to stabilise at low levels as companies cope with a highly uncertain environment. Moreover, the government's significant commitment to support research and innovation in the Autumn Statement, should mean that growth in R&D expenditure partly offsets the decline of business investment in other types of assets. By contrast, housing investment should hold up in 2017 underpinned by the government's housing support package announced in the Autumn Statement.

TAILWINDS FROM THE WEAK STERLING TO BOOST NET EXPORTS

Reversing the pattern of previous years, net trade will contribute positively to GDP growth in 2017. As growth prospects improve in major trading partners, export orders will be ramping up while the weak Sterling will provide a boost to competitiveness. In the meantime, imports are expected to stall in 2017 in response to the slowdown in domestic demand and the surge in import prices following the Sterling depreciation.

NO FURTHER ACTION FROM THE BANK OF ENGLAND

All in all, UK GDP is expected to show 2.1 % growth this year and moderate to 1.3 % in 2017, significantly revised upward by 0.5 and 0.6 percentage points respectively from our last Manufacturing Outlook. In its November *Inflation Report*, the Bank of England similarly upgraded its GDP forecasts. After its early action in August, the MPC is unlikely to come up with further monetary stimulus, unless the economy shows greater signs of a slowdown next year.

UK ECONOMIC FORECASTS

% CHANGE EXCEPT WHERE STATED

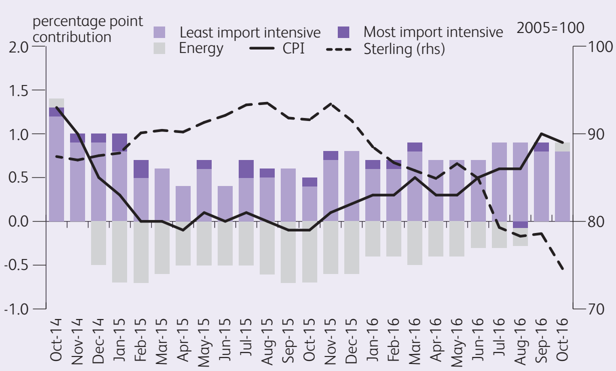
	2015	2016	2017
Trading environment			
Exchange rate (€/£)	1.37	1.21	1.15
Exchange rate ($/£)	1.53	1.35	1.25
Exports	4.8	2.7	2.7
Imports	5.8	2.5	1.3
Current account (% GDP)	-5.4	-5.3	-3.5
Output			
Manufacturing	-0.2	0.2	-0.2
GDP	2.2	2.1	1.3
Costs and prices			
Average earnings	2.5	2.5	2.4
Oil price (Brent Oil $/bl)	52.4	43.8	50.3
Employment			
Manufacturing (000s)	2,662	2,679	2,633
Rest of economy (000s)	31,289	31,703	31,656
Unemployment rate (%)	5.4	5.0	5.2

Source: Oxford Economics and EEF

INFLATION SPOTLIGHT

INFLATION IS GRADUALLY DRIFTING UP

CONTRIBUTIONS TO CHANGE IN INFLATION BY IMPORT INTENSITY AND STERLING EXCHANGE RATE



Source: ONS and EEF analysis

Consumer price inflation has been drifting up this year, climbing to 0.9 % in the year to October since it fell into negative territory a year ago. Interestingly, the Sterling exchange rate depreciated by more than 20 % over the same period.

The link is not straightforward, however. Indeed, energy prices have been so far the largest upward pull on inflation, reflecting the ongoing recovery in oil prices. While this trend is amplified by the weak pound, the pull on inflation from other import-intensive products has been moderate, suggesting the pass-through of the Sterling depreciation into higher consumer prices has been limited so far.

However, the Sterling depreciation has already translated into a surge in manufacturers' input costs to a five-year high of 12.2 % in the year to October. Although modest, the upward slope in output prices suggests that cost pressures will be gradually feeding through to higher consumer prices next year.

GLOBAL GROWTH PROJECTED TO STRENGTHEN IN 2017

GLOBAL HEADLINES

- Global growth projected to strengthen in 2017 after poor performance this year
- Markets reacted calmly to Trump's election
- Growth in Eurozone to temper next year
- Growth prospects brighten in emerging markets

There have been a few surprises in the international economy since our last Manufacturing Outlook. The worldwide improvement in PMIs at the start of the last quarter of this year suggests global activity and global manufacturing particularly are both heading in the right direction. We expect world economy growth to pick up to 3.3% in 2017, after a trough in 2016.

Financial markets reacted calmly to the election of Donald Trump as the 45th president of the United States against fears of big turmoil. While Trump's election heightened political uncertainty, the impact from policy shifts such as trade protectionism or immigration restrictions is unlikely to materialise as soon as next year. US GDP growth is expected to pick up to 2.0% in 2017 after a lacklustre growth of 1.5% in 2016. Business investment is projected to recover as headwinds from weak demand, strong US dollar and low oil prices are fading. What's more, labour market conditions should remain solid, with healthy employment expansion and wage growth amidst firming inflation. The Fed is likely to increase the federal funds rate at its December meeting this year. The path of monetary policy normalisation over the course of 2017, however, will depend on the economy's response to downside policy risks.

In the Eurozone, activity expanded at a quarterly growth rate of 0.3% in the three months to September, so far shrugging off the UK vote to leave the EU. Looking ahead, Eurozone GDP growth is expected to temper in 2017 as tailwinds from low oil prices, accommodative monetary policy and the euro depreciation start to unwind. Private consumption, once the key driver of the recovery, is projected to soften on the back of rising inflation. In addition to heightened political uncertainty, the fragility of the European banking system should continue to hinder the recovery in investment. Overall, GDP growth is expected to show at 1.6% in 2016 before slowing to 1.4% in 2017.

EMERGING MARKETS' ACTIVITY PICKS UP

The economic outlook in emerging markets continued to show signs of pick-up. In China, GDP expanded above market expectations in the third quarter, while industrial activity and investment continued to improve in October, reducing market concerns over the ongoing economic rebalancing.

Stabilisation of growth also continued across Latin America, with Brazil and Argentina slowly emerging from recession. Meanwhile, Russia's recovery is expected to strengthen helped by higher oil prices. However, risks remain skewed to the downside for the year ahead, with Brexit, Trump's presidency and major elections in Europe exacerbating political uncertainty.

INTERNATIONAL ECONOMIC FORECASTS

% CHANGE EXCEPT WHERE STATED

	GDP			INFLATION		
	2015	2016	2017	2015	2016	2017
France	1.2	1.3	1.4	0.0	0.2	1.2
Germany	1.5	1.7	1.4	0.2	0.5	1.8
Japan	0.6	0.8	0.9	0.8	-0.3	0.1
US	2.6	1.5	2.0	0.1	1.2	2.0
Eurozone	1.6	1.6	1.4	0.0	0.3	1.5
China	6.9	6.7	6.3	1.4	1.9	2.1
India	7.2	7.5	7.2	4.9	5.3	5.3
World (2010 PPPs)	3.1	3.0	3.3	2.8	2.8	3.0

Source: Oxford Economics

SECTOR FORECASTS

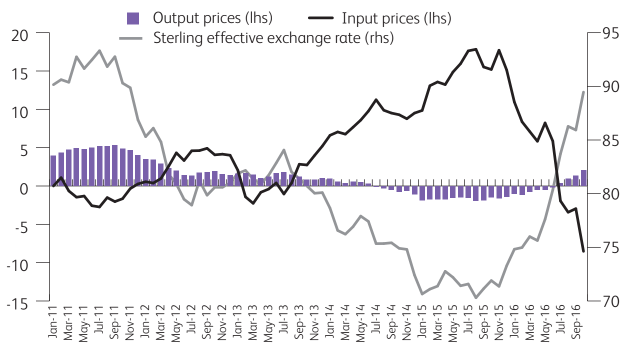
Our final Manufacturing Outlook report for 2016 has seen a significant improvement in trading conditions across the manufacturing sector. Brexit-related anxiety seems to have somewhat subsided and most manufacturers look to be trotting along as normal. Nevertheless, these first signs of recovery remain tentative and as we move into 2017, the risks – Brexit and non-Brexit related – are plenty and widespread.

Consequently, we expect output across the manufacturing sector to be broadly flat in both 2016 and 2017. This is mainly driven by a mix of opposing forces; a boost in export sales, partly down to better demand from overseas markets and partly down to the sterling depreciation, is likely to be offset by a weaker domestic market, as inflation starts to bite on household consumption and businesses turn more cautious with their investment plans in response to higher uncertainty.

As ever, the ability of different manufacturing sectors to deal with the challenges and grasp the opportunities will vary considerably. The hefty depreciation in the value of sterling is both a boon and a bane to manufacturing sectors; an increase in export competitiveness comes at the price of higher input costs. What's more, commoditised sectors are likely to see the benefit filter through quickly, as opposed to high-value add sectors that compete more on quality than price.

STERLING DEPRECIATION FILTERING FAST TO RISING INPUT COSTS FOR UK MANUFACTURERS

% YEAR ON YEAR INCREASE IN INPUT & OUTPUT PRICES, STERLING MONTHLY AVERAGE EFFECTIVE EXCHANGE RATE INDEX (JAN 2005=100)



Source: ONS (2016) and EEF analysis

SECTOR GROWTH RATES AND FORECASTS

% CHANGE

	OUTPUT			EMPLOYMENT		
	2015	2016	2017	2015	2016	2017
Basic metals	-10.7	-15.1	-2.5	1.8	-1.8	-4.9
Metal products	2.8	0.2	-1.3	-7.6	-1.5	0.6
Mechanical	-12.6	-1.5	-1.6	-4.8	-2.0	-3.2
Electronics	-1.9	-1.8	-1.2	2.1	1.9	-3.5
Electrical	1.0	-7.0	-2.5	4.3	-1.2	-1.7
Motor vehicles	6.6	5.1	1.8	10.0	-0.1	0.7
Other transport	5.8	2.1	1.8	-1.4	8.9	0.9
Food and drink	-0.1	0.9	0.7	6.3	1.2	-0.4
Chemicals	6.0	-2.9	0.3	-5.0	0.4	-2.8
Pharmaceuticals	1.0	0.3	0.2	-2.7	-2.0	-5.0
Rubber and plastics	-3.3	-2.0	-2.0	4.7	-8.4	-1.2
Non-metallic minerals	-2.3	7.4	-4.3	5.7	7.2	-8.5
Paper and printing	0.2	-1.5	-0.6	-4.9	-4.6	0.5
Textiles	0.0	-3.3	-0.8	7.7	10.4	-4.8
Manufacturing	-0.1	0.2	-0.2	1.7	0.7	-1.7

Source: EEF and Oxford Economics

CAPITAL GOODS TO REMAIN IN THE DOLDRUMS

Business investment forecasts have been subjected to some hefty downward revisions since the UK's vote to leave the EU. This is because uncertainty about the UK's future relationship with the EU is likely to weigh on businesses' confidence to proceed with large-scale investments. With visibility of future order pipelines blurred and multinationals likely to be reviewing the location of their next round of investment, the outlook for business spending has deteriorated considerably.

Sectors in the capital goods markets are the most exposed to this trend. The **mechanical equipment** sector – the chief investment good in UK manufacturing – is likely to face reduced demand for capital equipment from domestic buyers. The sector also supplies a good part of its output to the oil & gas and construction industries, where prospects for 2017 look weak.

However, the sector is also export-intensive and the pick-up in global manufacturing activity has already boosted export sales over 2016. Once the impact of the pound depreciation filters through in 2017, the high value-add mechanical equipment sector could beat some competitors to win orders at the margin. This has led us to forecast a contraction in output of 1.6% in 2017, along the lines of our 2016 forecast, but significantly higher than 2015.

In a similar position are the **electrical equipment** and **electronics** sectors. However, they are more vulnerable to recent movements in exchange rates as both sectors are heavily dependent on imported components. But they are also more diverse in their demand base with considerable consumer and intermediate goods segments. We expect both sectors to continue to contract over 2017, although the electrical equipment sector should see better growth than in 2016 as the power generation industry comes off the bottom.

SLOWDOWN IN CONSTRUCTION TO HURT SUPPLY CHAIN

Activity in the construction sector is another big worry post-Referendum. Output in the construction industry recorded consecutive losses in q2 and q3 2016, with forecasts for 2017 ranging from flat to moderately negative growth. Manufacturing sectors in the construction supply chain are therefore vulnerable to weakening conditions in their key market.

The **non-metallic minerals** sector depends heavily on bricks and mortar, with almost half of what the sector produces going into construction projects. As a result, we expect the sector to contract by a hefty 4.3% in 2017, after robust growth in 2016. This is also down to the fact that the sector is twice as import than export-intensive, which means that the pound depreciation will generate upward pressures on input prices without a corresponding export boost to offset the squeeze on margins. Nevertheless, the announced ramping up of public spending into housing should provide something of a cushion for the sector.

Similarly, the metals industries will also be affected by a slowdown in construction. The **basic metals** sector has seen a calamitous 2015 and 2016, with output shrinking by 10.7% in 2015 and a drop of 15.1% pencilled in for 2016. A considerable reduction in production capacity over the past two years combined with weak construction activity should mean another year of contraction for 2017. However, the sector is heavily commoditised and export-intensive, which means it's well positioned to take advantage of the pound depreciation to boost exports. The sum of these contrasting dynamics should push the sector to shrink by around 2.5% in 2017.

The **metal products** sector's key supply markets are more evenly distributed. Exposure to industries, such as motor vehicles and other transport, should offset some of the drag from the construction and capital goods sectors. We expect output to shrink by 1.3% next year, after flat growth in 2016.

LESS SUPPORT FROM THE UK CONSUMER

Household consumption has been the locomotive of growth in the UK economy over the past few years. Consumer spending has been supported by a persistently low inflation environment and strong labour market dynamics. However, the rise in fuel costs and pound depreciation are expected to generate some considerable inflationary pressures, leading to a slash in forecasts for growth in household consumption for 2017.

Consumer-facing sectors, like **food and drink** and **textiles** are therefore likely to see less support from UK households. What's more, while both sectors have recorded solid export performance in 2016, they are largely reliant on foreign inputs and export less than 15% of their output. We're already seeing food and drink producers pass the cost on to higher output prices, which is likely to weigh on consumer demand.

Still, the food and drink sector is relatively demand inelastic, which should help sustain growth in 2017 of about 0.7%. The textiles sector has been undergoing something of a transformation, with investments going into new factories and more automated production processes likely to prompt a better output performance next year at -0.8% from -3.3% in 2016. A rejuvenation of the Made in Britain brand for clothing in Asia should help offset some of the drag from shrinking profits in major high street retailers.

AUTOMOTIVE COMING OFF THE BOIL

Motor vehicles is also a consumer-facing sector. However, the sector is considerably more export-intensive than food and drink and textiles, with about 80% of all cars produced in the UK exported. The industry is therefore well-placed to capitalise on the weaker sterling to boost export sales. However, with the current pipeline of new models running out, automotive manufacturers are likely to see disruptions in production processes as they gear up for the development of the next round of models around the second half of 2017. Production lines will need to be reconfigured and labour re-skilled, causing output growth to slow from 5.1% in 2016 to 1.8% in 2017.

This is also likely to affect sectors in its supply chain like **rubber and plastics**. Moreover, the sector supplies about 40% of its intermediate output to the construction, mechanical equipment and food and drink industries, where we expect weak growth in 2017. We therefore forecast the sector to contract by 2% in 2017, along the lines of 2016 growth rates.

BREAKING FROM THE PACK

There are two sectors that tend to decouple from the wider macroeconomic trends affecting the manufacturing industry; other transport and pharmaceuticals. The **other transport** sector has been enjoying long order books over the past few years, with increasing demand for single aisle aircraft and record productivity, pushing consistently positive output growth in the sector. We don't see this trend changing in 2017 either and we expect output to grow at a similar pace as in 2016.

Pharmaceuticals are highly demand-inelastic products, meaning that demand for medicine is unlikely to fluctuate with changes in household disposable incomes or public spending patterns. The end of the patent cliff saw growth in pharmaceuticals output of 1% in 2015 for the first time since 2009, but large swings in production are likely to reduce that growth rate to 0.3% in 2016. We expect growth in pharmaceuticals to come in at a similar rate in 2017.

R&D FUNDING BOOST FOR MANUFACTURERS

BDO MARKET VIEWPOINT

The current economic and uncertain climate is placing huge demands on UK manufacturing to be more competitive, to develop new and innovative products in shorter timeframes and to improve the efficiency of manufacturing processes.

In addition, manufacturing companies have to meet the increasing demand of customers for lower prices, product customisation and comply with the demands of regulatory and environmental bodies.

Manufacturing is a long-term game with most businesses in the sector relying on large capital investments which pay off over years or even decades. Businesses need stability and certainty in government policy if they are to commit to the investment that the country needs to grow.

In her first speech to the CBI Annual conference on 22 November, Prime Minister Theresa May outlined the first steps of the Industrial Strategy which includes a welcome long-term commitment to research and innovation.

This was followed by the Autumn Statement, announced by Chancellor Philip Hammond which set out new measures, including a new Industrial Strategy Challenge Fund for a number of priority technologies, and help support collaborations between businesses and the UK's science base.

This is part of the National Productivity Investment Fund (NPIF) which the Chancellor announced will be established in an attempt to close the UK's productivity gap with its competitors. UK productivity is believed to be between a quarter and a third lower than in France, Germany and the US. In response to this, the NPIF will invest £23bn over five years in innovation and infrastructure, which includes an annual £2bn fund by 2020 to support R&D investment, which will be managed by Innovate UK.

The Autumn Statement also provided some detail about how research and development (R&D) tax relief is to be reviewed and improved in order to make the UK an even more competitive place to do business.

This shows that R&D tax relief continues to remain a key part of the Government's package of tax incentives to support UK manufacturing.

Manufacturers undertaking R&D activity can, in time, expect an increase in R&D incentives, both in the form of grant funding and in R&D tax relief. The grants and R&D tax credits claimed by many of our clients over the last few years have enabled the creation of innovative new manufacturing processes and techniques that are so important for the future of manufacturing in the UK.

However, in our experience, many manufacturers are still not aware that they are eligible for this generous tax incentive or do not realise the full scope and potential of the relief.

New product development is clearly an area to explore when considering an R&D tax relief claim. However, R&D activities span far beyond this initial activity, and can include improvements to existing products and manufacturing processes to improve quality, reduce costs, reduce waste and improve machine rates.

In addition, R&D is often undertaken in areas outside the R&D department, for example when tendering for contracts where bespoke solutions are required and initial R&D may be required to prove the technical concept. Equally, developing tooling for new materials or processes may qualify, or where a new material is used in a new or novel application.

All manufacturers should invest some time exploring whether they are entitled to R&D funding, which could help fund their investment plans.

The ambitious, fast-growing manufacturing companies that we work with have continued to focus on growth and investment, according to our recent Manufacturing Prospects report 60% of UK manufacturers surveyed said they are making no changes to R&D investment plans, with 16% planning to increase investments in this area. And similarly it is also promising to see the latest q4 survey results showing a rebound in manufacturing activity and investment.

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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, to help them work better, compete harder and innovate faster. Because 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.

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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 1,400 offices in 154 countries. We operate from 18 offices across the UK, employing 3,500 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

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