Outlook 2018

Robust growth – fragile politics

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With a growth rate of probably 2.3% in 2017, Germany delivered the main positive surprise in the industrial world. The euro area did better than expected, too. In 2018, German GDP looks set to expand by 2.3% again. If this forecast materialises, Germany will grow at an above-potential rate for the fifth year in a row. The boom is driven by investment activity, which is fuelled by rising export demand and considerably higher capacity utilisation, and by continuously strong employment growth. Higher employment and a more significant increase in effective wages should lead to consumption growth of almost 2%.

Construction investment looks set to accelerate in comparison to 2017, driven mainly by residential construction. Nevertheless, the gap between supply and demand for residential real estate is likely to widen further; at the moment, about 1 million residential units are lacking. The price pressure will abate slightly at best; in 2017, house prices rose by 6% and flat prices even by 10%. A lack of building land, insufficient capacities and inadequate regulation restrict supply. As domestic activity is booming, imports look set to rise more strongly than exports, even though the latter are increasing, too. The contribution of net exports to GDP looks set to be near zero once again.

The ifo business sentiment index reached a new all-time high in November. As capacities become scarcer and the euro appreciates, we expect growth to slow somewhat in 2018 in comparison to 2017. While the average for the year as a whole will probably remain unchanged, at 2.3%, this unchanged growth rate is largely due to a growth overhang of c. 1 pp at the beginning of 2018. In 2019, the growth rate is likely to decline to less than 2%.

We already voiced concerns ahead of the Bundestag elections that the new government (just like its predecessor) might not pay sufficient attention to urgent challenges such as digitalisation, demographics and globalisation as the labour market situation is favourable (for now!) and the budget looks set to be in the black for the fifth time in a row in 2018. Now that forming a government has turned out to be unexpectedly difficult (from our vantage point, the outcome is indeed undetermined), our concerns have increased.

Due to basis effects from energy prices, inflation (Nov 2017: 1.8%) might temporarily slow down at the beginning of the year and might even be slightly below the average of 2017 in 2018 as a whole, at 1.6% (2017: 1.7%). The upcoming wage round and resilient demand combined with the global decline in free capacities might, however, push up prices more strongly than currently expected.

We expect the ECB to stop its bond purchases completely by the end of 2018. Another six months are likely to pass in 2019 before the first rate hike of 25 bp. If the Italian elections go without a hitch and the economy continues to expand strongly, the path towards this rate hike is free, particularly if lending picks up.

Economic forecasts

	Real GDP (% growth)			Consumer Prices* (% growth)			Current Account (% of GDP)			Fiscal Balance (% of GDP)		
	2017F	2018F	2019F	2017F	2018F	2019F	2017F	2018F	2019F	2017F	2018F	2019F
Euroland	2.3	2.3	1.7	1.5	1.4	1.5	3.3	2.7	2.1	-1.1	-0.9	-1.0
Germany	2.3	2.3	1.8	1.7	1.6	1.8	7.2	6.5	6.5	0.9	0.8	0.5
France	1.8	2.0	1.6	1.2	1.3	1.4	-0.8	-0.6	-0.6	-2.9	-2.7	-2.9
Italy	1.6	1.4	1.0	1.3	1.0	1.5	2.9	2.8	2.6	-2.1	-1.9	-1.8
Spain	3.1	2.9	2.3	2.0	1.5	1.6	1.8	1.7	1.6	-3.1	-2.2	-1.6
Netherlands	3.0	2.5	2.4	1.3	1.6	1.9	10.2	10.2	10.1	1.1	0.5	0.4
Belgium	1.8	2.2	1.7	2.2	1.6	1.7	-1.0	-0.7	-1.0	-1.8	-1.5	-1.5
Austria	2.8	2.5	2.3	2.2	2.0	1.7	2.2	2.5	2.8	-0.9	-0.7	-0.5
Finland	2.9	2.6	2.1	0.9	1.2	1.6	-1.0	0.0	0.5	-1.2	-1.0	-0.8
Greece	1.2	3.0	2.2	1.2	0.7	1.1	-1.0	-0.5	0.0	-1.6	0.0	1.0
Portugal	2.6	2.0	1.5	1.6	1.2	1.5	0.2	0.0	0.0	-1.4	-1.2	-1.2
Ireland	4.1	4.0	3.2	0.3	1.0	1.2	3.8	3.5	3.0	0.1	0.1	-0.4
UK	1.6	1.0	1.4	2.6	2.5	2.3	-4.5	-4.0	-3.5	-2.5	-2.1	-1.4
Denmark	2.1	2.0	1.9	1.1	1.6	1.6	7.5	7.5	7.0	-1.0	-0.5	-0.5
Norway	1.8	2.2	2.0	1.9	1.9	1.8	6.0	6.0	5.5	3.5	4.0	5.0
Sweden	3.0	2.7	2.5	1.8	2.0	2.2	5.0	4.5	4.0	1.0	1.0	0.5
Switzerland	0.9	2.1	1.8	0.5	0.3	0.7	10.5	10.6	11.0	0.3	0.3	0.2
Czech Republic	4.2	3.4	3.0	2.5	2.4	2.2	0.6	0.4	0.9	1.0	0.8	1.1
Hungary	3.9	3.5	3.1	2.3	2.5	3.0	3.8	3.1	2.7	-2.3	-2.4	-2.3
Poland	4.2	3.8	3.5	2.0	2.2	2.9	-1.4	-1.7	-1.9	-2.3	-2.5	-2.7
United States	2.3	2.6	2.2	2.1	2.1	2.2	-2.9	-3.2	-3.5	-3.6	-2.8	-3.2
Japan	1.5	1.0	0.8	0.3	0.4	0.8	4.1	4.5	4.5	-3.5	-3.0	-2.6
China	6.8	6.3	6.3	1.7	2.7	2.4	1.2	0.8	0.6	-4.0	-4.0	-4.0
World	3.7	3.8	3.7	3.0	3.2	3.0						

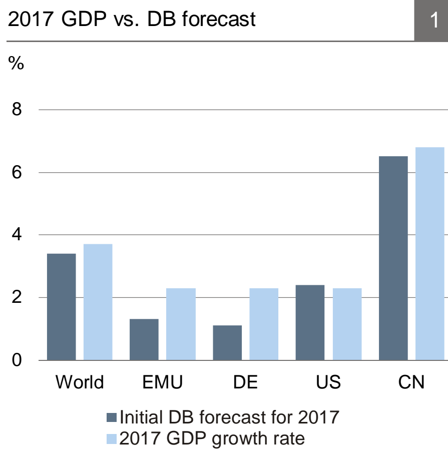
*Consumer price data for European countries based on harmonized price indices except for Germany. This can lead to discrepancies compared to other DB publications.
Sources: National Authorities, Deutsche Bank

Forecasts: German GDP growth by components, % qoq, annual data % yoy

					2018				2019			
	2016	2017F	2018F	2019F	Q1F	Q2F	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F
Real GDP	1.9	2.3	2.3	1.8	0.5	0.6	0.5	0.5	0.4	0.4	0.4	0.4
Private consumption	2.1	2.1	1.8	1.5	0.4	0.6	0.5	0.5	0.3	0.4	0.3	0.2
Gov't expenditure	3.7	1.1	1.0	1.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Fixed investment	3.1	3.9	3.7	3.6	1.0	1.0	1.0	0.8	1.0	0.9	0.9	0.8
Investment in M&E	2.2	4.3	5.1	3.1	1.0	1.0	1.0	0.5	1.0	0.7	0.7	0.5
Construction	2.7	3.6	4.0	4.9	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Inventories, pp	-0.2	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exports	2.6	4.2	4.8	4.5	1.2	1.2	1.2	1.2	1.1	1.0	1.0	1.2
Imports	3.9	4.7	5.2	5.1	1.3	1.4	1.4	1.4	1.2	1.2	1.1	1.2
Net exports, pp	-0.3	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Consumer prices*	0.5	1.7	1.6	1.8								
Unemployment rate, %	6.1	5.7	5.4	5.3								
Industrial production**	1.4	3.0	1.8	1.5								
Budget balance, % GDP	0.8	0.9	0.8	0.5								
Public debt, % GDP	68.3	64.9	61.3	58.6								
Balance on current account, % GDP	8.4	7.2	6.5	6.5								
Balance on current account, EUR bn	262.6	232.0	212	214								

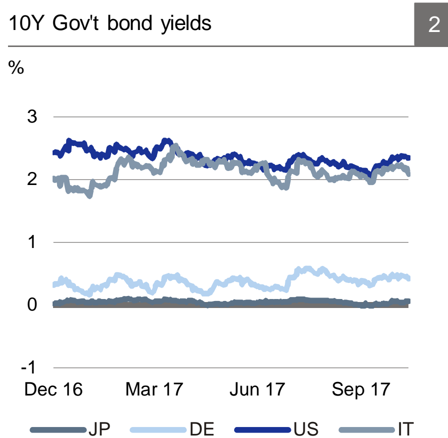
*Inflation data for Germany based on national definition. This can lead to discrepancies to other DB publications. **Manufacturing (NACE C)
Sources: Federal Statistical Office, German Bundesbank, Federal Employment Agency, Deutsche Bank Research

2017 GDP vs. DB forecast 1



Sources: National Statistical Offices, Deutsche Bank Research

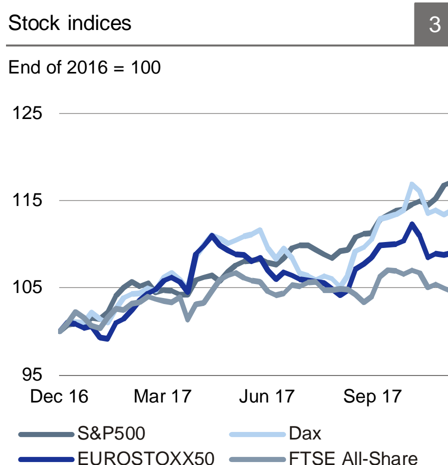
10Y Gov't bond yields 2



Sources: Bloomberg PLC, Deutsche Bank Research

Stock indices 3

End of 2016 = 100



Sources: Bloomberg Finance LP, Deutsche Bank Research

2017 in review: Europe and Germany provided the biggest surprises

The global economy did better in 2017 than expected a year ago. At 3.7%, global growth looks set to be roughly ½ of a pp stronger than in 2016 and more than ¼ of a pp higher than forecast at the beginning of 2017. The euro area and Germany in particular surprised to the upside. Growth in the euro area will probably come in at 2.3% for 2017 as a whole, i.e. 1 pp above our initial forecast. And at 2.3%, the rate for Germany looks set to be more than twice as high as anticipated at the beginning of the year (DB forecast: 1.1%; consensus: 1.3%). Our growth forecast for the US proved quite accurate (2.3%; forecast: 2.4%) even though the tax reform plans of the new administration were considerably delayed. GDP growth in the other major industrial countries was largely in line with the expectations. The same applies to the emerging markets, where the recovery picked up speed. In China, the expected structural slowdown seems to have been interrupted, at least if we look at the average growth rate for 2017 (6.8%; our forecast: 6.5%).

Asset price boom

Inflation slightly exceeded the expectations in the industrial countries, but remained below them in China. Nevertheless, the asset markets did considerably better than expected. Ten-year government bond yields trade at almost the same level as 12 months ago in the US, Japan and Germany, even though nominal GDP growth accelerated significantly during the past year (probably by more than 1 pp in the G7 countries). Several European peripheral countries (Portugal, Greece) even saw their yields decline palpably as political risks receded. Important equity markets have gained between c. 5% (UK) and almost 20% (US) during the year. The euro surprised to the upside; since April, it has appreciated roughly 10% versus the US dollar and more than 5% in trade-weighted terms.

Outlook 2018: Global GDP growth of 3.8% in 2018

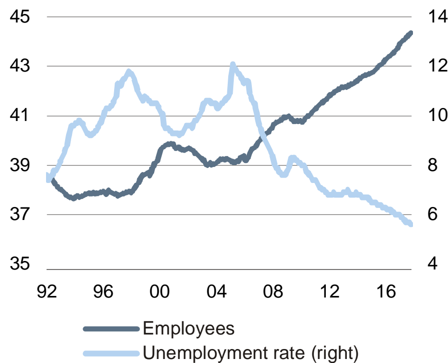
We expect the global growth momentum to continue in 2018; in fact, global GDP growth will probably even accelerate slightly, to 3.8%. In the US, the upcoming tax reform should boost investment in particular and help to drive GDP growth up to 2.6%, despite the expected four Fed hikes. Despite the likely slowdown in China, to a growth rate of 6.3%, the recovery in the emerging markets looks set to continue. Growth momentum in the euro area appears to have peaked, as free capacities are becoming scarce; the output gap in the euro area should be almost closed by now. By the final quarter of 2018, annualised GDP growth will probably have weakened to 1.6%; however, this rate is still above potential. The growth acceleration during 2017 will lead to a growth overhang of almost 1 pp at the beginning of 2018. While the average rate for 2018 will therefore still come in at 2.3%, despite the forecast slowdown in the course of the year, it is likely to decline more significantly in 2019, to 1.7%.

Germany in 2017: Resilient consumption, recovery in investment

We considerably underestimated German GDP growth in 2017 for two reasons. First, contrary to our expectations, employment growth accelerated again during 2016 so that the forecast slowdown in consumption growth did not take place. Second, investment activity was considerably stronger than expected at the

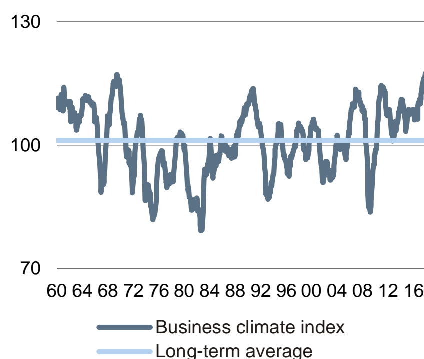
Germany: Labour market 4

right y-axis: in m
left y-axis: in %



Sources: Federal Labour Office, Federal Statistical Office

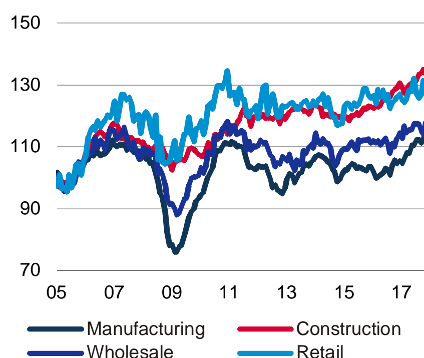
ifo business climate index 5



Source: ifo

ifo index by sector 6

Index 2005=100



Source: ifo

beginning of 2017. Despite major uncertainties about economic policy, investment in machinery and equipment rose significantly during the first half of the year. Construction investment also surprised to the upside in Q1, helped along by the favourable weather conditions. As a result, capital expenditure seems to have increased by almost 4% in 2017 as a whole (forecast at the beginning of the year: 1%).

Economic boom to continue in 2018

Both the current assessment and the expectations components of the ifo business climate index reached all-time highs in November, with manufacturing being the main driving force behind this increase. In December, the manufacturing PMI (flash) reached a new record high as well. The services PMI is still more subdued; but December's strong rise pushed the index 2.6 points above its historical average. Overall, however, the economic basis for 2018 is excellent, which is why we expect growth to reach 2.3% again. However, while the average for the year as a whole is quite high, growth is likely to slow down in the course of 2018. First, a lower number of working days reduces the rate for 2017 by c. ¼ of a pp. In working-day-adjusted terms, growth in 2017 should even reach 2.5 – 2.6%. In 2018, however, the number of working days is unlikely to affect the growth rate. Second, Germany should benefit from a growth overhang of 1% from 2017. The slowdown of the average annualised quarterly growth rates from 3% in 2017 to just above 2% in 2018 (i.e. a rate which is still considerably above potential) provides a better picture of the overall economic dynamics. The deceleration is largely caused by capacity bottlenecks, in particular on the labour market, and by the firmer euro. Overall output is likely to exceed its potential level (output gap) by about 2pp in 2018. This trend will probably act as another brake on growth, which is why the expansion looks set to slow down to 1.8% in 2019.

Risks

Apart from North Korea, the Middle East poses considerable political risks, which might even lead to renewed flight movements to Europe. Moreover, the parliamentary elections in Italy, which need to be held by May 2018, harbour additional political risks for the euro area. In Germany, the unexpected difficulties in forming a government have increased political uncertainty. The country may be in for another grand coalition that may hesitate to introduce reforms and instead spend more money, or for an unstable minority government, or early elections. This might even damage the reputation of Germany as a business location. From an economic vantage point, the biggest risk stems from the Chinese government's ambitions to slow down the country's expansion. In addition, more visible conflicts of interest in global trade might result in increased protectionism. However, the biggest risks probably relate to the global bond markets, not least because volatility was extremely low during the past year. The ECB's exit from its QE programme might trigger considerable volatility, particularly if our concerns about a quicker than expected normalisation of global inflation rates materialise.

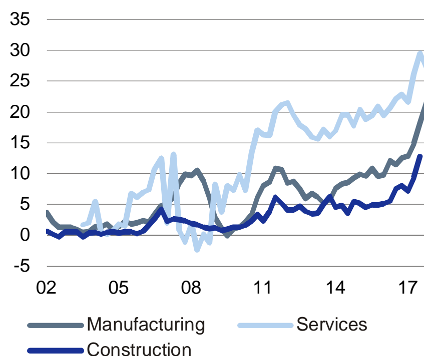
Strong labour demand 7

Standardised values (since 2008)

Sources: Federal Employment Agency, ifo, Markit, Deutsche Bank Research

Companies experience labour shortage 8

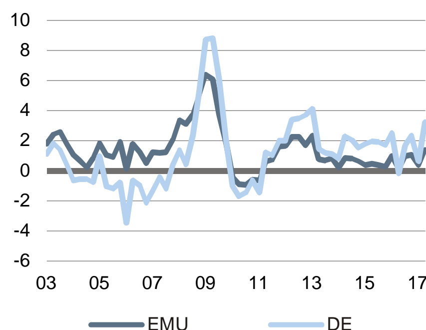
Labour shortage as limiting factor, share of companies, %



Source: EU Commission

Unit labour costs: Germany getting more expensive 9

Nominal unit labour costs, % yoy



Sources: Eurostat, Deutsche Bank Research

Private consumption to remain an important pillar of growth

While private consumption growth looks set to weaken slightly, from 2.1% in 2017 to 1.8% in 2018, it will nevertheless remain one of the key pillars of growth in 2018, together with capital expenditure. Each of these two segments will probably contribute c. 1 pp to growth. Our forecast is based on the assumption that employment will continue to rise and that the upcoming wage negotiations in 2018 will result in healthy wage increases. In addition, favourable financing conditions should continue to support private consumption. The dampening effects of rising energy prices are likely to be offset by an appreciation of the euro.

Labour market: On the way to full employment

The labour market has developed considerably better than expected during the past year, and employment looks set to rise further in 2018. In fact, the German labour market was in an excellent condition in 2017. Employment trended upwards and reached ever new peaks; recently, 44.5 million people were gainfully employed. Overall, employment was up 1.5% yoy. At the same time, the unemployment rate declined steadily, to recently 5.6%. At 5.7%, the average for the year looks set to be considerably below the consensus forecast published at the beginning of the year (6.1%).

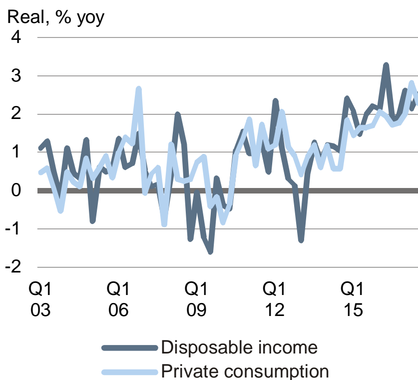
Much of the rise in employment stems from labour migration, which is possible thanks to the EU principle of the free movement of workers. Part of the rising demand for labour was covered by workers from the eastern European EU countries, from Greece, Spain, Italy, Portugal and the Balkans. As most labour migrants were well qualified, they were quickly integrated into the labour market. As the economy recovers, particularly in the southern EMU member states, labour migration looks set to slow in the coming year. This means that the imminent lack of qualified labour, which is already visible in some regions, will probably intensify in the coming year. According to several surveys, many companies regard the lack of well-qualified workers as one of the main obstacles for their business.

Wage round 2018 – IG Metall raises the stakes

Against the background of strong labour demand, attention will focus on the upcoming wage negotiations in 2018. Wage agreements for roughly 9.7 million workers or c. 30% of the total number of 32.5 million workers in regular jobs that are subject to social security contributions are up for re-negotiation. In this context, negotiations in the metals industry and the civil service play a key role. The IG Metall trade union demands wage hikes of 6% for both regular workers and apprentices and the introduction of a clause that will give workers the option to reduce their working time to 28 hours per week for a maximum of 24 months. In addition, the employers are to compensate their employees for part of the resultant wage losses if certain conditions are met. The employers have offered aggregated wage hikes of 2.35% in the second negotiation round, but are still not willing to discuss a reduction of working hours. This suggests that wages will be raised by slightly more than 3% in the end. However, the employers will need to improve their offer significantly if they want to get IG Metall to back down from their call for a reduction of working hours in the upcoming wage round. Since the remaining 60% of the aggregate number of employees are covered by wage agreements that foresee wage hikes of considerably less than 3% in 2018, overall wage growth should remain below 3%.

Disposable income and private consumption 10

Real, % yoy



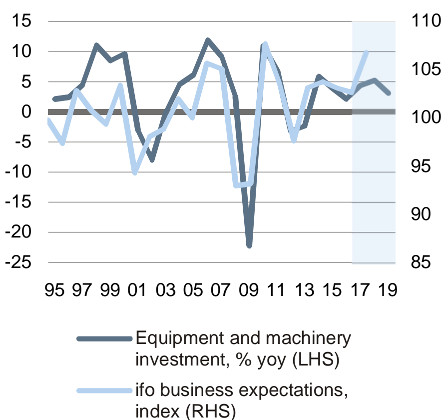
Sources: Deutsche Bundesbank, Deutsche Bank Research

The minimum wage will remain unchanged next year, at EUR 8.84 per hour. However, several sectors have already agreed on increases during the past year. The mandatory minimum wages for c. 1.3 million employees will rise by an average 4% next year – a development which should support effective wage growth. Overall, the expected trend in wages and employment as well as the upcoming increase in pension payments (west: 3.09%, east: 3.23%) should lift households' nominal disposable income by c. 3¼% in 2018. The savings rate is unlikely to move much from its current level of 9.7%.

The expected pick-up in inflation, to 1.6%, will offset a part of the nominal wage increases and thus lead to real income growth of c. 1¾%. A productivity growth of c. 1% should result in an increase of unit labour costs by 1½% to 1¾% - similar to that seen last year.

Investment in machinery and equipment to pick up thanks to high capacity utilisation and the positive growth outlook

Investment in machinery and equipment should benefit from favourable business expectations 11

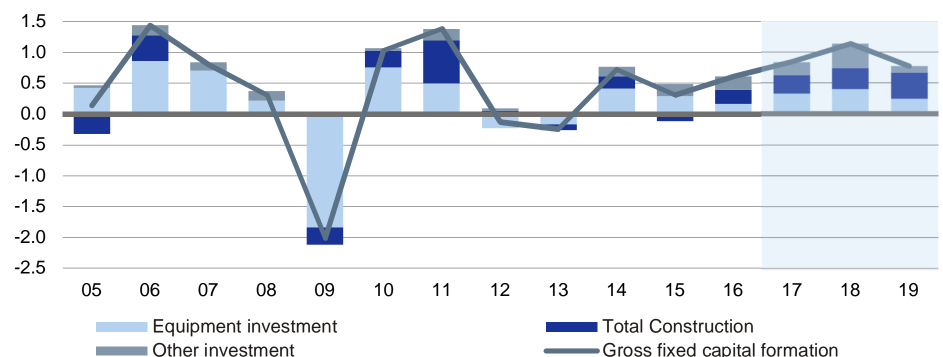


Sources: Destatis, Eurostat, Ifo, Deutsche Bank Research

The environment for investment in machinery and equipment has improved markedly in the course of the year. On the one hand, companies in Germany are turning more upbeat about the (global) growth outlook and political uncertainty in Europe is taking a back seat. On the other hand, global growth has gathered momentum of late, which provides a further stimulus to German (export) business and has a positive spill-over effect on investment activity. In view of the favourable growth outlook (which is also supported by leading indicators such as ifo or PMI) and the sharp rise in manufacturing capacity utilisation (currently at around 86.5%; by comparison 1995-2016 average: 84%), we expect growth of investment in machinery and equipment to rise further.

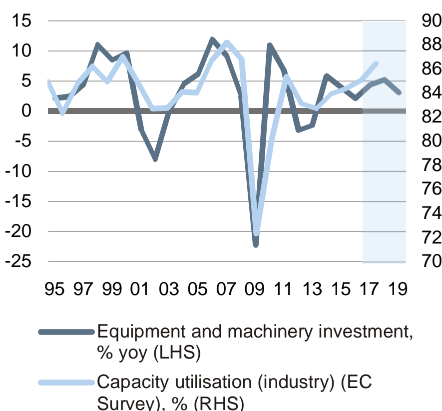
Gross fixed capital formation (GFCF) over time 12

Contribution to annual real GDP growth, percentage points



Sources: Destatis, Eurostat, Deutsche Bank Research

Rising capacity utilisation should support investment 13



Sources: Destatis, Eurostat, EC, Deutsche Bank Research

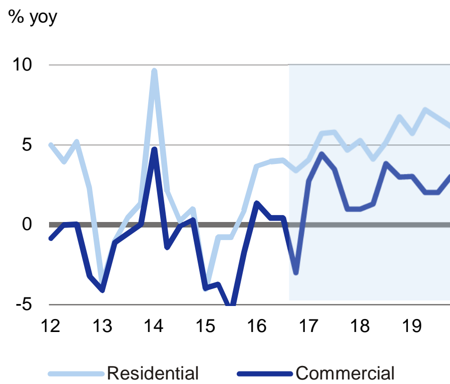
According to our estimates, (gross) investment in machinery and equipment in 2017 looks set to edge up by roughly 4.3% (real, price-adjusted) compared with the previous year (2016: +2.2%). In 2018, it could gather even more steam and rise at a rate of roughly 5%, thereby contributing 0.4 percentage points to German GDP growth (of around 2.3%). It is noteworthy, though, that the growth overhang is roughly 3% next year, which means that the relatively strong expansion of machinery and equipment investment is not quite as high as it may appear at first glance. In addition to replacement investment, capacity-increasing investment is set to contribute more strongly to total investment in equipment and machinery over the coming two years thanks to the strong

cyclical growth momentum. In 2019, however, the growth rate of machinery and equipment investment looks set to slow again (to around 3%), in line with the expected slowdown of the German economy.

Construction: House price cycle unlikely to come to an end in 2018

Construction investments 14

% yoy

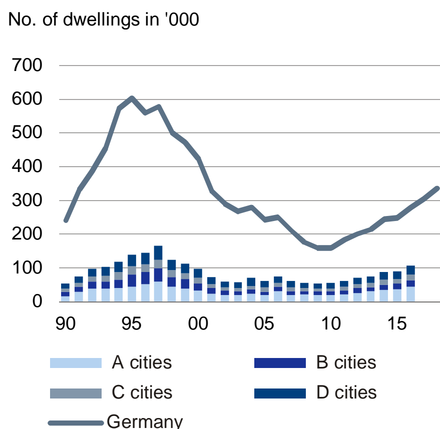


Sources: Federal Statistical Office, Deutsche Bank Research

Construction investment recorded a year-over-year increase of around 3 ½% in 2017 and looks set to gather further steam. Our expectation of 4% for 2018 is – as in the preceding years – likely to be dominated by residential construction, whereas growth contributions from commercial and public construction will be less pronounced. In view of the flourishing labour market and on-going immigration, housing demand remains at elevated levels. As in recent years, housing investment consequently edged up only slowly in 2017, rising by roughly 5%. Since the beginning of the house price cycle in 2009, the housing shortage hence increased for the ninth year in a row. Overall, more than 1 million additional residential units are meanwhile needed in Germany, above all in metropolitan areas and major cities. In the years ahead, the situation ought to ease only gradually, given the particularly low price elasticity.

Completions 15

No. of dwellings in '000

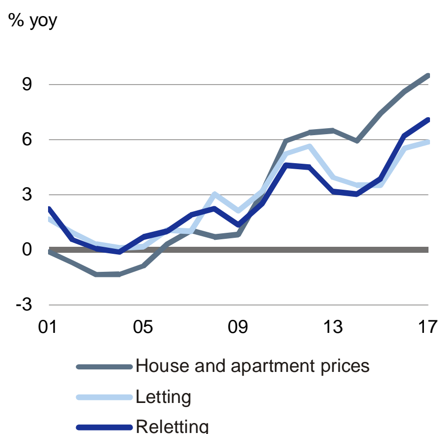


Sources: riwis, National Statistical office, DB Research

Despite the shortage, housing investment is unlikely to gather momentum, from our point of view. Along with substantial capacity restrictions across Germany, lack of land for construction and complex political processes are hindrances to building activity at the local level. Skilled construction workers are becoming increasingly rare. The number of companies reporting a "shortage of labour" in the monthly ifo survey has not only risen to an all-time high, but actually doubled within 12 months. Another factor contributing to capacity restrictions is the construction industry's reluctance to visibly expand investment in construction equipment. A resumption of the grand coalition would imply additional hindrances. Although the rent brake, in effect, fails to cap rents, the Social Democrats stick to their plans of rent-control legislation, in addition to demanding stricter protection for tenants. Likely to slow new construction and fuel prices and rents, this additional attempt to undermine market mechanisms would be counterproductive. A CDU minority government, on the other hand, argues for more positive impulses, as a majority in the new Bundestag favours strengthening new construction over tightening protection for tenants.

German residential property: Prices and rents 16

% yoy



Sources: riwis, Deutsche Bank Research

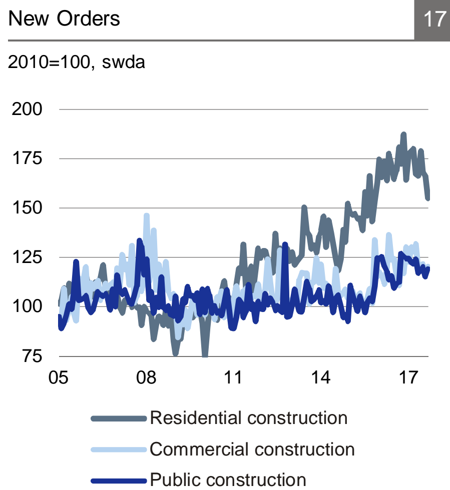
2016's hefty two-digit increase in new orders and building permits was not repeated in 2017. New orders inched up by only around 5%, and building permits retreated from their extremely high levels in 2016. In view of pent-up demand in recent years – the order backlog is near its record high – we nonetheless expect housing investment in 2018 to pick up slightly to above 5% year over year. Correspondingly, new residential units ought to rise to 335,000, in our view. Whilst this would mark a strong increase from 305,000 units in 2017 (date of release: June 2018), it would fall short of the need for at least 350,000 homes, thereby further exacerbating scarcities on the housing market. By 2019, at the earliest, supply could for the first time in ten years exceed demand in the current cycle.

Still high price momentum

Led by scarce supply, house prices in 2017 rose even more rapidly than in the preceding years. According to BulwienGesa (126 towns and cities) house prices increased by an average of around 6 ½% and apartment prices by over 10%. As in the preceding years, metropolitan areas and major cities recorded the steepest price hikes, though prices were also on a strong uptrend in many

New Orders 17

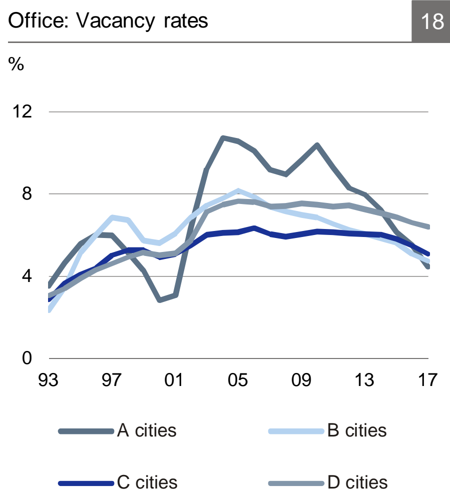
2010=100, swda



Sources: Federal Statistical Office, DB Research

Office: Vacancy rates 18

%



Sources: Riwis, Deutsche Bank Research

Global trade vs. global PMI and US-Purchasing manager index: ISM 19

left y-axis: Index<50 contrac., >50 expansion
right y-axis: % yoy

Sources: Markit , ISM, CPB, Deutsche Bank Research

towns, and none of the 126 towns and cities under survey reported a decline. The price boom is also reflected in rent momentum. Marking the steepest increase since 1993, rents for lets and relets in 2017 were up by 6% and 7%, respectively. Moreover, with rent growth picking up rather than declining over the cycle since 2009, the rent brake seems to have a boomerang effect.

In 2018, price and rent momentum is likely to slow only marginally, at best. The housing shortage and the flourishing labour market continue to be the key price drivers. Demand in 2018 will be dampened by high prices, which ought to squeeze many potential buyers out of the market. Other dampening factors are higher capital market rates and the resulting slight increase in mortgage rates. For end-2018, we expect 5- to 10-year mortgage rates to inch up to 2% (currently 1.7%). Given strong price momentum in 2017 and the persistent shortages, the reduction of which should take many years, the risk of a real estate bubble in the current cycle has increased visibly.

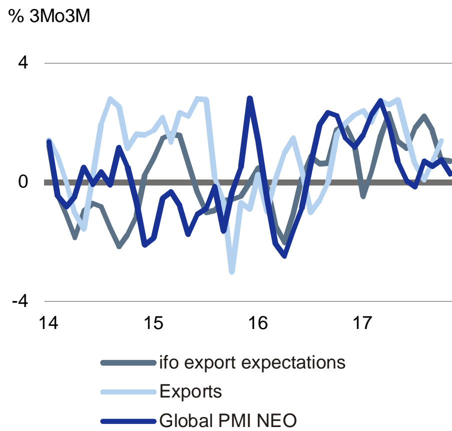
In line with our expectations, commercial construction turned the corner in 2017. After declining by around 5% from 2012 to 2016, investment recorded a year-over-year increase of roughly 2 ½% in 2017. Led by the sharp steady rise in the number of employees subject to social security contributions, office employment and hence demand for office space also picked up. More than 40% of the employees subject to social security contributions in Germany, and around 50% in major cities, are working in offices. Courtesy of the thriving labour market, demand looks set to rise further in 2018. On the supply side, vacancies are hence likely to remain on the decline, which ought to stimulate investment. In some regions, bottlenecks already exist today – for the first time since the reunification boom. Looking ahead, space should also become scarce in the major office property markets, Frankfurt and Düsseldorf. After rising markedly on the heels of the dotcom boom, vacancies are meanwhile on the retreat. Thanks to the Brexit, demand for office space in Frankfurt has recently picked up visibly, following sluggish demand growth in 2016. The German office market ought to gather further steam in 2018, as the number of office employees is likely to rise further, whilst vacancies look set to continue their downtrend in many cities. Driven by the persistent boom in online retail sales, demand for logistics properties ought to pick up, partially at the expense of retail industry, which has suffered from weak growth impulses in recent years. On the whole, commercial construction looks set to gather momentum, given the marked rise in new orders in 2017 and building permits near their all-time highs of the early 1990s. Against this backdrop, we expect commercial construction investment to edge up by somewhat more than 2 1/2% in 2018.

Unlike residential and commercial construction, public construction is sluggish. In 2017, investment was flat, as on average over the past 15 years. Of late, new orders have recovered, probably owing to the full state coffers, whereas building permits continue to stagnate. Although the Energiewende, the German energy transition, together with investment in digital infrastructure and the envisaged restructuring of defence spending imply higher investment potential, it is unlikely to materialise, given the numerous challenges besetting major public projects. For 2018, we therefore expect public construction investment to inch up only moderately by around 1% compared with the previous year.

Exports benefit from acceleration of global trade

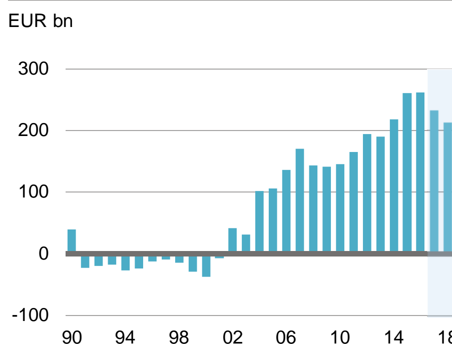
The German export momentum has picked up considerably since the end of 2016 on the back of the increase in global trade. However, the euro appreciation dampened demand, in particular from Anglo-Saxon industrial countries. Most export growth models assume long-term export elasticities of 0.6 to 0.7 with regard to the euro exchange rate. This means that the exchange-rate-related

Nominal exports vs. indices 20



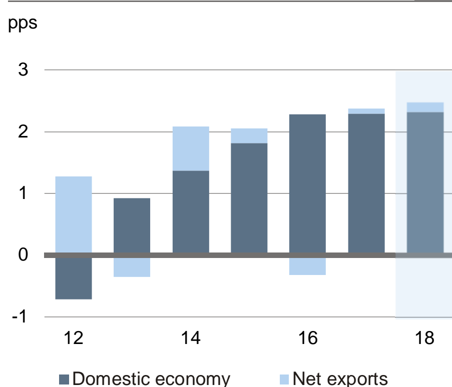
Sources: Federal Statistical Office, ifo, Markit, Deutsche Bank Research

Current account 21



Sources: Federal Statistical Office, Deutsche Bank Research

GDP growth rate 22



Sources: Federal Statistical Office, Deutsche Bank Research

price competitiveness of German exports deteriorated by up to 1 ½ pp. However, these elasticities may have changed in the last few years due to a more sophisticated international division of labour and the fact that China is increasingly emerging as an important competitor in the capital goods sector.

Exports to Asia grew almost 10% yoy, i.e. quite strongly in comparison to both the relatively subdued growth rates of the last few years and to shipments to other regions. Chinese demand was up by an above-average rate of c. 14% as the country's economy stabilised. Owing to this development, the Chinese market is on its way towards replacing the UK as the third-largest export market. Exports to the UK declined again by c. 3%, as in 2016. The significant sterling depreciation and political uncertainties are leaving their traces. Exports to the US, which are still the most important market (their share in total exports amounts to almost 9%), grew by roughly 4%. While the euro appreciation prevented even stronger growth, this figure is roughly in line with the long-term growth momentum of US exports. Exports to France, the second-largest market, stagnated ahead of the French presidential elections. Following Macron's victory, they rose palpably, sometimes at a two-digit rate year-on-year. This acceleration during the course of the year was not limited to France. Rather, it took place in Europe as a whole. In 2017, exports to countries inside and outside the euro area rose by c. 6%, i.e. the strongest rate since 2012.

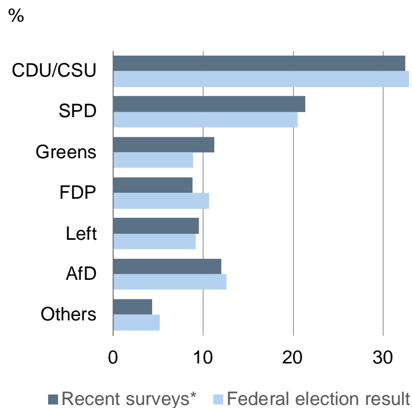
Sentiment indicators for German exports are moving towards their all-time highs, sometimes at considerable speed. The PMIs and the ifo export expectations paint a very favourable picture for the coming months. World-wide optimism should continue to limit the impact of the numerous global crises. As a result, the current export momentum will probably remain in place far into 2018. The main risk is probably the political uncertainty surrounding the Brexit negotiations between the UK and the EU. In case of a "hard" Brexit, not only exports to the UK itself, but shipments to other western European countries will probably suffer. At the same time, the increasingly likely adoption of the US tax reform is an upside risk for 2018. Higher corporate earnings might result in additional demand.

As risks have declined in comparison to preceding years and the global growth environment is favourable, we expect German exports to rise by another 6% to c. EUR 1,280 bn in 2018. Robust domestic growth has led to a significant increase in imports, which is why the German current-account surplus narrowed to 7.2% of GDP or EUR 232 bn in 2017. This is a significant decline, down from 8.4% in 2016. The trend looks set to continue in 2018, with the surplus likely to drop to 6.5%. Nevertheless, among the major economies Germany remains the one which makes a particularly large contribution to global imbalances. It will therefore continue to be criticised for its high export surpluses.

In real terms, German exports were up by more than 4% in 2017. We expect the growth momentum to accelerate to 4 ¾% in 2018. As at the end of 2017, export prices are likely to rise slightly, as both the euro and energy prices are in for a stable development in 2018. In real terms, imports look set to grow more strongly than exports on the back of very strong domestic growth, as in the preceding years. The contribution of net exports to overall growth should therefore remain largely neutral, as in the past few years.

Possible new Groko – political stability would come at high costs

Major political parties' recent popularity vs result of the election on Sept. 24 | 23



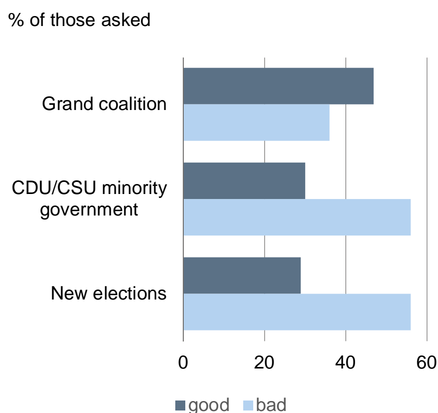
* Average of major recent surveys (Allensbach, Emnid, Forsa, Forschungsgruppe Wahlen, Infratest dimap, INSA)

Source: Wahlrecht.de

At the turn of the year 2017/18 Germany is in an unprecedented political situation. Within the past three months since the federal election the major political parties could not manage to form a new government coalition. Thus, the New Year will still see the caretaker government in office. However, there is evidence to suggest that a renewed grand coalition (Groko) or a minority government tolerated by the SPD could be established by late-spring. Yet, the SPD has still difficulty in participating in a new government, given the party leaders' repeated determined refusal of a renewed GroKo in first two months after the federal election on September 24. Their concerns have remained despite the Federal President's intervention. End-November, in the aftermath of the breakdown of the talks on a Jamaica coalition (between the CDU/CSU, the Greens and the FDP), President Steinmeier summoned the leaders of the CDU, the CSU and the SPD to remind them of their responsibility to hammer out a stable government. Meanwhile, on December 7, an SPD convention has greenlighted exploratory talks with the CDU/CSU. But there are still substantial obstacles for the formation of a new government. Thus, new elections could become a topic on Germany's political agenda for 2018. Anyway, in next few months we expect ongoing political uncertainty and noise which could negatively impact the markets.

Long and bumpy road towards a new government

Popularity of the options for government formation* | 24



* Question: What do you think about (a) ...

Source: Forschungsgruppe Wahlen: ZDF-Politbarometer

The SPD expects that a new Groko's policy will be focussing on its key requests for more social justice and solidarity – encompassing also EU matters such as an EU-wide minimum wage. As major SPD demands hardly fit with the CDU/CSU programme, complex and lengthy negotiations will precede the formation of a new government – SPD grandees even mentioned months. At present, it is even unclear whether serious exploratory talks will still start before Christmas. In this talks, among others, the SPD will explore whether the party will join a government coalition, tolerate a CDU/CSU minority government or participate in another form of cooperation. Once these talks will be finished successfully a special party convention shall decide on the start of formal negotiations with the Conservatives. Finally, the negotiation outcome and thus the preferred form of cooperation will be submitted to a SPD member survey for approval. The likelihood of a positive vote is all the more open, as the SPD leadership struggles hard to backtrack from its former no. Thus, a successful finish is likely but not a given.

Amongst the three options for cooperation debated within the SPD an official coalition seem to be the most likely. Given the parties' different political approaches with regard to various issues, compromises across the particular issues in the form of the usual horse trading seem to be necessary for an agreement. Therefore, a partial cooperation focussing only on one or two major issues, such as European policy, as proposed by SPD leader Schulz seems to be hardly feasible.

German politics would probably be different if Chancellor Merkel had to lead a minority government, especially one not based on a (formal) SPD toleration. Such a government could try to secure a changing parliamentary majority for each of its projects. Thus, its policy would probably reflect influences from the Greens and the FDP (Liberals), too. If new elections were held the resulting shape of the German political landscape would be even less predictable. Albeit the actors involved seem to dislike this option even more than a renewed Groko, new elections cannot be ruled out – at least not as long as politicians from both

camps stress positions that are obviously unacceptable for the other side, respectively. Amongst the Germans new elections are as unpopular as a CDU/CSU minority government (refusal rate 56%, respectively; Forschungsgruppe Wahlen).

Even in the most likely scenario of a grand coalition the future government's stance on several issues is still in the dark, as the parties involved favour different approaches and the political dynamics is still high. With this disclaimer, what can markets expect from a Groko? Which main topics will such an alliance emphasise with regard to European policy, to fiscal policy and to the regulation of markets?

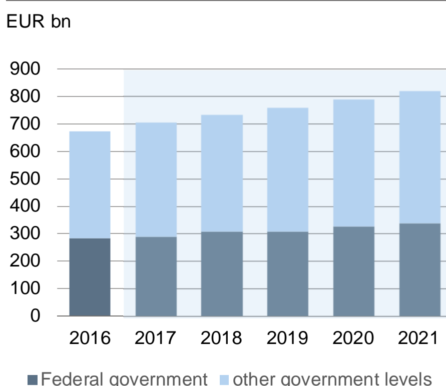
German responsibility in the EU context driver for assuming coalition talks

A major reason for SPD and CDU/CSU to engage in coalition talks is the need to endow the government with a clear mandate for upcoming decisions on the EU level. Both parties share the view that with the new French President Macron and against the background of the EU election calendar a window of opportunity has opened up to launch further initiatives, e.g. on defense, and to get reforms off the ground. The latter holds true in particular for the discussion on how to further stabilise the euro area and improve its crisis resilience. The EU Commission has just presented detailed proposals which, however, will find only partly support among the euro area members. Between the SPD and the CDU/CSU, too, differences prevail over the prioritisation of proposals as well as the concrete design, e.g. for the ESM. The SPD distances itself from "austerity policy", demands a broad investment initiative for the EU and emphasises the need for more solidarity including some sort of risk sharing. The CDU/CSU is opposed to the latter, supports the rule-based fiscal policy coordination and expects more funding to be conditional on structural reforms. Thus, how bold the next government's European policy mandate will be at the end of coalition talks remains to be seen. By contrast, it is obvious that the envisaged timetable for euro area reforms – principal endorsement at the EU summit on Dec 14 to 15 and final decisions in June – has become unrealistic given the lengthy government building in Germany (and the remaining differences among the Eurogroup). The current finance minister Altmaier has reacted with caution to the Commission's proposals stressed that there was no need to rush on the reforms.

Limited reduction of the tax burden, but intensified government spending on infrastructure

Tax revenue will increase strongly 25

EUR bn



Source: Working Party on Tax Revenue Estimates (Nov 17)

Domestic projects are subjects to fiscal policy guidelines. Notwithstanding the SPD's various requests the CDU/CSU is likely to stick to its major goal of a balanced budget (no new net borrowing). On that condition the federal government can dispose of additional (free) funds in the amount of cumulated EUR 30 bn to 45 bn by end-2021, according to our estimates. This volume could be increased by (partial) tax hikes or – less likely – the use of technical reserves from the debt brake mechanism. Whether and to what extent a Groko will fall back on tax hikes could to be one of the most disputed issues in the coalition talks. The CDU/CSU is clearly opposed to the SPD's demands for a higher tax on 'very large inhertiances', for a wealth tax (on 'huge assets') and for higher top tax rates in the income tax. Therefore, we do not expect tax hikes with the exception of possible modifications of the withholding tax on investment income (limited increase of the present 25% (plus solidarity surcharge) flat rate). In return the total amount of tax relief will likely remain below the EUR 15 bn to 17

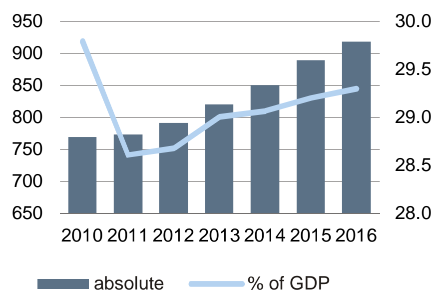
bn requested by the CDU/CSU. Likely measures are a flattening of the income tax scale in the lower- and the middle-income brackets, increased family transfers and the start of the phase out of the solidarity surcharge in 2020, but possibly initially only in favour of low- and middle-income earners. All in all these groups are likely to primarily benefit form tax reductions and transfer increases. This should foster private consumption.

The impact from probably soaring government spending will likely be more felt. A renewed Groko seems to be willing to devote substantial funds to the widely demanded „modernisation“ of Germany's infrastructure. All three parties advocate an increase in public investment especially on education, on the digital infrastructure (broadband network) and on transportation. However, many of the parties', especially the SPD's, pet projects in the field of education are under federal states' responsibility. Furthermore, the CDU/CSU and the SPD want to intensify the public promotion of R&D spending, especially in favour of small and medium sized enterprises. The SPD demands increased government spending on (public) housing. However, there are virtually now spare capacities in the construction industry, which would limit demand effects at least in the short term.

Intensive debates are likely with regard to defense spending. The SPD is opposed to higher spending as requested by the CDU/CSU and international institutions.

Increasing welfare spending 26

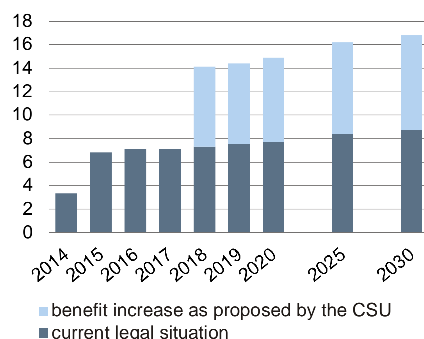
EUR bn (left-hand scale), % of GDP (right-hand)



Sources: BMAS, Federal Statistical Office, Deutsche Bank Research

Costs of mothers' pension* 27

EUR bn



* Calculations by the Cologne Institute for Economic Research, assumed pension increases according to 2016 pension report

Sources: BMAS, IW-Koeln

Sustainable funding of social protection at risk

Given the SPD's priorities, the issue of social protection will likely be high on the agenda, too. So there is the risk that the new government – like the past Groko – will burden the social security schemes with additional and continuously growing costs. The SPD's and the CSU's pension policy proposals alone amount to nearly EUR 10 bn p.a. in 2021. This would further inflate the income redistribution from the active generation and the enterprises to the pensioners – with negative impact on economic growth and employment.

The SPD's request to adjust benefits from the public pension scheme so that the replacement rate will remain at the current level of 48% (of the employees' average wage), is especially problematic. This could cost EUR 1.3 bn in 2021 and even about EUR 23 bn in 2029 according to calculations (on the basis of a 47.5% level) from the Cologne Institute for Economic Research (Institut der deutschen Wirtschaft). Here, the Conservatives should be consistent and stick to the present pension benefit formula established by SPD Labour Ministers in the past decade to enhance the scheme's sustainability.

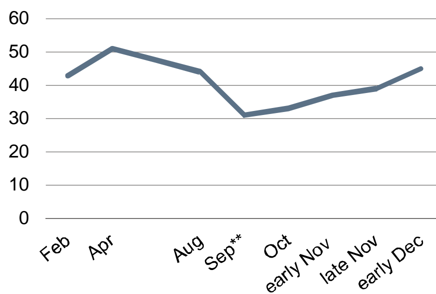
Two other proposals are more likely to survive the negotiations, albeit these are expensive, too, namely the minimum pension and the increase of the pensions for mothers with children borne before 1992. A supplementary benefit for employees with low pensions despite long working careers, which already was on the past Groko's agenda, would cost nearly EUR 1 bn in 2020. The burden from higher pensions for the respective mothers would be even higher – at least in the short- and medium-term (EUR 7.2 bn in 2020).

The growth path of the health care expenditure and of government interventions in this area are difficult to predict. On the one hand the SPD requests a merger of the private and statutory health insurance into a single "citizens' insurance" system, so that all citizens (at present 89%) including the civil servants and the self-employed shall be members of the new scheme. One the other hand the CDU/CSU rejects this proposal. The same is true for the SPD's proposal that employers shall pay higher contributions to the public health insurance (so that they would have to pay the same contributions as the employees). While this would reduce the employees' payroll tax (by EUR 7.4 bn in 2018) it would

burden the employers and the public pension scheme (contributions for pensioners) with EUR 6 bn and EUR 1.4 bn.

Popularity of a Groko is slightly increasing again* 28

2017, % of those asked



* Question: "Do you think a grand coalition is very good or good:" ** in the aftermath of the election on Sep. 24

Source: Infratest dimap: ARD Deutschland-Trend

Likely more instead of less regulation on the labour market

The three parties see the challenges for the German labour market resulting from digitalisation, demography and globalisation. But they draw different conclusions. Traditionally, the SPD fights for strengthening the rights of employees. It wants to abolish the rule that (new) employment contracts can be limited to up to two years without a material reason for this limit. In addition, the SPD proposes to compliment employees' right to apply for part-time work by the right to return to their former number of working hours. Furthermore the SPD is against more flexibility with regard to the daily working time. Amongst the Conservatives there is sympathy for the first two proposals, too. However the CDU/CSU business-oriented wing is strongly opposed to stiffer labour market regulations. The Conservatives also reject guidelines for wages. This includes some SPD grandees' request for an increase of the minimum wage (from EUR 8.85 per hour in 2018 to EUR 12).Therefore, labour market policy could become another vigorously debated issues in Groko coalition talks. In contrast, it seems likely that the parties will smoothly agree on a framework for the immigration of qualified labour from countries outside the EU.

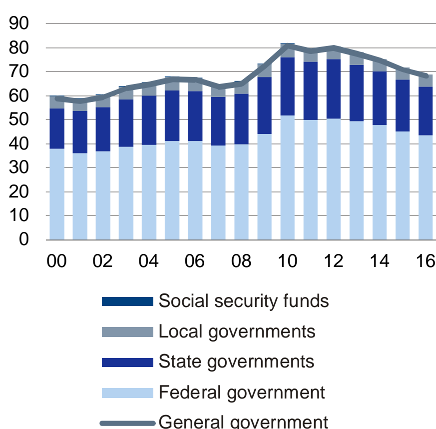
Exit from the reform path would be the wrong signal for Europe

A renewed Groko would certainly be no love affair – neither for the parties involved nor the German public. The Germans have disapproved of the wavering course in government formation, so far, and they still have to get used to the prospect of another CDU/CSU-SPD coalition. According to surveys (Infratest dimap) the approval rate is increasing only slightly and still markedly below 50%, at present. It still remains to be seen, whether Germany and Europe would benefit from such an alliance. Currently the signs are inconsistent. Both, the CDU/CSU and the SPD, want to reform the EU and to modernise Germany. But they often seem to rely on paternalistic approaches, such as subsidies and transfers. Market-orientated solutions, i.e. deregulation and increased flexibility, seem to play a minor role only.

Especially, with regard to social policy and to labour market policy issues, the risk is that a renewed Groko would depart from the past decade's reform path even more than its predecessor. This would jeopardise the favourable development of the German economy. It would also send the wrong signal to the reform-minded European partner countries.

Debt ratio is decreasing, though still above the Maastricht limit 29

General government debt, % of GDP



Sources: Deutsche Bundesbank, Deutsche Bank Research

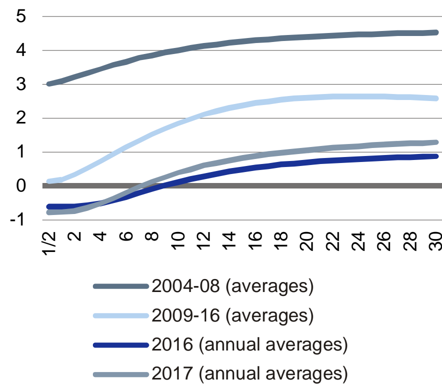
Public finances doped by zero interest rates and buoyant tax revenues – fiscal stance is turning pro-cyclical

Germany's public finances unprecedented from a historical perspective …

Germany's general government budget (federal government, federal states, local authorities and social security funds) continues to stand out. In 2017, it ought to be in the black again - for the fourth year in a row. Four consecutive years of general government surpluses are unprecedented since 1950!

The German yield curve moved noticeably downwards over the past decade **30**

Yields* on government bonds, % (Y-axis)
Maturity of government bonds, years (X-axis)



* based on the Svennsson method

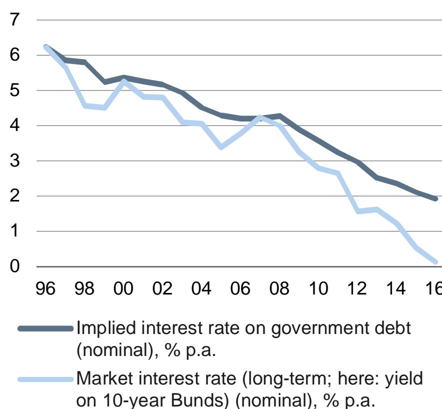
Sources: WEFA, Deutsche Bundesbank, Deutsche Bank Research

Accordingly, government revenues have outstripped expenditures in only 11 fiscal years since the early 1950s, and, as a rule, surplus years were promptly followed by longer phases of (sometimes large) deficits (see chart 32). Given the above, the following questions arise: What exactly are the reasons behind the multi-year general government surpluses? How is the current fiscal situation of the German government to be interpreted in the context of zero interest rates? What is to be expected in the medium term?

… primarily built on zero interest rates and buoyant tax revenues

Overall, the fiscal situation in Germany is very favourable at present, but this state should not be regarded as permanent. Firstly, Germany is still experiencing a demographic respite, which means that the impact of ageing on the economy and public finances is unlikely to be felt to the full extent before the late 2020s resp. the early 2030s[1]. Secondly, German government expenses continue to largely benefit from the expansionary stance of the ECB and low interest rates. We estimate that the German government saved almost EUR 260 bn in interest payments between 2008 and 2016 (c. 8% of 2016 GDP), courtesy of declining interest rates (see charts 30 and 31). Excluding these beneficial effects from low interest rates, the government would not have generated surpluses in the past three years and, as a result, the debt ratio would have been much higher at the end of 2016, marking 76.7% of GDP instead of only 68%[2]. Thirdly, Germany is currently experiencing a phase of buoyant growth resp. scarce capacities, which puts additional cyclical tax revenues into the state coffers. These should not be regarded as permanent. According to the November estimate of the Working Party on Tax Revenue Estimates, German government tax receipts could surge to around EUR 890 bn by 2022 (up from EUR 706 bn in 2016; +26%), thanks to strong growth and the “cold progression“ in the German tax system (see chart 25). If the status quo continues, government surpluses should hence continue to balloon.

Since 2008 there is only one way for for interest rates: downwards! **31**

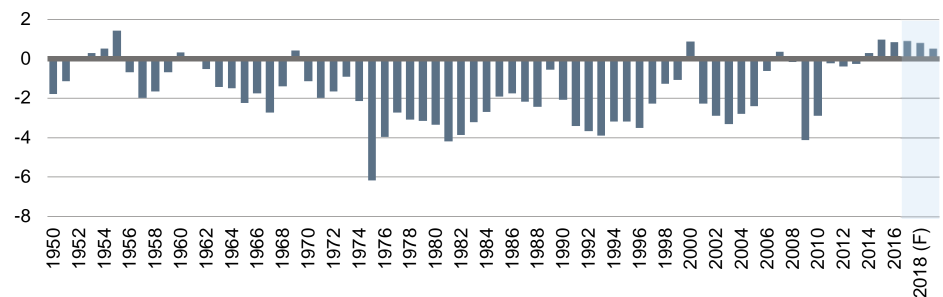


The implied interest rate on government debt is calculated as the ratio between interest payments for a year and the gross government debt stock of the preceding year.

Sources: Eurostat, AMECO, Bloomberg, DB Research

Exceptionally strong fiscal position: Three consecutive years of government budget surpluses date back to the early 1950s. And three more years could follow! **32**

Government budget balance, % of GDP



Sources: Destatis, Deutsche Bank Research

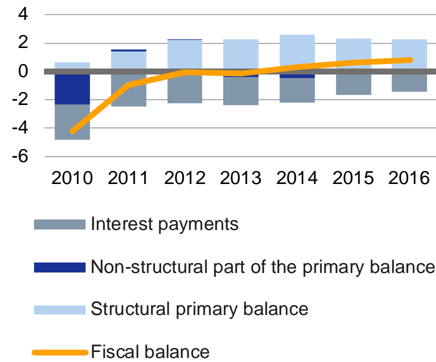
A breakdown analysis into a structural, cyclical (& one-off) and interest rate component reveals that only roughly one-third of the improvement in the general government fiscal balance (relative to GDP) between 2010 and 2016 (from -4.2% to +0.8% of GDP) can be attributed to structural (i.e. permanent) adjustments to revenues and expenditures. This means that around two-thirds of the fiscal improvement are entirely owed to the sharp decline in interest

[1] See also “Germany’s fiscal situation Full employment and zero interest rates result in budget surpluses – but demographic development might become a problem”

[2] See “Germany’s fiscal outlook: Goldilocks will not last forever!” in “Focus Germany: Cyclical boom no reason for fiscal complacency

Only one third of budgetary improvement is structural 33

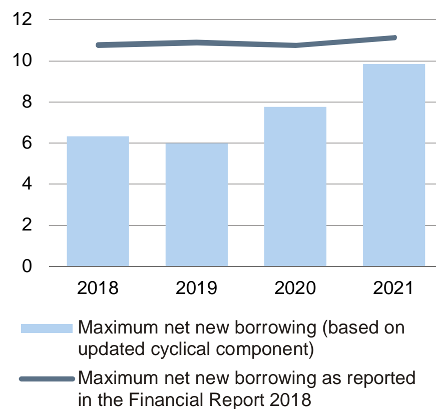
% of GDP



Sources: EC, Deutsche Bank Research

Maximum net new borrowing likely to be lower than initially assumed 34

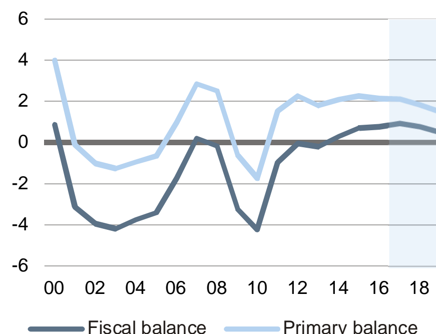
EUR bn



Sources: Federal Ministry of Finance, Deutsche Bundesbank, Deutsche Bank Research

General government budget balance should remain in black in 2018/19 35

% of GDP



Sources: Eurostat, Deutsche Bank Research

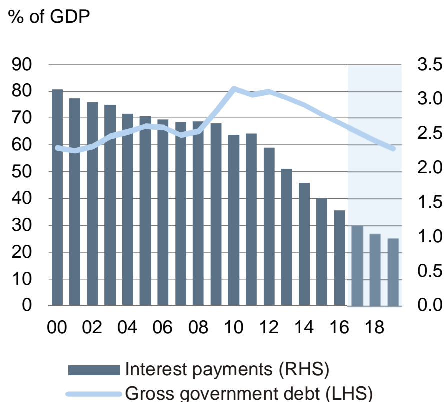
payments and additional tax revenues (resp. lower expenditures) from strong economic growth as well as the fading of one-off budgetary effects (see chart 33). Consequently, the weal and woe of German public finances hinges to a large extent on the growth and interest rate outlook. As we do not expect the economy to slip and the ECB's exit from its ultra-loose policy ought to be very slow, the German public sector budget should continue to receive a tailwind from the economy and interest rates in the years ahead.

Whetting the appetite of politicians, surpluses are likely to melt away in the medium term

Although spending is rising rapidly, Germany's general government budget should continue to stand out in 2018 and 2019 – courtesy of the special factors described above. But given the uncertainties surrounding the composition of the next federal government, risks are substantial (see "Possible new Groko – political stability would come at high costs"), the more so as the fiscal balances are clearly prone to setbacks owing to sharply higher expenditures (on social security, in particular) and the increasing dependence on favourable financing conditions and dynamic tax revenue growth. Looking ahead to the next two years, the general government budget ought to run a sound surplus, given our expectation of above-potential (real) GDP growth of 2.3% for 2018 and 1.8% for 2019. Without fiscal policy measures, the general government balance could edge up from around 0.9% of GDP in 2017 (after 0.8% in 2016) to over 1% of GDP in 2018/19. But given the strong likelihood that the new federal government (irrespective of its final composition) will cut (income) taxes and step up spending (for social security and investment purposes, for instance), fiscal surpluses ought to shrink over the next years, in our view. For 2018 and 2019, we expect a decline to around 0.8% and 0.5% of GDP, respectively. In the next four years, the fiscal scope at the federal level looks set to be an accumulated EUR 30-45 bn, based on the uncommitted budget resources of roughly EUR 15 bn earmarked in the 2018 budget draft (of the former government) and the upward revision to the tax estimate (by c.EUR 15 bn compared with tax revenue assumptions in the 2019-21 financial plan). On top of that, additional funds could be generated by partly exploiting the narrowly confined scope for new borrowing granted under the debt brake rule (c. EUR 15 bn.).

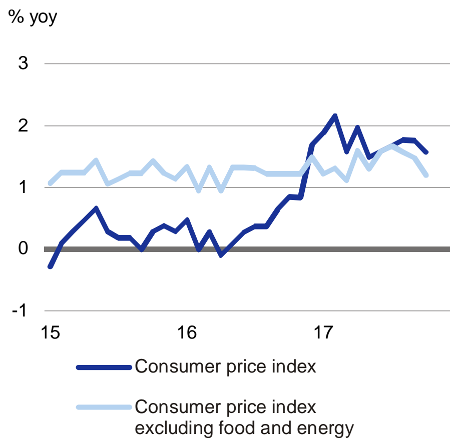
According to calculations in the Federal Ministry of Finance's 2018 financial report, the maximum permissible amount of net borrowing at the federal level is roughly EUR 10.7 bn in 2018, plus just under EUR 11 bn per year for the period from 2019 to 2021 (see chart 34). The maximum permissible amount of net borrowing is the sum of a structural component (0.35% of GDP), a cyclical component (contingent on the utilisation of production potential) and a third adjustment component, which takes account of financial transactions earmarked in the federal budget (for example, privatisation proceeds – which constitute a financial transaction – cannot be used under the debt brake rules as a means to increase the fiscal scope). The cyclical component provides additional scope for federal net borrowing in phases of under-utilisation of aggregate productive capacities (negative output gap), whilst confining it in phases of over-utilisation (positive output gap). As the economy is gathering steam (and the growth outlook is brightening visibly), the scopes confined under the debt brake for the years ahead ought to be much smaller than assumed in the 2018 financial report (see chart 34). In concrete terms, this can be attributed to the fact that the revisions to the Ministry of Finance's estimates now point to a positive output gap (resp. an over-utilisation of productive capacities) in the years ahead (in contrast to previous expectations of a slightly negative output gap).

General government debt ratio could fall below 60% already by 2019 — 36



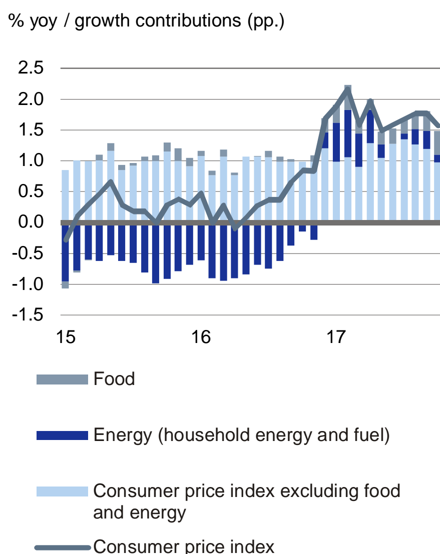
Sources: Eurostat, Deutsche Bank Research

Core inflation has fallen again lately — 37



Sources: Destatis, Deutsche Bank Research

Higher energy and food prices lifted the inflation rate upwards in 2017 — 39



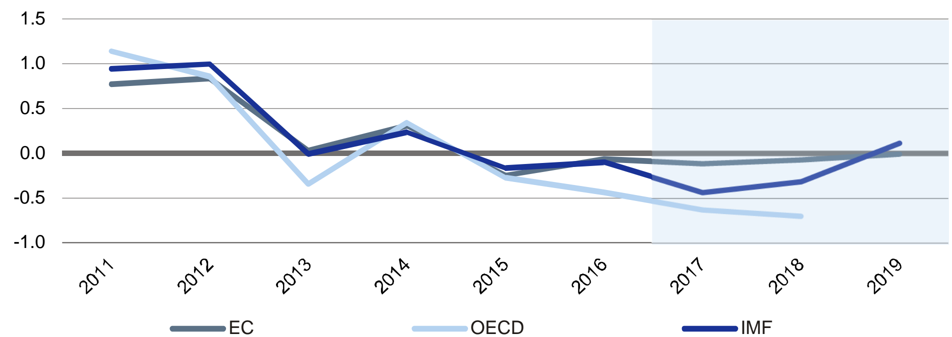
Sources: Destatis, Deutsche Bank Research

Risk of a fiscal setback rising

In compliance with the constitutionally anchored debt brake rules, the federal government is likely to exploit the above fiscal scope in this legislative period. That said, the new government might stick to the "black zero" (i.e. no new net borrowing). Moreover, it is to be expected that the 2018 budget will have to be adopted (retroactively) in the course of next year, as the formation of a new government is taking longer than expected and will probably last well into next year.

Against this backdrop, the full impact of the fiscal impulse (from lower taxes and higher spending) is unlikely to be felt before 2019. Thanks to the ECB's extremely hesitant exit from its zero interest rate policy, the resulting further decline in interest payments (to below 1% of GDP) and solid growth, the debt-to-GDP ratio (general government, according to the Maastricht definition) looks set to remain on the decline, although fiscal policy is turning increasingly pro-cyclical (see chart 38). By 2019, it could already undershoot the Maastricht limit of 60% of GDP (see chart 36).

Fiscal policy is becoming increasingly procyclical — 38



The OECD number is calculated on the basis of the cyclically-adjusted primary balance reported by the OECD and consideration of one-off budgetary effects as reported by the European Commission (EC).

Sources: EC, OECD, IMF, BMF, SVR, GD, Deutsche Bank Research

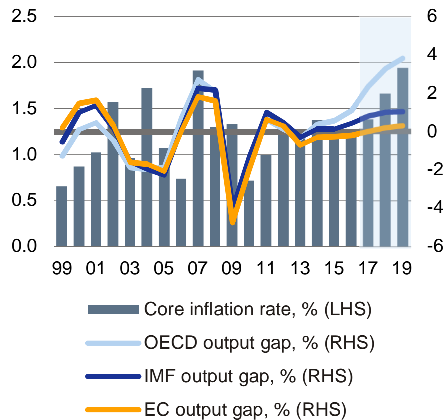
Price pressure to increase slightly in 2018/19, led by buoyant growth and full employment

Price pressure still very subdued despite strong growth

Price pressure in most major economies continues to be very subdued - although the global growth outlook is clearly biased to the upside, capacity utilisation is rising, and some labour markets are (near) full employment. Nor has the still-expansionary policy stance of the key central banks (Fed, ECB, Bank of Japan) (as yet) provided a visible lift to consumer prices.

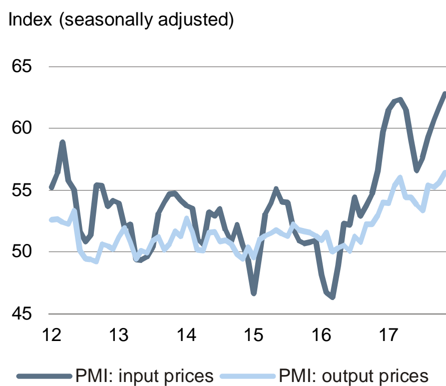
Since the beginning of the year, the euro area core rate (i.e. consumer price inflation excluding volatile energy and food prices) inched up slightly – from below 1% at the end of 2016 – but recently resumed its downtrend (Nov. 0.9%). In Germany, the core rate is also pointing slightly to the downside of late (see chart 37), even though employment (unemployment) is moving from one all-time high (low) to the next, companies are complaining about a shortage of skilled labour and increasing difficulties to fill positions and the trend for private

Rising capacity utilisation shoud lead to upward pressures on core inflation **40**



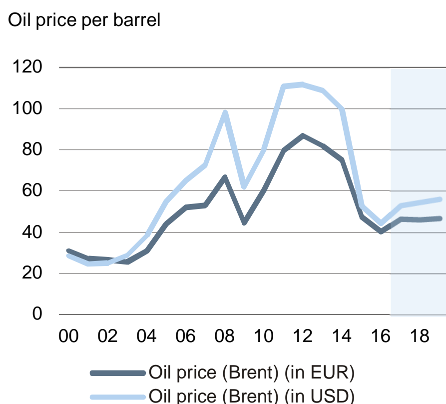
Sources: OECD, IMF, EC, Destatis, Deutsche Bank Research

PMIs indicate increasing price pressures **41**



Sources: IHS Markit, Deutsche Bank Research

DB oil price forecast (house view) **42**



Sources: WEFA, Deutsche Bank Research

consumption is relatively sound. Hence, the search for the causes of the on-going weakness of price momentum in many developed economies ("inflation puzzle") continues. There are, in fact, many reasons why inflation pressure has been so tepid in recent years (see box "Is inflation (really) dead?").

Led by lower energy prices, the German inflation rate looks set to decline somewhat in 2018, but ought to rise again in 2019

From our point of view, several strong arguments suggest that German inflation is likely to pick up moderately in the medium term. On the one hand, global capacity utilisation is on a steep upward trend in many countries (including Germany; see chart 40).

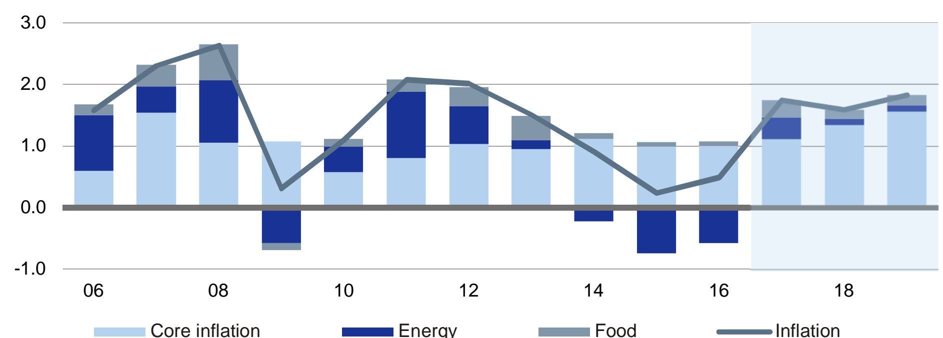
On the other hand, wage negotiations forthcoming in some key German sectors at the beginning of 2018 (metal industry, public sector, construction industry) could yield significant increases in (negotiated) wages, as the German economy is close to full employment. Despite the flatter Philipps Curve, this should put some upward pressure on core inflation. Given strong growth and sound employment, we expect the core rate to rise from around 1.4% this year to 1.7% and 1.9% in 2018 and 2019, respectively. Leading indicators such as, for instance, PMI input and output prices have been signalling stronger price pressure for quite some time (see chart 41). As the upward effect of energy prices looks set to be much more subdued next year (0.1 percentage points following 0.4 percentage points in 2017), headline inflation in 2018 ought to edge down slightly compared with 2017 (falling to around 1.6% from 1.7%) (see chart 43).

The above is based on the assumption that oil prices (a key driver of household energy and fuel inflation) will inch up only moderately in the forecast period (in USD terms). Led by the strengthening euro, the small uptick should be further alleviated (see chart 42).

At present, we expect oil prices (Brent) in 2018 to rise to around USD 55 per barrel (annual average, up from c. USD 53 in 2017; +3.1% yoy). In 2019, another slight acceleration ought to be on the cards (to roughly USD 56 per barrel, +2.8%). Along with the more or less neural price-dampening effect from the energy side, the contribution of food prices could also shrink somewhat next year, down from a relatively high level in 2017 (see chart 43).

Consumer price inflation should ease moderately in 2018 but rise again in 2019 **43**

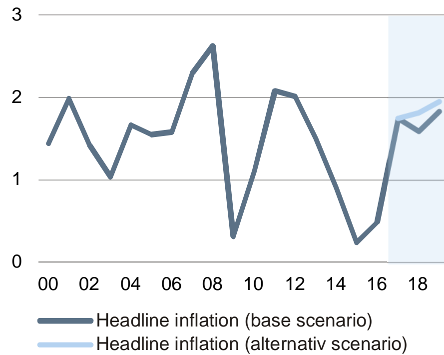
Contributions to annual (average) inflation rate, percentage points



Sources: Destatis, Deutsche Bank Research

From our perspective, 2018 and 2019 will be dominated by wage and core inflation. After declining (moderately) to 1.6% in 2018 (from 1.7% in 2017), (headline) inflation looks set to rise to around 1.8% in 2019 (see chart 43). It

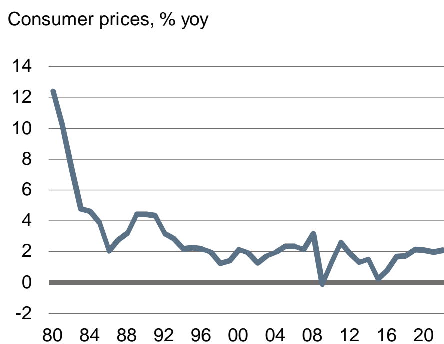
Inflationary developments in the event of higher oil price assumptions 44



Sources: Destatis, WEFA, Deutsche Bank Research

Inflation in major advanced economies 45

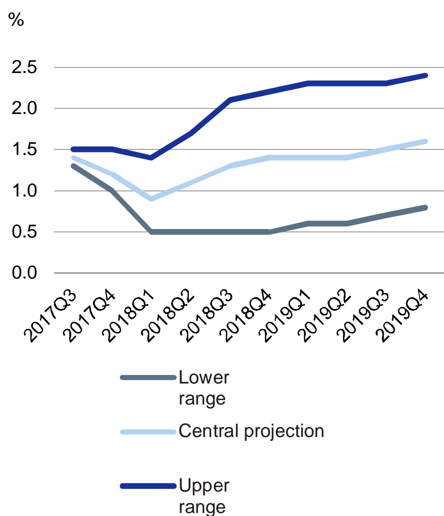
Consumer prices, % yoy



Sources: IMF, Deutsche Bank Research

ECB projection: EA inflation rates 46

%



Sources: ECB, Deutsche Bank Research

should be noted though that inflation could be very close to the 2% target in the forecast period, if oil prices rose more rapidly than expected (for example, to USD 66 in 2018 and USD 73 in 2019; see chart 44).

Is inflation (really) dead?

After central banks in the industrialised countries were struggling with high inflation rates for roughly three decades following the suspension of the gold standard in 1971, inflation seems to have disappeared on the heels of the global economic and financial crisis. In Europe, the ECB actually justified its non-standard policy measures of asset purchases and a reduction in the deposit rate to -0.4% as a tool to prevent the euro area from slipping into a detrimental deflation scenario. Although even the ECB meanwhile acknowledges that the threat of deflation is gone, it nonetheless decided in October to extend its expansionary stance to September 2018 or beyond, voicing concern that inflation is still too low and is, from its perspective, not expected to reach its target – of below, but close to, 2% - until end-2019 at least. The average of the inflation rate is 1.6% for Q4/2019, according to the ECB's staff macroeconomic projections.

In Germany, inflation has averaged 1 ¼% since 2010 (compared with 1.3% in EMU). Given the decline in oil prices and, as a result, surprisingly weak headline inflation from 2014 to 2016, the average is clearly distorted to the downside, though. But the supporters of expansionary policy argue that the core rate (consumer prices excluding energy and food), on which lower oil prices could, at best, have indirect second-round effects, is also too low from their point of view. In recent months, the core rate in Germany was fluctuating around 1 ½%, up from its long-term average of 1 ¼% (2000-2017). Slipping to 0.9%, the euro zone core rate, on the other hand, has recently declined relative to its longer-term average of around 1 ½%, which, however, is no reliable comparison or reference value, given the bubble-like price trend in the periphery from 2000 to 2007.

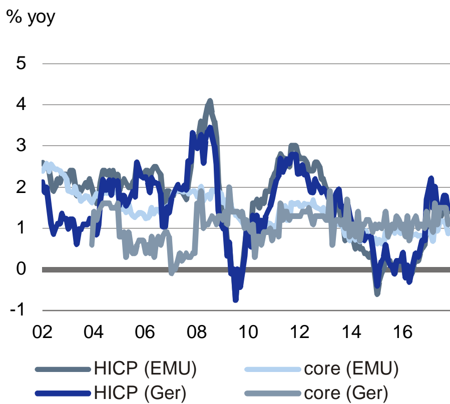
In the historical comparison, inflation over the past years was also surprisingly weak in other major industrialised countries such as the USA and Japan. The fact that wage growth has remained sluggish in the face of low unemployment rates is seen as a key contributory factor. The inverse relationship between unemployment rates and wage growth resp. inflation rates is known as the Phillips Curve. The debate revolves around the question as to whether the flattening of the Phillips Curve – at least in its simple form – i.e. the weakening negative relationship between unemployment and (wage) inflation is a temporary or a permanent phenomenon.

In this connection, several reasons are being discussed (the list below is by no means complete):

— The massive expansion of global labour supply, particularly in the wake of China's economic liberalisation, and the corresponding dampening effects on wage growth in the industrialised countries. According to recent studies, this effect could soon reverse as China's working-age population will shrink as a result of the imminent demographic challenge. This would imply higher wage and core inflation in the industrialised countries.

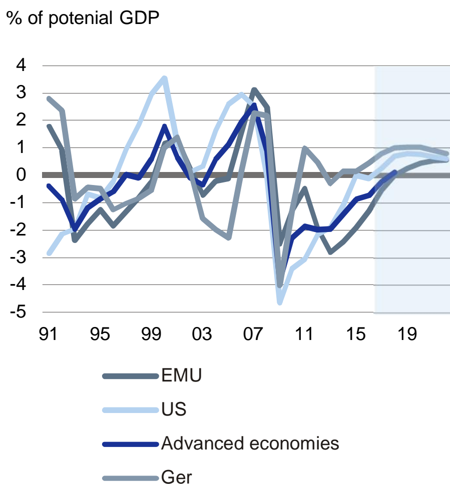
  Following the onset of the economic and financial crisis, global over-utilisation (of productive capacities) weakened the pricing power of companies and facilitated a shift to global suppliers by means of import, outsourcing or offshoring, if a country is facing supply constraints. Given the current sharp reduction in global over-capacities, this price-dampening effect could gradually fade. Working in the same direction, the rise of

Consumer prices: Headline & core 47



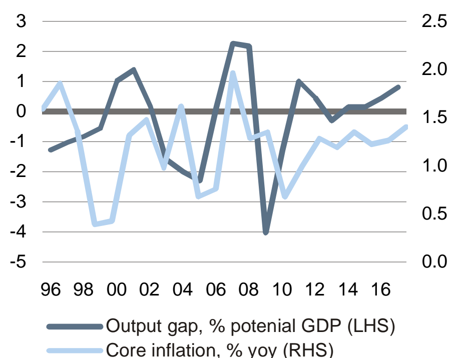
Sources: Eurostat, Deutsche Bank Research

Output gaps 48



Sources: IMF, Deutsche Bank Research

Output gap & core inflation 49



Sources: IMF, Deutsche Bundesbank, Dt. Bank Research

protectionist tendencies since the financial crisis could also stimulate inflation.

— The sluggishness of global investment over the past years had a paralyzing effect on productivity growth. But unless (real) wage increases are financed via productivity gains, they come at the expense of profits. But a trend reversal may be on the cards thanks to the expansion of the global investment cycle – our colleagues are particularly optimistic for US investment.

— Owing to the central banks' ultra-loose monetary policy stance, loss-making companies were not driven out of the market thanks to historically low financing costs. Moreover, given thin capitalisation, banks – especially in Italy – are not interested in writing off their debt, which is (probably) to a large extent non-collectable. As these Zombie companies have been artificially kept alive, markets are – in contrast to the usual crisis pattern – still congested, which, in turn, further undermines the pricing power of healthy companies.

— Led by extremely weak inflation in recent years, price expectations of companies and consumers declined, possibly depressing pricing and wage claims.

Supporting higher price transparency, structural changes through digitisation (especially digital markets and platforms) could permanently reduce inflation pressure. As an increasing number of self-employed workers are also offering their services via the internet, this effect is finally being reflected in the labour factor.

Apart from the last item on the list, all of the above-mentioned price-dampening factors could soon evaporate or reverse. If this were to happen more or less in parallel in all major economies, upside risks to global and hence German inflation would be substantial, the more so as global liquidity provision through the central banks continues to be extremely generous.

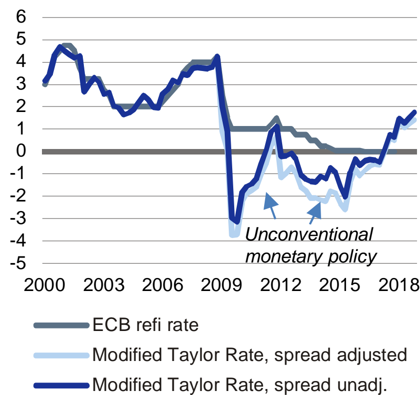
Slow ECB exit justified to foster inflation, but loose policy stance won't last

We see ECB QE finishing at the end of 2018 with a quick taper in the final quarter and the first 25bp policy rate hike six months later in June 2019. This is several months earlier than the market. If the Italian election passes without incident, the current macro momentum holds, the hurdle to an early rate hike will fall, especially if credit growth accelerates.

A "dovish tightening"…

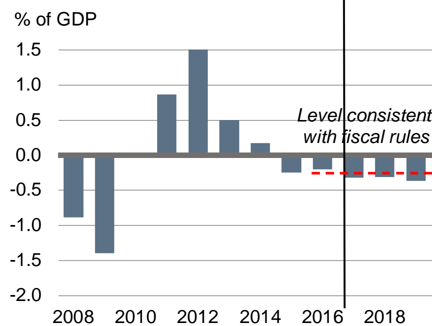
In line with expectations, on 26 October the ECB announced a nine month extension of QE to September 2018 at a rate of EUR30bn per month. The ECB had emphasized the importance of clear and consistent communications in recent months and communicated effectively to ensure it was a market non-event. To help minimize the impact of exit on financial conditions, the ECB maintained its QE forward guidance: the open-ended commitment to QE and the pledge to do more QE or QE for longer if necessary.

Taylor Rule says the time for unconventional monetary policy is over — 50



Sources: Deutsche Bank, Eurostat, ECB, Haver Analytics

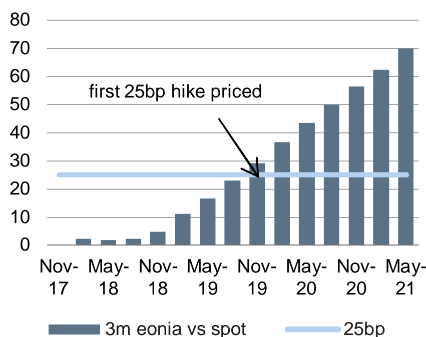
Above potential GDP growth argues against expansionary fiscal policy — 51



* positive numbers are a tightening of the fiscal stance negative numbers a loosening of the fiscal stance

Sources: Deutsche Bank, European Commission

ECB rate hike market pricing — 52



Sources: Bloomberg Finance LP, Deutsche Bank

…but not quite as dovish as we were expecting

We were expecting the ECB to emphasize two policy rotations to help achieve the dovish exit. The first rotation was a shift in emphasis from net to gross purchases, that is, more focus on reinvestments. The second rotation was less evident than we were expecting — the rotation from QE to rates and rates guidance (i.e., lower for longer). The minutes indicate the Council trying to keep policy optionality.

Assuming the economy performs in line with current expectations, the ECB Council is unlikely to make policy decisions again before June 2018. Our baseline expectation is the ECB will announce a quick taper over the final quarter of 2018 and by the end of next year QE (net purchases) will be finished. Six months later, in June 2019, we expect the first rate hike. We expect the refi rate to rise 25bp (the deposit rate to rise 40bp) and policy rates to rise at a pace of 25bp every six months thereafter. It is unlikely the ECB ends reinvestment before 2021. By mid-2018 we also expect forward guidance to evolve, changing the link between QE and inflation.

We see the first 25bp hike roughly six months before the market. Several arguments underline the early policy rate tightening risk:

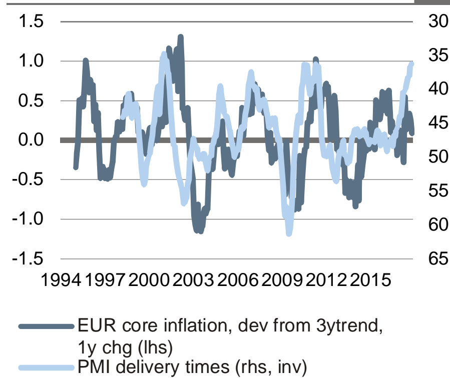
Macro conditions. Economic growth is strong. We now expect 2018 GDP growth to reach 2.3%, 0.5pp above the ECB's September staff forecast. Our confidence that the inflation normalization process is beginning is also building. The production chain is tightening. Upstream prices are starting to rise, several member states are reporting rising wages and inflation expectations are showing signs of slowly moving upwards.

Modified Taylor Rule. We have modified the Taylor Rule for the specifics of the euro area, for example, including medium-term inflation expectations and rate spreads as well as a lower neutral real rate. The MTR says that policy rates should be starting to rise already in 2017, not in mid-2019. If correct, it means the monetary policy stance will become increasingly inappropriate. The way to rationalise this against the policy stance is that the ECB is taking out insurance against a relapse into disinflation.

Fiscal slippage. It is not just the monetary policy stance we think the ECB hawks will grow increasingly uncomfortable with in 2018. The euro area fiscal stance is gradually easing, in absolute terms and especially relative to the fiscal rules. With GDP growing above trend and the output gap closed, this fiscal stance will be increasingly viewed as inappropriate.

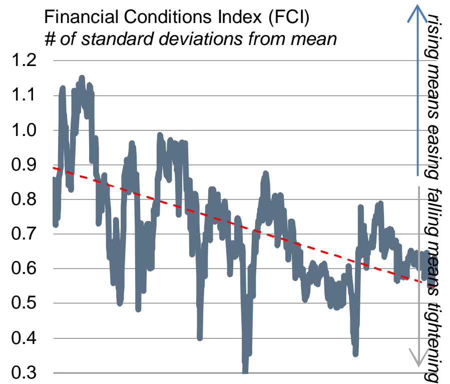
Hawks vs doves. Two interconnected points have reinforced the notion recently that the balance between the hawks and the doves is changing and challenging dovish market pricing. First, Executive Board Member Benoit Coeure said following the 26 October announcements that he hopes this is the last announcement on QE. This contradicts Draghi's comment at the last press conference that a sudden end to QE is unlikely. Second, Bloomberg reported that Weidmann, Coeure and Villeroy (Banque de France Governor) wanted to change forward guidance to make the overall monetary policy stance and not just the QE stance conditional on inflation. If Weidmann already has the support of the two French members of the Governing Council, the economic might of the two core member states could prove increasingly influential over the policy views of smaller member states.

There is a breadth of evidence saying the turning point in inflation has been reached 53



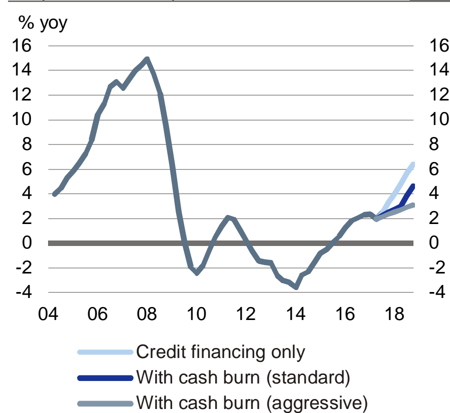
Sources: Deutsche Bank, Markit, Eurostat, Haver Analytics

Financial conditions are gradually trending down (tighter) 54



Sources: Deutsche Bank, Bloomberg Finance, Haver

Internal resources could allow for continued strong growth into 2018 despite a muted corporate credit impulse 55



Sources: Deutsche Bank, ECB, Eurostat, Haver Analytics

Dovish risk: The challenging mechanics of inflation normalization

The mechanics of inflation normalization are challenging, underlining the need for slow policy normalisation. Pre-crisis, inflation was in line with the ECB target on average because inflation rates were faster in the periphery than the core. Periphery-led inflation reflected an unsustainable pattern of debt-fueled domestic demand, large current account deficits and a higher exposure to import prices. Today, each of the Big4 is contributing to sub-target inflation. The normalization of inflation requires either (a) a return to the pre-crisis pattern, (b) a new regime where inflation accelerates in Germany and France or (c) inflation to accelerate evenly in all member states. If nominal wage growth over the next couple of years is in line with national central bank forecasts, the normalisation of euro area inflation could potentially be led by France and Italy among the Big4. However, when the external rebalancing constraint is applied, it may be that only France is capable of generating faster inflation and only if it can bolster its non-cost competitiveness.

Hawkish risk: ECB won’t accept fast credit growth as price worth paying

A return to the pre-crisis pattern of debt-fuelled domestic demand, current account deficits and imported inflation is one route to inflation normalization. Fixing the credit channel to ensure the creditworthy regain access to finance was part of the post-crisis policy fix. Credit supply is no longer a constraint. The cash position of the corporate sector means corporate credit need not accelerate much, at least in H1-18. If credit demand starts to come through strongly, we believe the ECB hawks would grow more uncomfortable. The faster the credit growth, the lower the inflation hurdle to tighter monetary policy.

German industry to continue on its expansion path in 2018

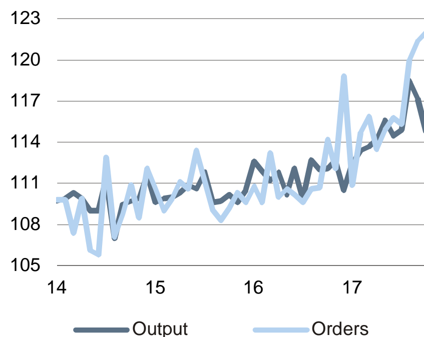
The German manufacturing sector is currently experiencing its strongest upswing since 2010/11. Back then, robust output growth (+12% and +8.5%, respectively) was largely the result of a basis effect: the German economy underwent a deep recession in 2009. Today, however, there is no such basis effect. After all, manufacturing output steadily increased between 2014 and 2016, if only by an aggregate 4.5% in real terms.

In 2017, German industrial output looks set to rise by c. 3%. We currently forecast a growth rate of c. 2% for manufacturing output in 2018. One reason for this more cautious projection is that the strong euro looks set to weigh on export demand. In addition, numerous economies are already far ahead in the growth cycle. Nevertheless, our forecast for 2018 is rather conservative.

The German industry is likely to benefit from the fact that companies in both Germany and key export markets are investing more heavily in machinery and equipment in 2017 and 2018 than in the preceding years. Investment in machinery and equipment has so far been a missing component of the German upswing. Companies have long been quite cautious, not least because decisionmakers remembered the crisis years 2008/09 quite well. Back then, capacity utilisation dropped considerably within a very short period of time.

Upward trend despite some volatility 56

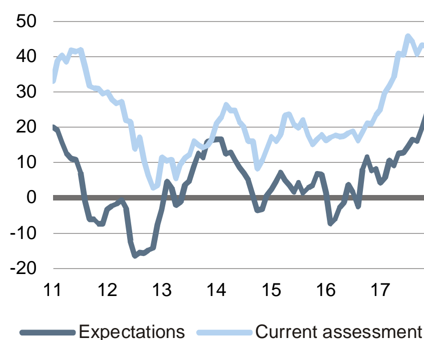
Manufacturing industry in DE, output, 2010=100



Source: Federal Statistical Office

Manufacturing: Business sentiment reaches record high 57

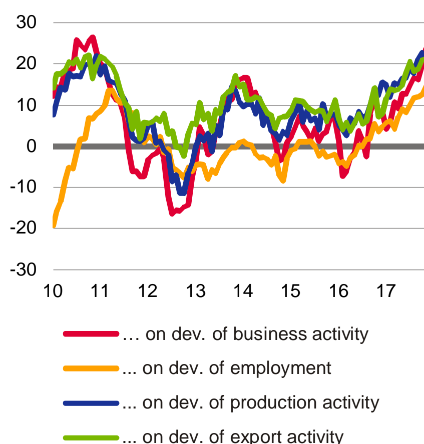
Manufacturing industry in DE, balance of positive and negative company reports



Source: ifo Institute

Sentiment indicators in the German industry in positive territory 58

Company expectations, balance of positive and negative company reports



Source: ifo Institute

The export and capital-goods-oriented German industry benefits from the fact that growth cycles around the globe are largely moving in sync. In other words: All main German export markets are currently doing well. Still, the Brexit impact (weak sterling exchange rate, slower growth) is already affecting goods exports to the UK. In recompense, most commodity-based economies have passed the trough. China's minor slowdown does not pose major problems, particularly since bilateral trade depends not only on the growth cycle, but also on how quickly Chinese demand for German products can be satisfied by locally manufactured goods of German companies.

Buoyant industrial sentiment

Industrial sentiment has been remarkably upbeat for months now. A majority of companies have been optimistic about their current situation since mid-2010. In the last few months, expectations have considerably improved as well – a fact which bodes well for the future. Managers are clearly cheerful about future trends in business and production activity, exports and employment. This is somewhat surprising, seeing that there are numerous economic and political risks. Moreover, industrial output growth of c. 3% is not particularly strong in comparison to former upswings (such as the years 2004-2007).

Investment activity in Germany has picked up in line with stronger capacity utilisation in the industry. Capacity utilisation has risen for six quarters in a row now and was 3.5 pp above the long-term average at the beginning of Q4. In fact, manufacturing capacity utilisation has reached its highest level since Q2 2008. Against this background, the share of expansion projects in total investments in machinery and equipment is likely to rise in the coming quarters. This hypothesis is supported by a survey conducted by the Association of German Chambers of Commerce and Industry (DIHK) in autumn 2017, which showed that companies have recently invested increasingly in expanding their capacities.

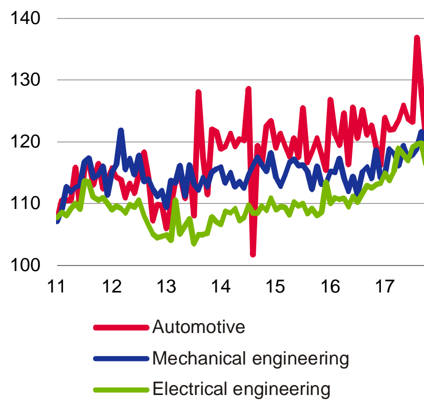
A look at the individual sectors: Broadly based upswing

The cyclical upswing in German manufacturing is quite broadly based. This statement is true not only for 2017, but probably also for 2018. Electrical engineering and pharmaceuticals are currently experiencing particularly dynamic growth. Both sectors could increase their output by c. 5% in real terms in 2017, thanks to considerably stronger export demand than in 2016. The same applies to mechanical engineering, where output is likely to rise by c. 3% in 2017. We expect all three sectors to continue on their expansion path in 2018, even though the pace of growth is likely to slow, not least for exchange-rate reasons. However, the macroeconomic drivers are different. Pharmaceuticals benefit from household consumption in key markets, electrical and mechanical engineering from the pick-up in investment activity.

Domestic output in the car industry looks set to rise by 2% in 2017 and slightly more slowly in 2018. We expect that additional stimulus from German and western European car demand will decline in 2018. Western European car markets have steadily grown over the last few years, which means that sales (in absolute terms) have reached a relatively high level (again) by now. Stimulus from the US and China should be limited in 2018, too, as the US are already far along in the economic cycle and car sales in China look set to grow more slowly due to basis effects. In addition, both countries are increasingly relying on local production of German car makers. The euro is quite firm which will additionally weigh on exports. In the UK, the negative impact of the Brexit decision (including a weak sterling exchange rate) is dampening both demand for cars

Electrical and mechanical engineering quite dynamic 59

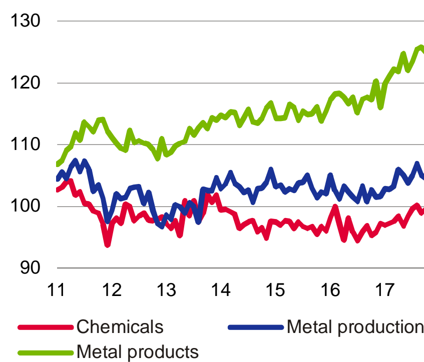
Output in selected sectors in DE, 2010=100



Source: Federal Statistical Office

Chemical industry has stopped downward trend 60

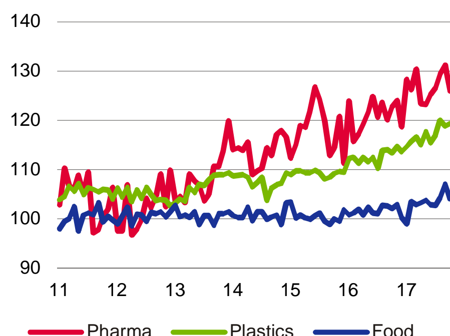
Output in selected sectors in DE, 2010=100



Source: Federal Statistical Office

Pharma and plastics industry show an upward trend 61

Output in selected sectors in DE, 2010=100



Source: Federal Statistical Office

and German exports to the UK. It is difficult to gauge the effect of "dieselgate" on total output volumes. Overall, demand and production have mainly shifted towards petrol engines. Cars with alternative propulsion technologies are still rarely used and thus play a negligible role for the current business cycle in the auto industry. However, alternative technologies will gain importance in the coming years, not least because regulation will force car makers to direct their efforts increasingly towards electric vehicles (e.g. via ambitious CO_2 limits for cars in the EU or quota for electric cars in China).

In the wake of the uptrend in capital goods sectors, output in the upstream sectors, i.e. the plastics and metal industries, has also risen considerably. We forecast output growth of c. 4% for both sectors in 2017. As industrial output growth looks set to slow a bit in 2018 (see above), the plastics and metals industries will probably see their expansion lose speed, too, in the coming year.

As in the preceding years, the chemical industry is expected to underperform also in 2017 and 2018 in comparison to the manufacturing average. Still, output in the chemical sector (excluding pharmaceuticals) looks set to rise by more than 1% in 2017 after having shrunk in each of the years between 2014 and 2016. We expect it to roughly stagnate in 2018. We stick to our view that much of the repeated below-average performance of the chemicals industry is due to structural reasons (the capital stock in Germany has been shrinking for years, not least because of the uncertainty about the German government's energy policy).

Output in the food sector is likely to increase by more than 1% in each of the years 2017 and 2018. With such a growth rate the sector, which is not very cyclical anyway, is moving at the upper edge of its usual corridor. Key drivers are immigration, strong household consumption growth and an (continued) expansion to additional export markets.

Producer prices are gradually rising

Producer prices in the manufacturing sector have steadily risen over the last few months. They will probably be up by 2.5% in 2017 and by 2.5%-3% in 2018. While commodity and energy-intensive sectors (metal production, chemicals) are the main price drivers this year, prices look set to rise on a broader basis in 2018, as wage negotiations in the metals industry will probably lead to quite high wage increases, the order books are full and capacity utilisation is high.

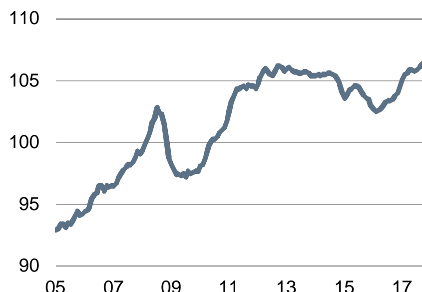
Structural challenges, in particular a lack of qualified labour

Quite apart from cyclical developments, the German industry is faced with numerous structural challenges. "Industry 4.0" is certainly an important topic for companies, but the management boards differ in their approach. In fact, the issue is still quite abstract. However, companies are focussing on different aspects when trying to grasp the actual, real-life implications of the "Industry 4.0". An increased digitalisation and automation of the value chain, the creation of digital connections between machines and materials and the role of artificial intelligence in R&D or production processes may threaten business models which are still working quite well today. However, many developments will only manifest themselves gradually.

In the short run, the lack of qualified labour is the main challenge. Depending on the region and the individual sector, it becomes more and more obvious. The DIHK survey mentioned above showed that companies regard a lack of qualified labour as by far the most important risk for their business. In fact, this issue has clearly become ever more important during the last few years. The lack of

Producer prices on the rise 62

Producer prices in the manufacturing industry
DE, 2010=100



Source: Federal Statistical Office

qualified labour will have an impact on short-term growth, too, as companies would be able to process their orders more quickly if more labour was available. Labour costs are the second most important challenge, according to the DIHK survey. However, this is obviously always an issue; labour costs have been mentioned for some years now as a challenge. Energy or power-intensive industries in particular also regard the energy price development as a key business risk.

Overall, the economic framework conditions for the German industry look set to remain quite favourable in 2018, even though the pace of growth is likely to slow somewhat during the year. Structural issues such as the lack of qualified labour dampen the favourable overall picture. There are no quick solutions in sight. If the economic and geopolitical risks continue to leave the “real economy” unscathed, it is likely that manufacturing output will continue to rise in 2019, too.

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