Schneider, Stefan; Becker, Sebastian; Boettcher, Barbara et al.

Book

Under corona siege - Update

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Deutsche Bank
Research

Europe

Economics

Focus Germany

Date
18 March 2020

Under corona siege – Update

- **Corona recession – depth probably close to 2009 slump.** Within days lock-down measures and (temporary) factory closures have reached a level that suggests a far bigger H1 contraction than previously thought. In our new baseline scenario we expect GDP to decline between 4% and 5% in 2020, notwithstanding a recovery in H2, as – in contrast to 2009 – the service sector will be hard hit, too.
- **Fighting the corona crisis: Whatever it takes.** The government's support measures so far include greater access for firms to short-time allowance, tax moratorium and the potential provision of state guarantees of up to EUR 460 bn. We expect additional fiscal stimulus measures soon. The budget balance could post a deficit of 3.5% of GDP in 2020/21.
- **German labour market and the corona pandemic**. In the 2009 crisis, working time accounts and the short-time working schemes (Kurzarbeit) did much to secure jobs. The number of persons in short-time working is likely to rise to 1.5 m in the next few months (peak during financial crisis: just under 1.5 m). The unemployment rate is expected to rise to 5.6% in 2020.
- **Coronavirus will extend industrial recession – structural problems give rise to concerns.** We expect manufacturing output to decline by 10% in real terms in 2020. As in 2019, all capital goods producers will be strongly affected.
- **German auto industry: Corona – another blow.** We expect automotive production in Germany (production index) to decline by 12% in real terms in 2020. Global car demand will decrease for third year in a row.
- **Government measures to support liquidity of German companies – who is most at risk?** German companies are entering the recession in a better position than in 2008/09. Within manufacturing, most at risk could be small firms with a turnover < EUR 10 m in mostly traditional industries (food; paper, publishing & printing; vehicles other than motor vehicles). Large firms seem best prepared for the downturn.
- **Corporate lending in a corona recession: Development banks as an anchor of stability?** The corona recession is straining corporate lending. Could countercyclical lending by government-owned development banks such as KfW help?
- **Migrant crisis 2.0? Not really, as political dynamics have changed.** PM Erdogan's move to open Turkish borders and the prospect that migrants could enter the EU has led to a rush of thousands attempting to cross the Greek borders and seek asylum in the EU. Germany will not open its borders again. The refugee issue might impact the support for the three candidates for CDU leadership.

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Key Economic Forecasts

Figure 1: Economic Forecasts

	Real GDP (% growth)			Consumer Prices* (% growth)			Current Account* (% of GDP)			Fiscal Balance* (% of GDP)		
	2019	2020F	2021F	2019	2020F	2021F	2019	2020F	2021F	2019	2020F	2021F
Euroland	1.2	-3.4	3.5									
Germany	0.6	-4.5	3.4									
France	1.3											
Italy	0.3	-2.7	2.6									
Spain	2.0											
Netherlands	1.7											
Belgium	1.4											
Austria	1.5											
Finland	1.0											
Greece	1.9											
Portugal	2.2											
Ireland	5.5											
UK	1.4											
Sweden	1.3											
Denmark	2.2											
Norway	1.2											
Switzerland	0.9											
Poland	4.1											
Hungary	4.9											
Czech Republic	2.4											
United States	2.3	-0.8	2.4									
Japan	0.7	-1.7	1.4									
China	6.1	1.0	10.0									
World	3.1	2.0	3.9									

*Currently not available.
Source : National Authorities, Deutsche Bank

Figure 2: Forecasts: German GDP growth by components, annual data % yoy

	2018	2019	2020F	2021F
Real GDP	1.5	0.6	-4.5	3.4
Private consumption	1.3	1.6		
Gov't expenditure	1.4	2.6		
Fixed investment	3.5	2.6		
Investment in M&E	4.4	0.6		
Construction	2.5	3.9		
Inventories, pp	0.3	-0.9		
Exports	2.1	0.9		
Imports	3.6	1.9		
Net exports, pp	-0.4	-0.4		
Consumer prices*	1.7	1.4	0.6	0.9
Unemployment rate, %	5.2	5.0	5.6	5.8
Industrial production**	1.1	-4.6	-10.0	11.0
Budget balance, % GDP	1.9	1.4	-3.5	-3.5
Public debt, % GDP	61.9	59.2	64.2	64.4
Balance on current account, % GDP	7.4	7.8	6.7	6.1
Balance on current account, EUR bn	241.4	267.1	236.0	220.0

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

Corona recession – depth probably close to 2009 slump

- We identify six interacting dimensions of uncertainty: (1) the development of the pandemic, (2) possible supply chain disruptions, (3) the loss of demand, (4) consumer psychology, (5) the policy response, and (6) feedback loops.
- The usual approach in case of such heightened uncertainty are scenarios. The duration and severity of the corona pandemic offers an obvious dimension for that. But beyond the corona timeline the unprecedented lock-down of public life, the widespread closure of borders and non-essential businesses are altering the working of the economy to such an extent that even the simplest rules of thumb and approximations probably provide no authoritative basis for scenario differentiation.
- We therefore sketch a "baseline scenario", with a massive drop in H1 – concentrated in Q2 – and some recovery in Q4. Annual GDP falls by between 4% and 5% and could recover by around 3% in 2021. An even "more severe scenario" could imply a further albeit more modest contraction in H2. In such a case a GDP slump between 5% and 10% seems possible.

The outbreak of the coronavirus has hit financial markets with full force. Equity markets have dropped by between 25% and 30% versus their record highs enjoyed less than a month ago. US and German 10 year government bond yields have hit record lows and the EUR has gained temporarily around 5 cent against the USD following the 50bp inter-meeting rate cut by the Fed on March 3rd and the oil price collapse driven by the conflict about quota cuts. The reaction in financial markets to the ECB's press conference indicated that we have entered a confidence crisis with the likely economic damage dwarfing the initial supply shock created by the corona pandemic. Not even the Fed's second inter-meeting cut on March 15th by 100bp was able to change the sentiment. Investors' nervousness was highlighted by the March ZEW survey slumping by 58.2 points to -49.5 (the low during the GFC was -63.9 reached in July 2008).

There are various levels of uncertainty, behavioral aspects, non-linearities and feedback loops which substantially increase the error margins of forecasts even for the next one or two quarters, where normally bridge and now-cast models provide reasonable guidance. This is clearly a unique situation and normal elasticities and relationships or analogies from previous crisis (e.g. Hong Kong or Canada during the SARS epidemic in 2003) are probably of limited use, as the much stronger than expected decline in Chinese activity indicators for February have shown. The extreme level of uncertainty impacts forecasts across several interrelated dimensions.

Uncertainty 1: Further development of the corona pandemic

Obviously the severity and duration of pandemic is a key determinant for its economic impact in a single country but also for the global economy. There are indications that the outbreak in China is getting contained with the number of infected people plateauing. According to press reports, some 60% to 70% of the affected companies have resumed work. High-frequency data such as passenger travel numbers, coal consumption or port calls have clearly picked up but are still substantially below pre lunar-year holiday levels. Similarly, so-called epi-curves (tracking the number of infections on a daily basis) have clearly flattened in South Korea.

Western countries are at much earlier stages of their epi-curves, with growth rates

of infections still accelerating. Italy is currently clearly the most impacted country with around 30,000 registered infections. It just ratcheted up containment measures announcing nation-wide travel restrictions and lock-downs.

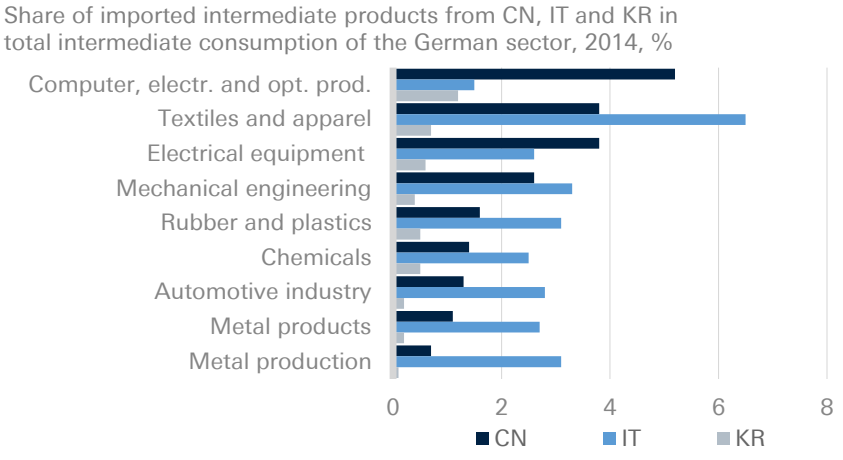
According to virologists, Germany has used the lead time provided by earlier outbreaks elsewhere to prepare, relying on a well-functioning health system and the 28,000 available ICU beds, with about 20% spare capacity. German experts have recently acknowledged that the outlook has worsened in recent days, with a new study suggesting that the virus might not die down once temperatures are starting to rise. In such a scenario a peak in infections might only be reached by July/August, which puts economic baseline scenarios expecting the maximum hit for the economy into Q2 at risk. Moreover, the time paths of the infections might diverge among industrial countries, meaning that the German economy might be hit at different stages by supply and demand shocks rippling through the world economy.

Baseline assumption: In our baseline scenario we still expect the numbers of infections to peak in early summer.

Uncertainty 2: Output / production – the risk of supply chain disruptions

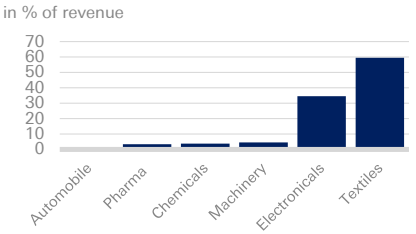
The big unknown are potential supply chain disruptions. Germany, the US and China are the dominant centers in global value chains. Within Europe, Italy is an important supplier for the German manufacturing sector. More than 5,000 German corporations are active in China. Ships from China take about 6 weeks to Germany, i.e. the last container ships leaving China pre-corona spike have arrived last week. Hence, supply disruptions are likely to spike in the coming weeks. Some crucial parts have been sent by air freight, but Lufthansa has stopped flights to Beijing and Shanghai until end-March. The relation of imports to a sector's turnover gives us a first and timely indication. Regarding China and Italy clothing (and textiles) stand out, although the bulk of this probably goes directly into final sales rather than serving as a production input.

Figure 6: Electrical products and textiles are important intermediate products that Germany imports from China, Italy and Korea



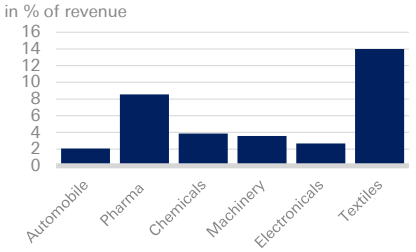
Source : WIOD

Figure 3: Imports from China / revenue by sector



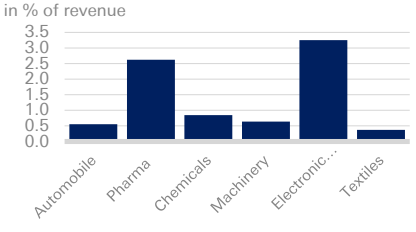
Source : Federal Statistical Office, Deutsche Bank Research

Figure 4: Imports from Italy / revenue by sector



Source : Federal Statistical Office, Deutsche Bank Research

Figure 5: Imports from Korea / revenue by sector



Source : Federal Statistical Office, Deutsche Bank Research

Data from international input/output databases (which is however based on 2014/15 data) shows that inputs imported from China as a share of total inputs are quite relevant for manufacturing of computer, electronic and optical products (5.2%), electrical equipment (3.8%), textiles and apparel (3.8%). Italian pre-products are important for textiles and apparel (6.5%), mechanical engineering (3.3%) and the automotive sector (2.8%). This kind of analysis can of course not answer whether the inputs are critical for the production in Germany or whether there are substitutes readily available. In addition, the input output table shows only bilateral links. If, as it is the case with some pharmaceuticals, Germany imports from India, which itself currently seems little affected, but the Indian product relies on inputs from China, the German importer will still be adversely affected. In a survey among 3,400 companies (manufacturing, trade and services) more than 52% on the manufacturers and 65.9% in trade mentioned problems regarding pre-products and raw materials (not differentiating between domestic and foreign).[1]

Figure 7: Coronavirus: Business activity of the German economy suffers

Percentage of companies surveyed that feel negative effects

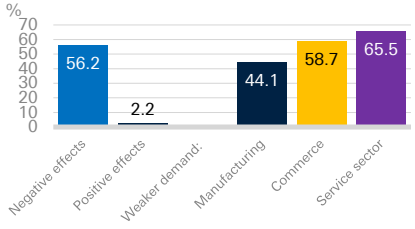
Travel agency, tour operator and others	95.9
Accomodation	79.8
Manufacture of electrical equipment	73.2
Manufacture of computer, electronic and optical products	71.1
Financial and insurance service activities	68.4
Manufacture of machinery and equipment	64.8
Manufacture of chemicals and chemical products	63.6
Transportation and storage	58.0
Manufacture of basic metals	50.0
Manufacture of motor vehicles, trailers and semi-trailers	50.0
Manufacture of fabricated metal products	45.7
Manufacture of food products	45.5
Information and communication	42.4
Corporate services	39.1
Manufacture of other non-metallic mineral products	33.3
Manufacture of pharmaceutical products	25.0
Electricity, gas and water supply	20.6
Real estate activities	11.8

Source : ifo Business Survey, March 2020, Deutsche Bank Research

Uncertainty 3: Demand – How will consumers, investors and governments behave?

In the same ifo survey, companies across all sectors complained about weaker demand. We can clearly see the effects of "social distancing" with Lufthansa cutting international flights to 10% and European flights to 20%. [2] even before the US government prohibited all flights from Europe to the US, and Deutsche Bahn reporting that passenger volumes have dropped by a quarter in yoy-terms in the first week of March.[3] These demand side reactions are amplified by countries closing their borders vis-à-vis certain other countries. Surveys by tourism associations show that ¾ of the restaurants are reporting turnover losses. 90% of the surveyed

Figure 8: Companies reporting weaker demand

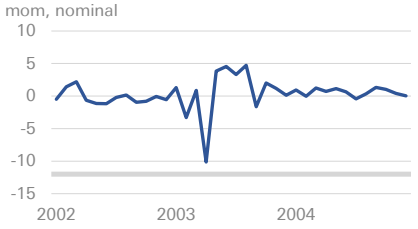


Source : ifo, Survey about coronavirus effects among 3400 German companies, 12 March 2020

1 ifo Institute: 56,2 Prozent der deutschen Firmen leiden unter Folgen der Corona-Epidemie, 12.03.2020
2 RP Online, Lufthansa streicht noch mehr Flüge, 16.03.2020
3 Focus Online, 12.03.2020

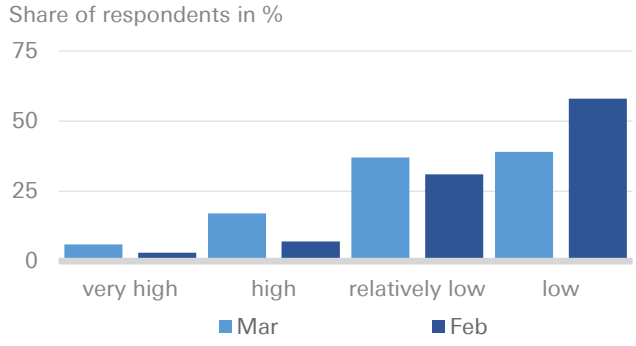
hotels report an average 38% drop in new bookings. Surveys among tour operators and travel agencies show that most of the surveyed companies are suffering turnover losses of up to 75%. Exhibition stand construction is suffering given the number of canceled trade fairs, including big ones such as the Hannover fair or the international tourism fair in Berlin.
At the beginning of March, weekly turnover of storable foods increased between 70% and 110%, total food retailing (accounting for slightly less than a quarter of total retail sales) was up 14% according to GfK.[4] . It seems plausible that surging demand for consumer staples will die off quickly as supermarket's shelves have recovered. There might be even some negative payback for the earlier panic buying. With regard to other segments such as furniture, clothing, consumer electronics, experience suggests that consumers will delay purchases they deem not urgent.

Figure 9: Hong Kong retail sales during SARS



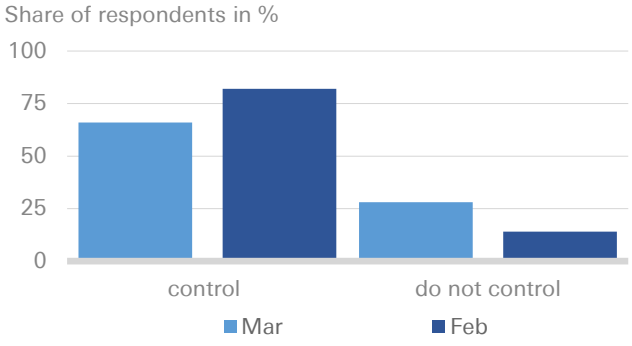
Source : Haver Analytics LP

Figure 10: Fear of infection



Source : ARD Deutschlandtrend, Deutsche Bank Research

Figure 11: Public administrations and health centres: the situation

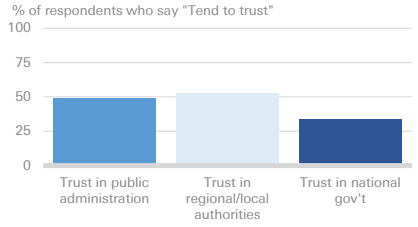


Source : ARD Deutschlandtrend, Deutsche Bank Research

Uncertainty 4: Consumer psychology

The extent consumers are changing their behavior (social distancing, less shopping, etc.) can be almost unrelated to the development of the pandemic. While experts assess risk based on number of infections or mortality, ordinary people follow an intuitive risk assessment.[5] Factor analysis for a large number of risks shows that the overall assessment is largely driven by two factors: (1) the dread factor (uncontrollable, dread, risk increasing) and (2) the unknown factor (not observable, unknown, effect delayed, unknown to science). One has to assume that the corona pandemic scores high on both factors. Still, according to surveys people are largely keeping their calm so far. An important aspect for the citizens' response is "social amplification" which is driven by media coverage, in particular their interpretation regarding the magnitude of the risk and the adequacy of risk management. Of course, the response of governments and health institutions is essential in shaping the (perceived) adequacy of risk management, but also the trust people have in general into their countries' institutions is a key factor, too.

Figure 12: EU: Trust in public entities



Source : Eurobarometer Autumn 2019

Behavioral traits make this an extremely challenging area for governments. People have a bias to mistrust and do attach higher credibility to trust questionable sources and reports. So-called "negative trust events", for example confessions or evidence of a wrong assessment, are particularly harmful. This probably explains why the

4 Handelsblatt, Virus/GfK: Umsatz mit Fertigsuppen mehr als verdoppelt, 06.03.2020
5 Paul Slovic, The Psychology of risk, 2010

German government is very cautious in its communication and also why Chancellor Merkel has repeated that at cursory glance very scary assessment that about 60 to 70% of the German population ultimately being infected, stated earlier by scientists. This number results from a simple epidemiological model, which is based on the rationale that the number of non-infected people has to fall below a certain threshold so that the chance for an infected person to pass the infection on to someone else is below 1, i.e. herd immunity is reached. This level is determined by the formula 1 - (1/R0), with R0 the base reproduction number, i.e. the number of people being infected by an infected person. R0 is assumed 3 in the case of the corona virus, leading to 1-(1/3) = 2/3. Of course, increasing social distancing, the cancellation of bigger events and the closure of child care centers and schools can reduce R0 implying a lower number of infections to reach herd immunity.

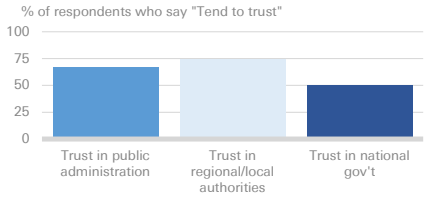
Uncertainty 5: Policy response – German fiscal boost coming

All major central banks and governments have already responded to the corona crisis. The Fed with 50bp inter-meeting cut, a massive increase in its lending in the repo market, and an injection of all in all up to USD 1.5 tn into the market. The Fed cut again inter-meeting by 100 bp on March 15th. Two days later it announced to buy commercial paper in order to the funding of mainly larger companies using CPs for short term liquidity needs. The BoE cut its rate by 50bp to 0.25% and offered a new Term Funding Scheme with additional incentives for SMEs and reduced the bank's counter-cyclical buffer rate to 0%. The ECB announced an unprecedented discount on the TLTRO interest rate to banks, creating in effect a mini-fiscal transfer to encourage banks to lend. There was an additional EUR 1.2 trillion of capacity added to the TLTRO liquidity facility. There was also a EUR 120 billion asset purchase backstop that can be deployed flexibly to support financial conditions, including with deviations from the PSPP capital key. Governments in all affected countries have provided some fiscal support in order to address liquidity and income issues. On Monday the Eurogroup announced a patchwork of policies to replace income and ensure liquidity to buffer the risk to jobs and businesses from an inevitable and escalating virus shock. The volume of resources is not capped. There are some estimates of the fiscal cost, but it "could be much larger going forward". Finance Ministers state their "strong determination to do WHATEVER IT TAKES". So far the structural and one-off elements are estimated at 1% of GDP.

Government looks to be fighting against a confidence crisis

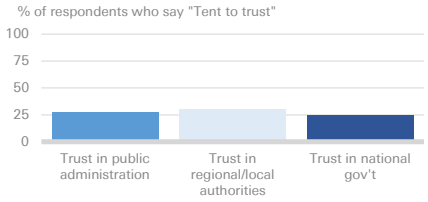
The corona crisis has started as a supply shock but is morphing into a demand shock, not at least driven by the panic reaction in financial markets. On March 8th, the German government has agreed on a package addressing negative liquidity, solvency and income effects, with the details presented on March 13th (see article "Fighting the corona crisis: Whatever it takes!"). This is clearly the appropriate first line of defense. Still, the increase in indebtedness could prove too much of a burden for many smaller companies, even if the economy starts normalising in H2. The government is drafting a law to suspend the normal three weeks period a company has to file for insolvency when running into trouble until the end of September 2020. Moreover, FinMIn Scholz has indicated that the government is thinking about measures (maybe some kind of a "reverse Treuhand") to reduce companies' increased debt burden resulting from using the provided liquidity measures. We are concerned that even if the virus impact lessens in a few months – a pattern which seems to evolve in China – the risks are becoming too large for fiscal policy to stay in pure damage limitation mode. Despite all the above listed government support, not all of the SMEs will survive, especially if their business model was only viable because of extremely low interest rates even before the crisis started. As this will become quickly evident in the coming weeks, we expect a fiscal package targeting

Figure 13: Germany: Trust in public entities



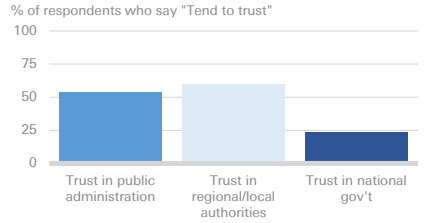
Source : Eurobarometer Autumn 2019

Figure 14: Italy: Trust in public entities



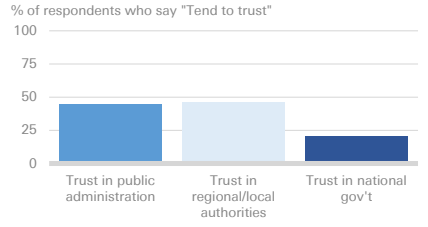
Source : Eurobarometer Autumn 2019

Figure 15: France: Trust in public entities



Source : Eurobarometer Autumn 2019

Figure 16: UK: Trust in public entities



Source : Eurobarometer Autumn 2019

the demand side in a volume of between EUR 20 to 30 bn (close to 1% of GDP) to follow soon.

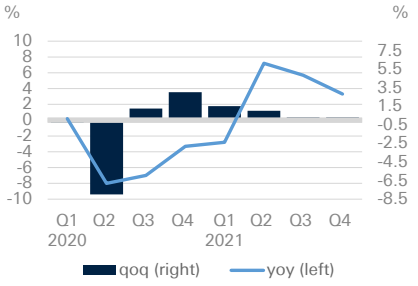
Uncertainty 6: Feedback loops

Basically all the globally important economies will be affected by supply and demand shocks and the meltdown in financial markets. However, the corona pandemic is not impacting economies in a simultaneous fashion, neither are the real economic shocks. We have therefore to expect that there will be staggered feedback loops within single countries and across countries adding another layer of complexity.

Scenarios: Deep recession looks unavoidable

Baseline: Given the unprecedented restrictions for public life – which seemed almost unimaginable just a week ago – the widespread closures of "non-essential" parts of the industry, trade and the service sector, we now expect a massive drop in Q2 GDP ranging between -6% and -10%., i.e. it could be substantially larger than Q4/2008 and Q1 2009 – the height of the 2008/09 recession – taken together (-6.3 pp) . Back then the industrial sector had to bear the brunt of the collapse in global trade, while most of the service sector was only indirectly effected through negative income and confidence effects. This time the industrial sector will be hit again as evident in the announced factory closures of the majority of big European car producers. Although they are so far intended to last only into early April, we could imagine that industrial production in H1 might be some 15% below H2 2019. Moreover, this time many "non-essential" parts of the service sector are shutting down, too. Together with the slump in demand induced by "social distancing" this could cause turnover to contract by between 30% and 50% in segments such as clothing, furniture, entertainment & leisure, hotels & restaurants (accounting for 1/3 of private consumption). Even assuming a substantial catching up in H2, private consumption could fall by 4% to 5% in 2020. Net exports could subtract by between 2 to 3 pp, with exports falling between 3% and 5%, a rather modest decline compared to -14.3% suffered in 2009. Investment spending (machinery & equipment) might decline between 10% and 15% (2009 -20.7%). The labour market will be supported by the widespread use of reduced hours compensations benefits (Kurzarbeitergeld). Given collapsing demand for airlines, public transport and other service providers the peak in people working short shifts will most likely exceed the 1.4 m seen in 2009. For smaller companies it might be more difficult to use this tool. Therefore we expect an albeit modest increase in the number of unemployed pushing the unemployment rate up by between 0.5 and 1pp (2019 5.0%).

Figure 17: GDP: Mild shock scenario



Source : Deutsche Bank Research

More severe: In this scenario the economy will continue to contract until the end of the year although by less dramatic rates, as the pandemic will depress the German and the global economy trough 2020. In this case GDP could decline between 5 and 10%.

Less severe? Forecasters cannot distance themselves from the siege mentality taking hold and the dramatic news flow (turbo-charged by social media). None of us has experienced anything like this during his or her career (at least not when covering larger industrial countries) and we, too, are flabbergasted when confronted with empty shelves in grocery stores and supermarkets. Maybe the extreme measures imposed during the last few days are more successful than we are currently prepared to believe. According to epidemiologists we should find out in 10 to 14 days. In such a case we might see substantial catching up towards the end of Q2 already and mood change in financial markets even before that. A continued recovery might then limit the annual GDP decline to -1 or -2% in 2020

which was our previous baseline. Lets keep our fingers crossed.

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Fighting the corona crisis: Whatever it takes

Berlin aims to protect the economy by a "shield for employees and corporates" – more fiscal stimulus measures likely to follow soon

Overview of fiscal measures taken so far

Finance Minister Olaf Scholz (SPD) and Minister for Economic Affairs Peter Altmaier (CDU) supplemented last Friday (13th of March 2020) the previous coalition committee's decisions from March 8th by adding further emergency measures to fight the economic damage from the coronavirus. The federal government's anti-crisis measures have been consolidated in a "Shield for Employees and Corporates". Focus of the federal government's protective shield are emergency liquidity measures to support corporates facing severe liquidity shortages by:

- Broadening existing liquidity programs – through potentially unlimited state guarantees – to facilitate firms' access to affordable loans (via their house banks, guarantee banks, the state development bank KfW),
- Easing the access for firms to a moratorium of tax payments, which could mean a temporary loss in tax revenue in the area of billions,
- Easing the conditions for short-time allowances, which cover 60% of a crisis-driven shortfall in working hours / compensation of employees.

Furthermore to the above steps, the federal government is currently drafting a law to suspend the normal three-week period a company has to file for insolvency when running into financial trouble (set to last until the end of September 2020). Moreover, Finance Minister Scholz has indicated that Berlin is considering measures to relieve companies from the increased debt burden resulting from using the liquidity measures (possibly some kind of a "reverse Treuhand"). As a side note, the government also announced to step-up federal investment in 2021-24, which will however not help to mitigate the imminent drop of GDP.

Stimulus package likely to follow soon to compensate for demand weakness

In addition to the above measures, we expect that the government will come up with a fiscal package to compensate for the likely longer lasting weakness in demand once the supply problems are starting to normalise. We guess a volume of EUR 30 bn for this year and an additional volume of EUR 60 bn for 2021.

Large fiscal deficits in 2020/21 will push government-debt-to-GDP ratio higher

Given both the breadth and depth of the economic crisis – which will considerably hit Germany's industrial and services sectors as well as the labour market at the same time – and the likely substantial fiscal response to the imminent economic fallout, we expect Germany's general government budget (federal government, states, municipalities and social security funds) to post a deficit of 3.5% of GDP in 2020/21. As a result, the government-debt-to-GDP ratio – which had fallen rapidly over the last seven years to around 60% (from more than 80% in 2011) – could rise to around 64.5% by 2021. That said, our fiscal forecasts have to be taken with caution as the assumed economic fallout is subject to high uncertainty and the actual materialisation of state guarantees ex-ante unknown.

Financial support by the federal government to corporates

The German federal government has focused – like most other countries – on areas where help is currently needed most. As such the federal government concentrates on liquidity support measures for affected corporates (e.g. exhibition and logistics firms, travel agencies, airline companies, etc.). In an attempt to avoid a chain reaction of a sales collapse, mass dismissals and credit defaults, the government wants to give targeted large-scale financial help to the corporate sector (such as through the provision of state guarantees and an easing of the conditions for firms to receive short-time allowances). Given the drastic measures as of 13th of March 2020 the federal government seemingly came to the conclusion that the Corona crisis is about to morph into a fully-fledged confidence crisis that can only be resolved by bold fiscal policy steps involving large sums. That said, the government has sent the psychologically clear and important message that everybody could rely on the government's promise that it will take all necessary steps to get this crisis resolved (a sort of "whatever it takes", although the government cannot print money like a central bank). The government promised to secure corporates and employees by providing potentially unlimited liquidity if needed.[6]

The measures announced so far include both a temporary easing of conditions for firms to receive short-time allowances (for now until at least 2020, possibly to be extended until 2021) as well as the grating of state guarantees to support banks to lend to solvent firms which are facing severe liquidity pressures because of a collapse in sales or disrupted chain values. In the event that economically successful companies or whole industries (airline, fair, tourism, restaurants, etc.) enter a protracted economic / liquidity crisis because of a deep macroeconomic shock, there is no alternative for the government other than providing financial assistance. Otherwise banks would need to reduce their credit supply to these affected firms because of rising credit risks. Rising defaults would at the end of the day do severe harm to the overall economy and the banking system.

Broadening existing liquidity programs through unlimited state guarantees

As a first step in its "protective shield", the government plans to broaden the existing liquidity programs to facilitate firms' access to affordable loans. As such private banks should be stimulated to give large amounts of liquidity strengthening loans to corporates. In order to reach this goal, the government plans to open the various credit instruments available at its development bank KfW to an increasing number of firms. As regards existing guarantee programs, the federal government said it will increase the upper guarantee limits for guarantee banks and to open up its "large-scale guarantee program granted to firms operating in laggard regions" also to firms outside such underdeveloped areas. Firms that are confronted with a serious liquidity crisis and which do not have access to the existing programs should receive financial support through the introduction of new special KfW programs. The government said it will grant the necessary guarantee volume to the KfW. Due to the high uncertainty and by intention, the government did not set an upper limit for its liquidity support. In this context, the government pointed towards a guarantee volume of EUR 460 bn (13.15% of GDP forecast for 2020), which would be accessible according to the federal government budget for 2020 (2019: EUR

6 See Federal Ministry of Finance and Federal Ministry for Economic Affairs and Energy. A protective shield for employees and companies. Package of measures to mitigate the impact of the coronavirus. 13th of March 2020.

456.2 bn or 13.3 of GDP).[7]

In case of need, this guarantee frame could be increased by a further EUR 93 Mrd. (2.7% of BIP) to then EUR 553 bn (16.5% of GDP). To get a better understanding, one could compare the 2020 guarantee frame to the one in previous periods like 2009 when the fiscal policy had to mitigate the economic fallout from the global financial crisis. At that time, the federal government was authorised to give guarantees of up to EUR 469.5 bn (19.2% of 2009 GDP), according to the Federal Board of Auditors ("Bundesrechnungshof") – an increase of EUR 155.6 compared to the authorised level of EUR 313.6 bn in 2008 (12.3% of GDP). Moreover, during 2009 the utilisation level of the federal government's guarantee frame (of EUR 469.5 bn) increased by EUR 71.2 bn (2.9% of GDP) to EUR 331.2 bn at the end of the year (from EUR 260.2 bn at the start of 2009). The substantial increase in the reliance of state guarantees was driven by the two fiscal stimulus packages at that time – the „Konjunkturpaket I" in November 2008 and the „Konjunkturpaket II" in January 2009.[8] As part of the second economic stimulus package, the federal government had increased its credit and guarantee scheme by an additional EUR 100 bn to EUR 115 bn (4.7% of actual GDP in 2009) in order to secure the supply of credit to the real economy.[9]

Easier access for firms to a moratorium of tax payments

Further government measures to support the corporate sector include easier access for firms to a moratorium of advance and supplementary tax payments (income, value added and corporate taxes) – which could involve billions of euros. Moreover, the government has also promised to give some smaller tax relief to corporates, e.g. through a depreciation allowance for digital goods or the option to non-incorporated firms to be taxed alike corporate companies. Meanwhile, the government is thinking about further financial support measures aimed at small businesses as well as the roughly two million of self-employed persons ("Solo-Selbständige"), which do not benefit from the easing of short time allowance and/or publicly guaranteed loans. In this context, the oppositional liberal party (FDP) said that the government measures so far were not sufficient and lacked urgently needed financial support to small firms and self-employed, which both cannot rely on financial buffers to weather the current downturn. One tool to bolster corporate liquidity further could be in the view of the FDP the introduction of a negative income tax. Payment of such negative tax could be determined e.g. on the basis of a company's tax bill in the previous year.

Easing of conditions for short-time allowances to protect the labour market

The easing of the conditions for short-time allowances ("Kurzarbeitergeld") is a powerful labour market tool that helps firms to overcome a temporary economic shock. Under certain preconditions the Federal Employment Agency can reimburse 60% of a crisis-driven shortfall in working hours and compensation of employees. During the global financial and economic crisis this tool is estimated to have saved 300k jobs. In 2009 the number of persons working short time climbed to around 1.1 million (from roughly 100 thousand a year earlier). In 2010 this number

7 In 2018, the federal government's guarantee volume stood at EUR 487.2 bn (14.6% of GDP) and was utilised in the total amount of EUR 361.3 bn (c. 74.2% of the guarantee frame or 10.2% of GDP). See Federal Board of Auditors.

8 See Federal Board of Auditors. 2010 Bemerkungen Nr. 01 - Teil I Allgemeiner Teil Feststellungen zur Haushaltsrechnung und zur Vermögensrechnung des Bundes für das Haushaltsjahr 2009.

9 See Monthly Report of the Federal Ministry of Finance (February 2009).

dropped already considerably to around 0.5 million persons and finally to a normal non-crisis level of around 100 thousand in 2011. For the Federal Employment Agency, the payment of the short-time allowance involved costs of EUR 5.3 bn (0.22% of GDP) (2009) and EUR 4.1 bn (0.16% of GDP) (2010).

Based on the coalition committee's decision from from March 8th the Federal Employment Agency should already be allowed to pay short-time allowance to firms if they report one tenth to be affected by a crisis-induced reduction in working hours (before this hurdle was a higher one third). Moreover, affected firms will not have to pay any more social contributions on the amount of the short-time allowance. In addition, short-time allowance should be also made available to contract workers. The new regulations should come into effect already in April and will apply retroactively as of March 1st.

Thanks to large financial buffers worth almost EUR 26 bn (0.7% of GDP) by the end of 2019, the Federal Employment Agency appears to be well equipped in financial terms to combat the crisis. How large the costs for the Agency will actually be in the end of the day is very difficult to predict at this junction as forecasting the increase in the numbers of short-time workers (as well as the duration of people working short time) is subject to high uncertainty during an unprecedented crisis like this. However, assuming that the number of short-time workers could exceed the levels seen in 2009 the Federal Employment Agency could easily face costs of more then EUR 10 bn in 2020 alone. These extra spending would not only result from the increase in short-time allowance but also capture the related shortfall in social security contributions (on short-time allowances) the Federal Employment Agency will have to pay for.

Federal states ("Länder") to give further support to their local economies

Apart from the federal government, various state governments have meanwhile also announced to support affected corporates in their local economies through own liquidity/guarantee support programmes. For instance, the prime minister of the Free State of Bavaria, Markus Söder (CSU), said that the Bavarian government will at first suspend the state's constitutionally binding debt brake for one year in order to increase the fiscal scope to fight the crisis – as in the remaining federal states, Bavaria's debt brake was originally meant to come into effect in 2020. Making use of an emergency clause in the debt brake rules, the Bavarian state government announced it will give an additional EUR 10 bn (0.3% of national GDP projected for 2020) for emergency liquidity measures to help the local economy. Meanwhile, the state of Hessen said it will come up with a supplementary budget for 2020 to incorporate financial support of EUR 1 bn and to be able to raise borrowing by an additional EUR 5 bn. Hence, on aggregate significant government support might be also given on the level of the federal states.

Increase in federal investment as a door opener for a larger stimulus package

While the coalition committee decided on March 8th on a cosmetic increase in public investment spending in the volume of EUR 12.4 bn to be split over the next four budget years 2021-24 (c. EUR 3.1 per year or 0.1% of GDP), it could not agree to bring forward the partial abolishment of the solidarity surcharge tax currently planned for 1st January 2021 (revenue loss of around EUR 10 bn per year). Although the increase in the investment budget isn't a bad thing as it will likely have positive effects in the medium term on Germany's growth potential, it will not help to cushion the imminent drop in real GDP as the money won't be spent before 2021-

24. Also, given the current backlog in public investment, something the government wants to reduce by speeding up planning periods, any further public investment will boost the economy with a considerably time lag.

Contrary to this, bringing the partial abolishment of the solidarity surcharge tax forward (e.g. by six months) or fully disposing this special tax would be meaningful measures from the perspective of a business cycle and growth strategy. A full abolishment could be implemented in very short time and would in one single step give relief to tax payers by EUR 20 bn (0.6% of GDP). It would also decrease the tax burden of distressed corporates which would still have to pay the solidarity surcharge tax under the current plans for a partial abolishment. Still, the federal government has not yet considered such a step, supposedly because of political tactics.[10] However a quicker relief from the solidarity tax surcharge seems increasingly likely. Overall, pressure on Berlin to deliver more in fiscal terms has grown tremendously over the past couple of days. Chancellor Merkel even sees corona as a more challenging situation than the great financial crisis – hence, a more powerful fiscal policy answer is becoming increasingly likely in our view. The government's statement to support the idea of the European Commission's "Corona Response Initiative" (in the volume of EUR 25 bn) could be interpreted as a further sign that the government's willingness to come up with further fiscal support measures has risen. Overall, we expect the federal government to announce soon an additional fiscal stimulus package in the amount of EUR 30 bn (c. 0.6% to 0.9% GDP) in order to restore economic confidence and avoid adverse second round effects on the real economy. Next year the government could in our view follow-up with further significant discretionary fiscal easing in the magnitude of EUR 60 bn (around 1.7%) of GDP.

Automatic stabilisers to mitigate the economic drop, debt brake allows government to exceed credit limits in a state of emergency

In addition to any given or forthcoming discretionary fiscal stimulus, the German economy will be supported by the functioning of automatic stabilisers. Automatic stabilisers can operate in a counter-cyclical way through both a disproportionate decrease in tax receipts (wage and corporate taxes) – due to the progressive taxation system in Germany – as well as an increase in government spending for social and transfer payments (e.g. unemployment benefits). In this context, it is worth noting that the federal debt brake explicitly allows automatic stabilisers to fully operate by considering a cyclical budget component ("Konjunkturkomponente") in the calculation of the government's credit limit. On top of this, the debt brake rules allow the government to exceed the constitutional structural borrowing limit of 0.35% of GDP in a state of emergency. In order to activate this special passage in the debt brake law / regulations the federal government needs to secure a simple majority in the national parliament (Bundestag).

As regards the German general government sector (including the federal government, the states, municipalities and social security funds) the European Commission estimates the budget semi elasticity – hence the sensitivity of public finances, i.e. the response of the latter, to the business cycle – at the moment at

10 The SPD offered to bring the partial abolishment forward by six months while the CDU/CSU insists on a full abolishment of this tax.

roughly 0.504.[11] By this Germany's budget sensitivity is roughly at the average of EU countries (EU-27: 0.51) but below these of other large Euro area countries like France (0.63) or Spain (0.60). The number for Germany implies that a widening of the output gap by one percentage point would cause a deterioration of the government's budget balance by around ½% (of GDP).

Based on our updated growth forecast of -4.5% for 2020 Germany's output gap could deteriorate from +0.4% of potential GDP in 2019 to -5.2% in 2020 (for comparison 2017/18: +1.2% and 1.3%). This would mean Germany would move from over-utilization to significant under-utilisation of production capacities. The output gap would become even more negative than in 2009 (c. 4 ½%). As a result, the general government's financial balance should weaken in 2020 by almost 3 full percentage points of GDP (compared to the 2019 outcome) just because of the worsening of the business cycle and the operation of automatic stabilisers. Therefore, even if the government abstained from further discretionary fiscal stimulus measures (which is not our baseline) the above mentioned cyclically-driven budget deterioration would alone already significantly smooth the economic cycle.

Federal government will have to say bye, bye to the „black zero"…

Thanks to the large fiscal surpluses over the last six years (2014-19) and a rapidly declining government-debt-to-GDP ratio to just 60.7% (last published value: Q3 2019) Germany's public finances remain very solid in an international comparison and hence prepared for an economic crisis. Already for some years – and hence well before the corona crisis – Berlin was repeatedly confronted with claims from abroad (ECB, IMF or France) to make greater use of its fiscal buffers to stimulate economic growth. These claims grew louder over the last year because of the markets' and policymakers' growing perception that the effectiveness of the ECB's monetary policies has reached or is close to reaching its limits. Given the already expansionary fiscal policy stance in Germany, the implementation of a large-scale fiscal stimulus program would only be meaningful in a severe economic crisis (similar to the global financial crisis) – a position already taken by finance minister Olaf Scholz for more than one year. In our view, this moment has apparently come right now. It is clear that the government has finally to say goodbye to the "black zero".

A reference point for the design of a forthcoming stimulus package could be the global economic and financial crisis (2008-10). At that time, the government reacted only hesitantly to the crisis but ultimately implemented a large fiscal stimulus to counteract the downturn. Overall, a fiscal stimulus package of a total EUR 85 bn (or 3.3% of 2010 GDP) distributed over two years was successful in preventing an even deeper recession, according to the German Council of Economic Experts. The government provided substantial tax relief (e.g. by lowering the marginal income tax rate, increasing the tax exemption limit or paying out a child bonus), which amounted to more than EUR 8 bn in 2009 and EUR 10 bn in 2010. Moreover, spending was raised considerably. Infrastructure spending increased by EUR 19 bn over two years. Corporates were supported by temporary tax law changes such as the reintroduction of a declining allowance for depreciation in 2009/10. In order to stimulate private consumption the government

11 See European Commission. The Semi-Elasticities Underlying the Cyclically-Adjusted Budget Balance: An Update & Further Analysis. May 2019. The semi elasticity of the budget is an indicator to measure the sensitivity of public finances to business cycle developments. Specifically, it measures by how many percentage points (of GDP) the financial balance would change if GDP increased by one percent.

introduced a car-scrapping program for 2009, which amounted to EUR 5 bn (or 0.2% of 2019 GDP). Starting in 2010, the government also lowered the contribution rate for the unemployment insurance scheme significantly to 2.8% from 6.5% of compensation in order to lower non-wage labour costs.[12]

As regards a potential fiscal stimulus package, the government should in our opinion prioritise on these measures that it intends to implement anyway according to its medium-term financial strategy (such as the abolishment of the solidarity surcharge tax, the compensation of the cold progression in the tax system) and/or which are conducive to boosting potential growth (corporate tax reform, income tax relief). As a general rule the government should give fiscal support that is targeted, quick and sufficient. While a further stepping up of public investment should be only of little help at the current junction, targeted and quick tax relief measures could be a powerful way to stabilise the economy despite some "leakage" effect (i.e. parts of income tax relief would very likely go into higher savings). The federal debt brake would not limit the government's fiscal space to combat the confidence and economic crisis as it explicitly allows the government to let automatic stabilisers operate and hence let the budget deteriorate in cyclical terms. Moreover, the federal government could, as already explained before, make use of an emergency clause. By securing a simple majority in the national parliament (Bundestag) the government could temporarily abandon the structural credit limits set out by the debt brake. Also, most of the social security funds (as e.g. the Federal Employment Agency) could buffer a temporary decrease in social contribution rates thanks to existing financial reserves. Should these financial buffers not suffice the federal government could inject the necessary liquidity, as already done in the past, by granting interest-free loans.

… and let the fiscal balance deteriorate drastically in 2020/21

In our baseline scenario (GDP -4.5% in 2020) we now expect the general government's financial balance to post a deficit of roughly 3.5% of GDP in 2020/21 – a massive but unavoidable U-turn after the 1.9% and 1.4% surpluses in 2018/19. A large part of the 2020 budget deficit will stem from the operation of automatic stabilisers that will lead to a largely negative cyclical component of the budget in the magnitude of more than 2 ½% of GDP. The structural budget balance (financial balance adjusted for cyclical effects and special/one-off items) should deteriorate to -0.8% of GDP in 2020 (from +1.2% of GDP in 2019) due to already planned and presumably forthcoming expansionary measures. Overall, this implies that fiscal policies will considerably support the economy in 2020. That said, the utilisation and materialisation of state guarantees are ex-ante unknown. Therefore, we have not considered a possible guarantee-related rise in the fiscal deficit and the government debt stock in our calculations. That said, our public finance forecasts are subject to further downside risks from a possible materialisation of (at least some parts of the) granted government guarantees and/or an even more severe economic fallout from the crisis. Furthermore, it is also thinkable that the government would have to take stakes in some systemically relevant large corporates. Well-respected German economists already spoke out loudly that the government should in the very worst case buy equity stakes in firms which are at risk of going into insolvency in order to avoid an economic collapse.

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12 See IMF Article IV consultations (March 2010 and July 2011) as well as the annual report for 2009/10 by the Council of German Economic Experts.

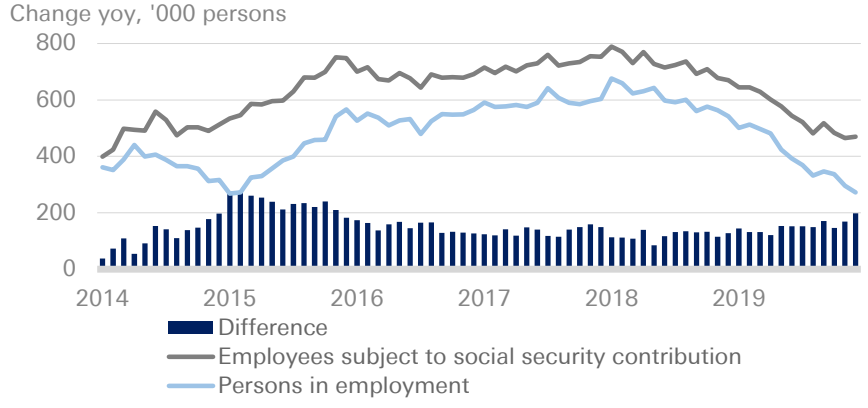
German labour market and the corona pandemic

The economic effects of the coronavirus pandemic represent a serious downside risk for the German economy. The current domestic and global containment measures to slow the spread of the wave of infection are already affecting the German economy. In addition, the interruption of international value-added chains threatens to affect German industry in particular in the medium term. Thus, the question of the labour market effects is obvious. Experience from the crisis of 2009 showed that the use of working time accounts and the rules on short-time working (Kurzarbeit) schemes did much to secure jobs. These instruments will also be used in the now expected economic downturn. This will enable companies to secure jobs so that business activities can be resumed quickly once the wave of the disease has subsided in H2 2020 as currently expected. In addition to easing the burden on companies, the short-time working schemes should above all dampen the uncertainty of private households' income expectations and thus support private consumption. This applies in particular to the expected further easing for the receipt of short-time working benefits and the extension of the regulations to the temporary employment sector.

With regard to the affected tourism industry, for example, many new notifications of short-time working are likely to be made in the near future. For March 2020, the German Federal Employment Agency forecasts around 124,000 people in short-time work. Due to the effects of the corona pandemic, this number is likely to rise to a level of around 1.5 m (record high in May 2009 just under 1.5 m).

The positive labour market trend of 2019 continued in January 2020. Seasonally adjusted employment figures reached a further record high of almost 45.4 m (+234k yoy). Nevertheless, the growth rate continued to flatten out, to 0.5% yoy. The economic downturn caused by the corona pandemic could put a halt to the increase in employment. Labour hoarding, as already observed during the GFC in 2009, could prevent a sharp decline in employment.

Figure 18: Corona pandemic could bring employment growth to a standstill

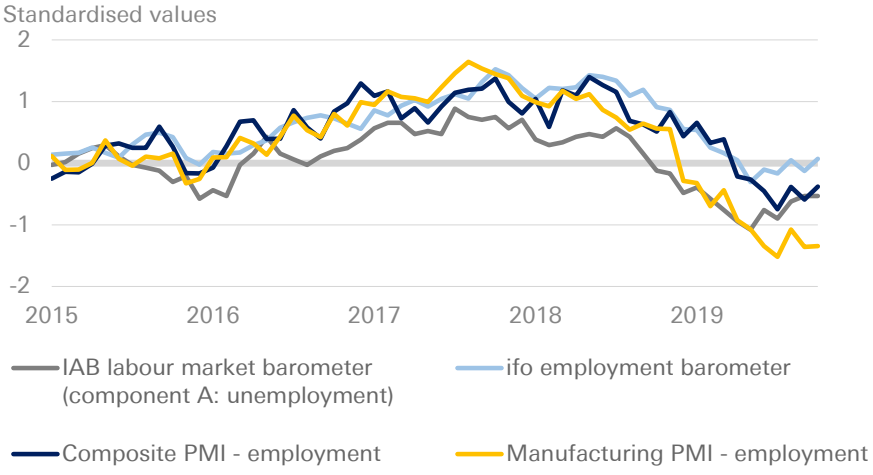


Source : Federal Employment Agency, Federal Statistical Office, Deutsche Bank Research

In particular, the number of employees subject to social security contributions reached another record high in Q4 2019, rising by 132k qoq (Q3: +96k qoq). Although the German labour market is still in good shape, even before the corona pandemic there had been unmistakable signs of an economic slowdown, especially in the manufacturing sector. As a result, the increase in the number of

employees subject to social security contributions slowed to 1.4% yoy in Q4 2019 (Q3: 1.5%, Q2: 1.8%) and will possibly come to a standstill due to the economic slowdown caused by the measures to counter the corona pandemic.

Figure 19: Q1 labour market indicators signaled a general stabilisation but a negative outlook for manufacturing

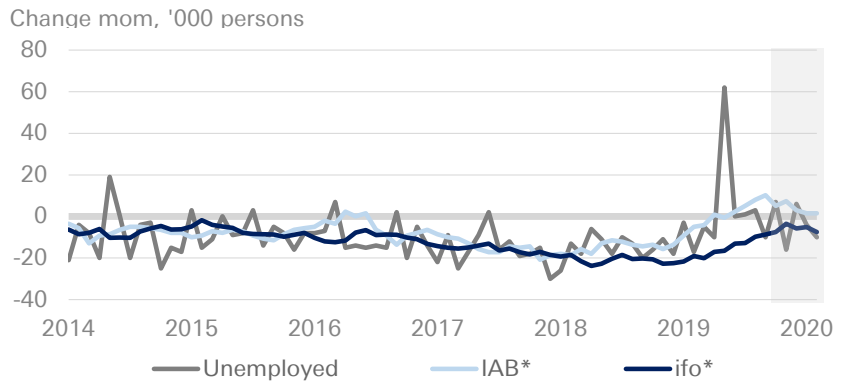


Source : ifo, IAB, IHS Markit, Federal Employment Agency

Prior to the nationwide spread of the coronavirus, leading indicators of the ifo and IAB (employment barometer) as well as the subcomponents of the purchasing managers' indices (PMI) – despite their noticeable declines – still pointed to an overall stable labour market. However, the development is bifurcated. The data signal further job growth in the construction and services sectors, while jobs are being cut in manufacturing. In view of the effects of the corona pandemic, however, job creation should come to a standstill in the short term and possibly accelerate slightly in 2021.

It will be important how long the restrictions on public life will affect the service sector and how long it has to withstand the negative spillover effects of the industrial recession. According to the latest survey results on the employment component of the PMI for services (Feb. 52.8 after 53.7 in Q4 and 54.5 in Q3 2019), this sector has lost its power as a job engine. The corona pandemic probably did not play a role in the latest survey results so far.

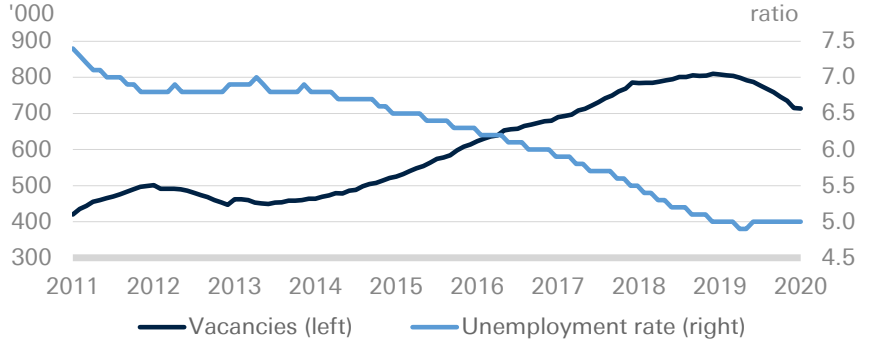
Figure 20: Prior to corona, IAB and ifo barometer indicated stable unemployment (sa)



** Simple linear regression of unemployment change on the basis of leading labour market indicators (lagged by 1 resp. 2 months). In May 2019, we saw that seasonally-adjusted unemployment rose by a extraordinary 62k, due to the one-off effect from the special review of the placement status of ALG II recipients. Without this effect the increase would have been 20k - 30k.*
Source : ifo, IAB, Federal Employment Agency

After the unemployment rate hardly declined at all in the last 6 months, it is likely to rise in the coming months. We expect the decline in labour demand caused by the corona pandemic to be partially offset by more short-time working. Moreover, the expansion of the short-time work scheme planned by the federal government should provide additional support. But companies are still likely to divest parts of their workforce and thus increase unemployment.

Figure 21: Labour market: Near full employment but cyclical skid marks



Source : Deutsche Bundesbank

For 2020, our new baseline scenario implies employment growth to stagnate, unemployment to increase by 500k to a good 2.5 m, and as a result the unemployment rate to rise by 0.5 pp to 5.6%. The depth of the current recession could be unprecedented. But the government has clearly announced far-reaching guarantees and a huge financial package in addition to the ECB's additional monetary policy stimulus. All these measures combined with labour hoarding could protect the labour market from a steep rise in unemployment. But a further increase by 0.5 pp, to 6.1%, cannot be ruled out, especially since the economic conditions differ from those of the great crisis in 2009 (unemployment rate +0.5 pp yoy). At present, many personnel intensive service companies are likely to be affected. In addition, an increasing number of self-employed individuals who are being hit hard by the crisis are likely to register as unemployed.

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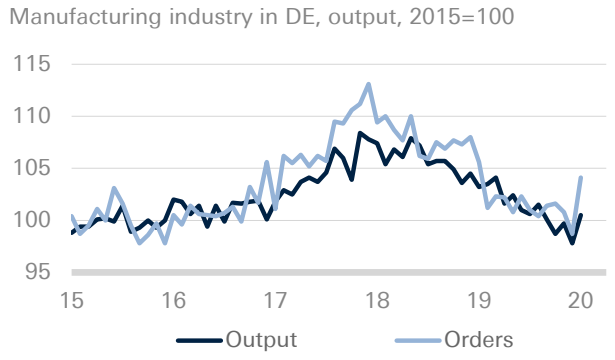
Coronavirus will extend industrial recession – structural problems give rise to concerns

- Due to the corona outbreak, the industrial recession in Germany, which started in Q3 2018, will continue right into Q2 2020. We expect manufacturing output to decline by 10% in real terms in 2020. As in 2019, all capital goods producers will be affected. Industrial output might rise by an average 11% in real terms in 2021. Nevertheless, even after this jump aggregate output would still be below the level of 2018.
- The coronavirus pandemic will be over sooner or later or under control to a certain extent. Once it is, attention will refocus on other cyclical and structural aspects. Overall, we see a risk that Germany may become less attractive as an industrial location over the coming years. For example, several cost factors have worsened in the last few years.

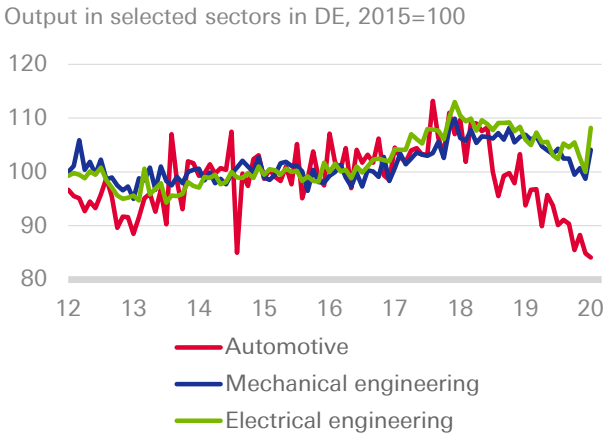
German manufacturing output declined by 4.6% in real terms in 2019. This was the first decrease since 2013 and the strongest since 2009. The industrial recession already started back in Q3 2018, and by now, industrial output has fallen for six quarters in a row in seasonally adjusted terms.

Figure 22: Recovery prior to corona outbreak



Source : Federal Statistical Office

Figure 23: Decline in output particularly strong in the automotive industry



Source : Federal Statistical Office

The automotive industry in particular was a drag on aggregate output; its production fell by 11.8% in 2019. Much of this development was caused by weak global demand for cars and domestic one-off effects (model cycle, shift towards electric vehicle production at some plants; see the related article in this issue of Focus Germany). At the same time, production declined across the board, with mechanical engineering (-3.3%), electrical engineering (-4.3%), the metals industry (-4.3%) and the chemicals industry (-3%) all registering a decline in domestic output. Capital goods producers suffered from a global reticence to invest due to several trade conflicts and the political uncertainty about Brexit, and the chemicals industry additionally has to deal with structural factors such as the long-term decline in capital stock.

Increasing signs of a turnaround ahead of the coronavirus outbreak

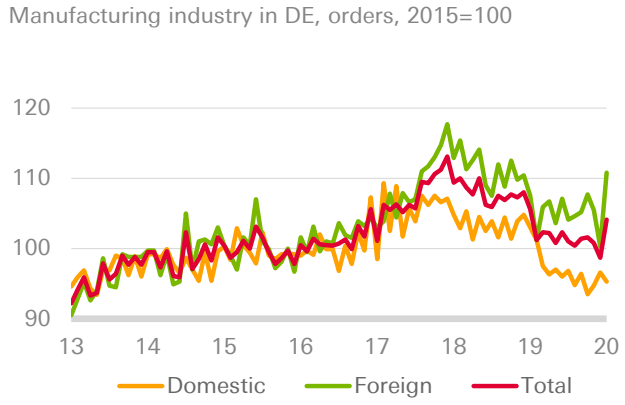
Ahead of the coronavirus (Covid-19) outbreak in China and its subsequent

spreading to many industrial countries, there had been signs of a potential recovery in German industrial activity after six quarters of recession. Order intake stabilised in the second half of 2019, and the downtrend in the order backlog slowed. Business expectations improved again from their low in September, and capacity utilisation rose for the first time in two years at the beginning of 2020.

2020 got off to a promising start. In December 2019, both domestic production and industrial order intake fell considerably, not least due to the dates of the holidays at the end of 2019. It seems that the working-day effect was not fully taken into account by the statistical seasonal adjustment procedures. However, these declines were more than offset in January 2020.

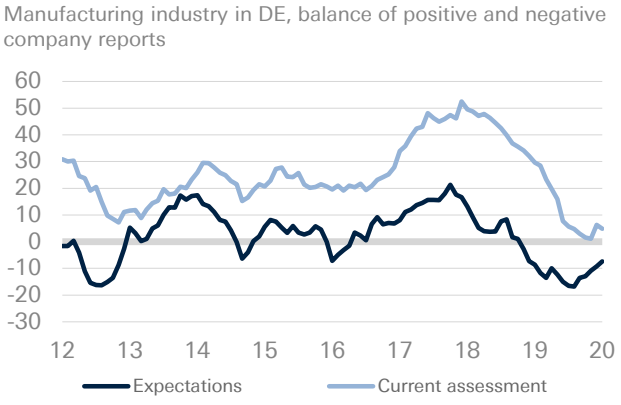
Still, the January data refer to the time ahead of the coronavirus outbreak. The negative impact of the pandemic on order intake, exports and output will not be visible until the figures for February and the subsequent months are released in April and later on.

Figure 24: Divergent development of late



Source : Federal Statistical Office

Figure 25: Preliminary turnaround in business expectations



Source : ifo Institute

Decline in demand and supply chain disruptions

Covid-19 affects the German industry via several channels. Order intake is declining, above all from those countries where many coronavirus infections have been registered and where the economy has gone into crisis mode due to quarantine and other restrictive measures. And even in countries where the coronavirus has not yet spread the growth momentum is slowing and weighing on demand for industrial goods of all types (demand shock). This means that domestic output, exports and imports will shrink, particularly since there are likely to be restrictions on trade in goods via some routes or other disturbances of transportation chains and there will be a temporary lack of transport capacity (such as aircraft). Moreover, supply chains will be disrupted (further) if intermediate products from abroad are not available or cannot be delivered in sufficient quantities and cannot be replaced by goods from other suppliers (supply shock). The decline in imports from China brought to Europe by ship will be felt mostly after early or mid-March, as ships leaving before the coronavirus outbreak were able to unload their freight in European ports before. Imports from Italy and direct German neighbor countries will probably decline considerably in the coming weeks even though freight traffic is not affected by the recent closing of some German borders.

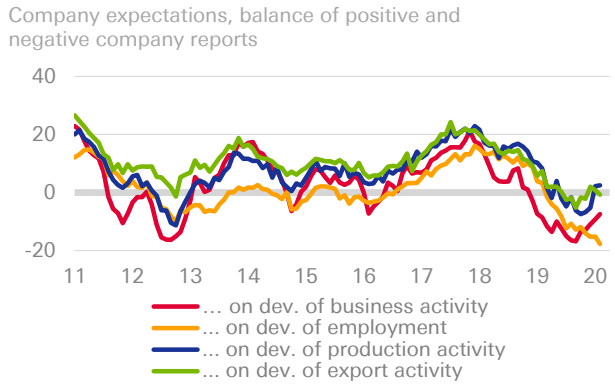
The concrete impact of the coronavirus is difficult to quantify, as uncertainty about the health risks and potential economic contagion is high. Let us take a look at some figures to get an idea of how close Germany is interlinked with certain economies. In 2019, almost 14% of Germany's total goods exports were shipped to the three countries most affected by Covid-19 (China, Korea and Italy). China was the third and Italy the sixth most important export market for Germany. China is the most important foreign market for German electrical engineering products, with a share of 10.5% of the sector's aggregate exports. In addition, China is the second most important market for the automotive industry and for mechanical engineering.

At the same time, more than 16% of all German imports came from the three countries mentioned above in 2019. China tops the list, with an import share of almost 10%. Roughly 5% of all imports came from Italy (sixth most important supplier). A sector breakdown shows strikingly high imports of electrical engineering goods from China. More than 30% of the sector's imports came from China in 2019. In any case, China is the largest producer and exporter of electrical engineering goods, both for consumer electronics and industrial equipment. Supply disruptions in this sector might weigh on deliveries to global buyers, for example in mechanical engineering, the auto industry or, in fact, electrical engineering.

China and Italy are the two most important suppliers for German mechanical engineering companies. Their combined share in imports amounted to c. 21% in 2019. The dependence on China and Italy is much smaller in the auto industry. In 2019, only 6.5% of the sector's aggregate imports came from these two countries. Still, the German car industry buys many intermediate products belonging to other sectors from China. And even relatively low dependence on a given region may result in major supply chain disruptions if specific key parts or components for production are sourced from one country only, which cannot supply them for some time.

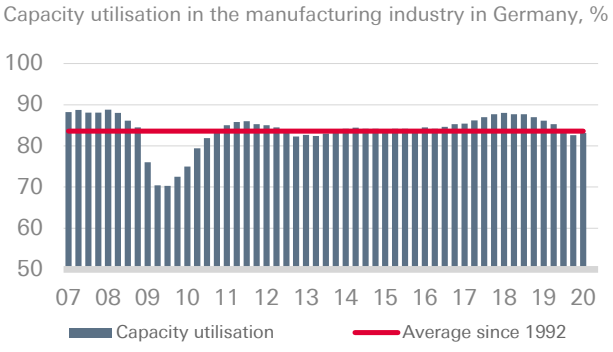
Imports from other countries will also suffer since the recent closing of the German borders will also lead to disturbances in freight transport (e.g. longer waiting times at the border). The Czech Republic is the most important foreign supplier for the automotive industry in Germany.

Figure 26: Mainly negative expectations in the German industry



Source : ifo Institute

Figure 27: Capacity utilisation increases slightly at the start of the year



Source : ifo Institute

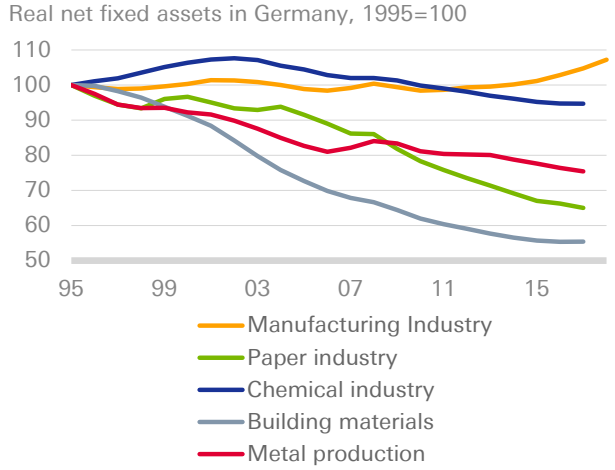
Recovery delayed to the second half of the year

We expect German industrial output losses to be particularly large in March, April and possibly May 2020. The recent announcement of some carmakers to close factories for some time is a strong indication for that. In addition, output will probably not return to the low average level of 2019 in June. We expect a recovery in Q3. However, this recovery will take place at low level. That means that the industrial recession will continue right into Q2 2020. This forecast is subject to considerable uncertainties, however. If the coronavirus pandemic quickly runs its course, catch-up effects may boost demand. However, industrial output might decline further during Q3 if important buyer countries or Germany itself do not overcome the coronavirus shock by then.

Overall, we expect manufacturing output to decline by 10% in real terms in 2020. Once again, all capital goods producers will be affected. We now expect output in the auto industry to decline for the third time in a row, by 12% in real terms. Mechanical engineering (-8%), electrical engineering (-7%), the metals sector (-8%) and the chemical industry (-5%) are also likely to see their domestic output decrease. These forecasts are based on the assumption that output recovers during the second half of the year. Domestic output in the construction materials sector, the pharmaceutical industry and the food processing industry is likely to grow moderately in 2020.

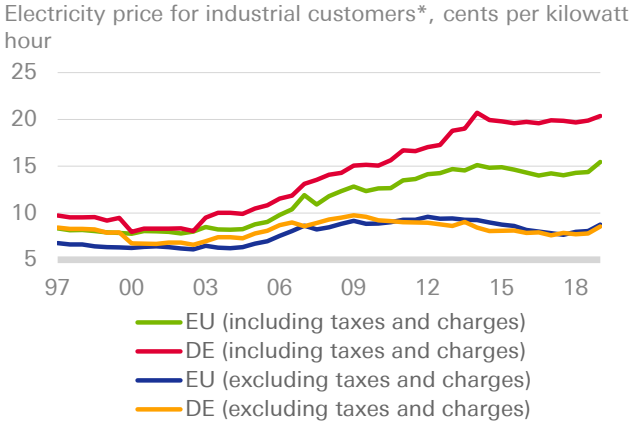
If manufacturing output develops as expected and recovers during the second half of the year, we are likely to see a high statistical overhang around the turn of the year 2020/2021. Even if the momentum slowed in 2021 in comparison to H2 2020, industrial output might rise by an average 11% in real terms in 2021. Nevertheless, even after this jump aggregate output would still be below the level of 2018.

Figure 28: Real net fixed assets decline in energy-intensive sectors



Source : Federal Statistical Office

Figure 29: Taxes and charges are the main drivers of electricity prices in Germany



** Annual electricity consumption between 500 and 2.000 MWh*
Source : Eurostat

Share of the industry in GDP is shrinking – structural problems are a burden

The coronavirus pandemic will be over sooner or later or under control to a certain extent. Once it is, attention will refocus on other cyclical and structural aspects.

Overall, we see a risk that Germany may become less attractive as an industrial location over the coming years. For example, costs have risen in the last few years. Wage costs and effective average corporate tax rates are among the highest in an international comparison, and electricity prices for many industrial companies are high compared to those in other countries. Energy-intensive companies are finding it difficult to deal with the uncertainty about long-term climate and energy policies at both the German and the European level. Their capital stock has been shrinking for years, and a turnaround is not in sight. The German chemicals industry has experienced a structural decline in output, and the aggregate output of the German metals sector is unlikely to rise either.

Due to the decline in German industrial output in 2019 and below-average growth in the years before the share of manufacturing in overall gross value added shrank for the third time in a row last year. In 2019, it was down to "only" 21.6%, i.e. the lowest percentage since the recession year 2009. While the industry still plays a more important role in the German economy than in the EU average (in 2019, its share in total value added amounted to 15.6%) or other EU countries (take, for example, France with a share of 10.9%), the downtrend is an alarm signal.

A look at the investment behaviour of the individual sectors underlines this statement. During the last few years, the lion's share of the increase in net capital investment in manufacturing was borne by the automotive industry. The pharmaceuticals industry and mechanical engineering followed at a large distance. In many other sectors, net capital investment is often just marginally positive or even negative. The auto industry may shift an even larger share in its investments in plants, machinery and equipment abroad in order to offset cost increases (for example for investments in alternative propulsion systems necessary to comply with CO_2 limits or for higher labour costs). German carmakers and their suppliers are currently preparing some plants in Germany for a transition to the production of electric vehicles and the necessary parts and components. Overall, however, value creation in Germany is likely to decline if e-mobility catches on quickly and the production of traditional engines and transmission systems loses ground. This would deprive industrial investment activity in Germany of a major stimulus. Investment in research and development will become more important compared to investment in machinery and equipment or construction. In view of the demographic developments in Germany, it is an enormous structural challenge to find and retain qualified employees for this purpose. This is another issue which has moved out of the focus due to the coronavirus, but is nevertheless quite important for companies' future viability.

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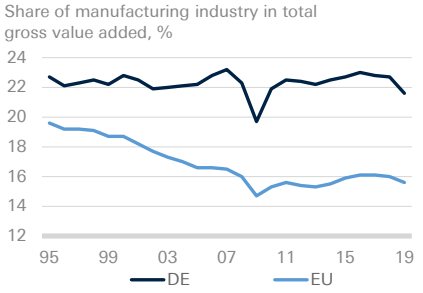
Figure 30: Share of industry has declined of late

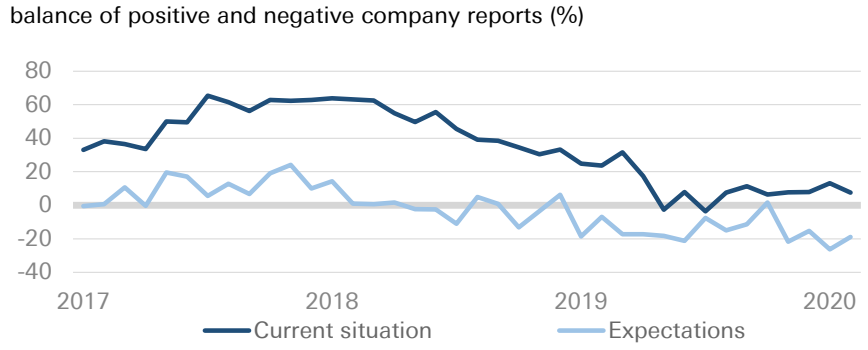


Source : Eurostat

German auto industry: Corona – another blow

WLTP, diesel scandal, trade wars, Brexit, weak global car demand and now corona. What a number of (partly self-caused) blows to the automotive industry. The automotive industry is the largest industrial sector in Germany, measured by revenue. Its performance will decide when and to which extent the German manufacturing industry will overcome the recession that has started in Q3 2018. Domestic automotive production (including suppliers) declined by close to 12% in real terms in 2019, the second decrease in a row. Before the outbreak of the coronavirus, indicators such as capacity utilisation and orders had signaled that the trough in the sector was in sight. The situation is now very different. Most of the following charts do not yet include the negative impact of corona since the relevant data will only be published in the weeks ahead. Some data points are already available, though: car demand in China decreased by more than 80% yoy in February 2020.

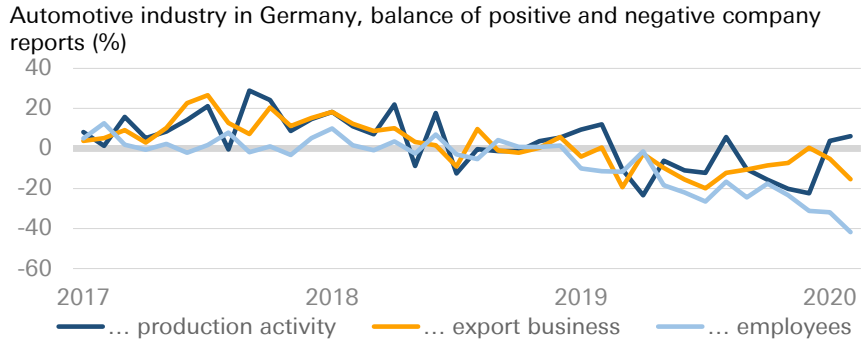
Figure 31: ifo business climate in German automotive industry



Source : ifo

Fig. 31: Business expectations (balances) in the German automotive industry have been almost entirely negative since the beginning of 2019. The latest marginally less sceptical reading (February) came as a surprise. A substantial deterioration of business expectations and the assessment of the current situation in March is likely since the dimension of the corona pandemic became more obvious in early March. Order backlog in the sector has been decreasing slightly on a high level during the last few months.

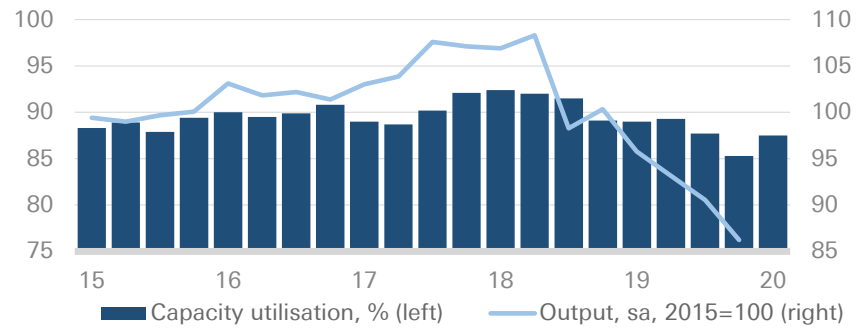
Figure 32: ifo expectations with regard to ...



Source : ifo

Fig. 32: The subcomponents of the ifo survey show a mixed picture. Production expectations have recovered of late. Export and employment expectations, however, were negative at the beginning of 2020 and will further decline in March. Employment, a lagging indicator, has started to decline in the auto sector in mid-2019 and will continue to do so in the next few months, not least due to the sector's structural adjustment towards e-mobility. Public short-time work scheme should help to mitigate negative effects of corona.

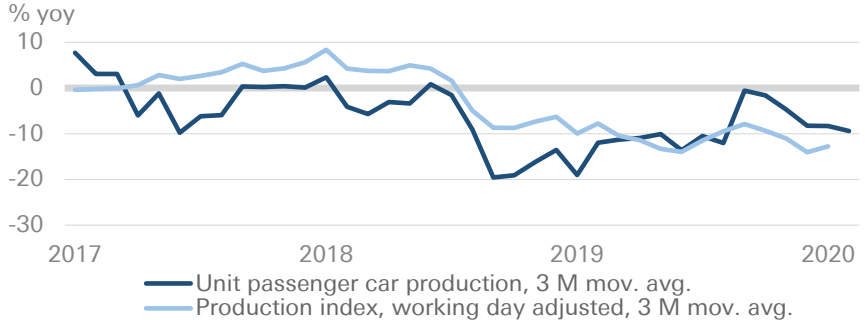
Figure 33: Output and capacity utilisation in German automotive industry



Source : Federal Statistical Office, ifo

Fig. 33: At the beginning of Q1 2020, capacity utilisation in the German auto industry increased considerably and for the first time since Q2 2019. However, it is still well below the value of 2018. The increase in capacity utilisation at the latest reading was an indication for the trough in the current cycle. That, however, was before corona. We now expect global car demand to decrease again in 2020. That would be the third decline in a row. Developments in China, "the great unknown", will provide huge negative effects in Q1 2020 and probably Q2, leaving a big question mark concerning the extent of a recovery in H2. Capacity utilisation will go down in Q2 2020 and so will production.

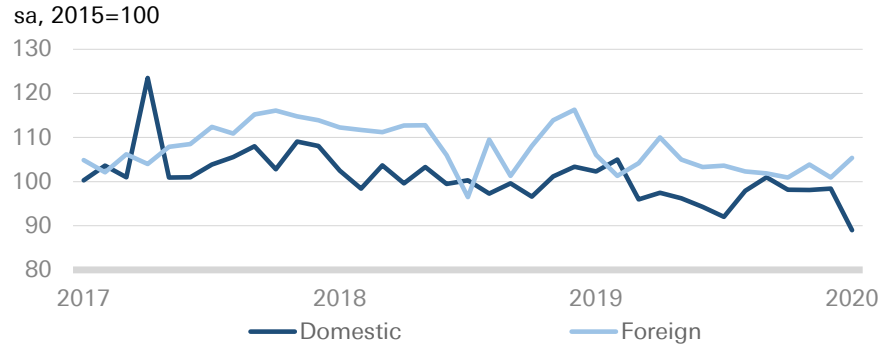
Figure 34: Automotive production in Germany



Source : Federal Statistical Office, VDA

Fig. 34: German car production was considerably down in year-on-year terms throughout 2019 and in early 2020. Domestic passenger car production (in unit terms) decreased by 9% in 2019. The decline in the output index, which also includes qualitative criteria, was even larger last year (-11.7%). We expect German automotive production (index) to decline by 12% yoy in real terms in 2020 even though important new models will enter the market.

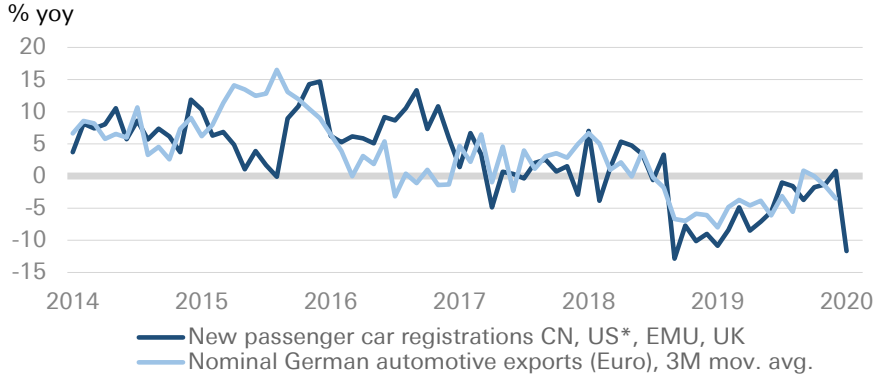
Figure 35: New orders in German automotive industry



Source : Federal Statistical Office

Fig. 35: Foreign order intake has been quite stable during the last few months and was even up at the beginning of 2020. Domestic orders disappointed in January 2020. We expect declines in orders in the coming months. German new passenger car registrations increased by 5% in 2019 and reached the highest level since 2009, the year of the scrappage premium in Germany. We expect a decline in 2020.

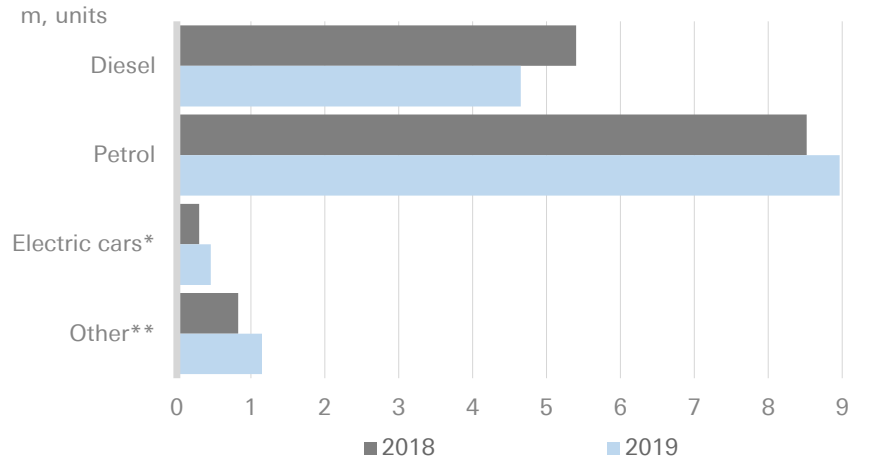
Figure 36: Global car demand and German automotive exports



** Light vehicles*
Source : ACEA, Bureau of Economic Analysis, China Automotive Information, Federal Statistical Office

Fig. 36: Weak demand in important German export markets, starting at the end of 2018 and still going on, weighed on auto exports. On average, passenger car exports (in unit terms) declined by 13% in 2019. The dark blue line (moving average!) already includes the massive setback in Chinese car demand in February 2020 (-82% yoy). We expected Chinese car demand (which has been weak for almost two years) to surprise on the upside in 2020. However, the corona outbreak will now drag down car demand significantly in Q1 2020 and in Q2. Still, backlog and replacement demand could provide stimulus as soon as the virus is under control. Public support for car demand is likely. Apart from corona, we should also not forget that the phase 1 trade agreement with the US is a positive for Chinese car demand. We are cautious for the European and US car markets, not least due to coronavirus. Global car demand will decline for the third year in a row.

Figure 37: New passenger car registrations in the EU by propulsion technology



** Battery electric, plug-in hybrid, range extender, fuel cell*
*** Including hybrid vehicles (mild and full hybrid)*
Source : ACEA

Fig. 37: Barring the corona crisis and the economic cycle, carmakers and suppliers continue their efforts to ramp up production of electric vehicles and the corresponding supplier parts and equipment in their plants respectively. More and more models are available. By 2021 at the latest, the CO_2 emissions of all new passenger cars in the EU are to be reduced to 95 g/km on average. If the auto industry fails to reach this goal, it will have to pay fines. The share of electric vehicles in the EU will have to rise to 10-15% of all new car registrations (from currently roughly 3%) if the sector as a whole is to avoid paying fines. Still, EVs are likely to account for only a small share of total passenger car production in 2020. The evolutionary change in propulsion technologies is not yet strongly reflected in production figures. Output value, however, benefits, as current prices for electric vehicles are on average higher than those for their counterparts with combustion engines. At the same time domestic production is negatively influenced since some production sites are being retrofitted in order to ramp up production of electric vehicles hampering. Being largely driven by the strict European CO_2 emission limits rather than market forces, the transition to e-mobility is a major challenge (not only for the German but) for the global automotive industry. Unless electric vehicles are heavily subsidized, consumer acceptance continues to be low. High investment needs hence contrast with a small market. Still, the German auto industry is better prepared for the electric mobility future than Germany as an industrial location for car producers. In fact, a number of factors on the cost side have deteriorated compared to other locations over the last few years (e.g. corporate taxes, wages, and electricity prices).

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Government measures to support liquidity of German companies – who is most at risk?

- To mitigate potential liquidity shortages, the government is beefing up KfW programmes. Firms with a turnover ≤ EUR 5 bn are eligible for loans, KfW takes ≤ 90% of the credit risk.
- German companies are entering the recession in a better position than in 2008/09. Smaller enterprises have boosted their equity capital ratio & reduced their dependence on bank loans.
- Within manufacturing, most at risk could be small firms with a turnover < EUR 10 m in mostly traditional industries (food; paper, publishing & printing; vehicles other than motor vehicles).
- Large firms with annual sales of > EUR 50 m generally seem best prepared for the downturn.

To support firms, the federal government is mainly acting on two fronts – through tax relief (moratorium, lower upfront payments) and the provision of liquidity via the federal development bank KfW. With regard to the latter, existing support programmes will be beefed up and conditions relaxed and a new special programme will be set up. In general, KfW is acting through commercial banks (incl. savings banks) which maintain the direct relationship with clients. KfW is sharing credit risk with the commercial banks.

Three different programmes will be implemented in the next few days, with varying conditions (many details still have to be finalised though):

1. For companies with a turnover of up to EUR 2 bn, they can receive working capital loans of up to EUR 200 m. KfW takes up to 80% of the credit risk. For companies which are at least 5 years old, an effective interest rate from 1% on applies.
2. For companies with a turnover of up to EUR 5 bn, syndicated loans are on offer whereby KfW takes up to 70% of the credit risk.
3. New special programmes will be set up for SMEs and large enterprises covering working capital and investment needs, with KfW taking up to 90% of the credit risk in the latter case. Syndicated loans will be on offer as well.

These loans are funded via guarantees provided by the federal government. Their total volume amounts to up to EUR 465 bn and EUR 93 bn can be added if need be. However, a substantial proportion of that has already been used (in 2018, EUR 361 bn, of a maximum of EUR 487 bn) and only EUR 120 bn were still available (EUR 6 bn of losses had occurred). Nevertheless, the government will most probably react quickly and decisively if circumstances require a further increase in these limits. In addition, on the European level (European Investment Bank) and the German state level, government-owned development banks may also introduce similar support programmes in the next few weeks.

Overall, German companies are entering the recession in a sound position and a much better one than before the last recession in 2008/09. The aggregate financial statements of all German companies show a relatively high average equity capital ratio of 31% of total assets at the end of 2018 (latest date available), and a limited share of bank loans in total assets of 10.7%, with long-term loans (6.3%)

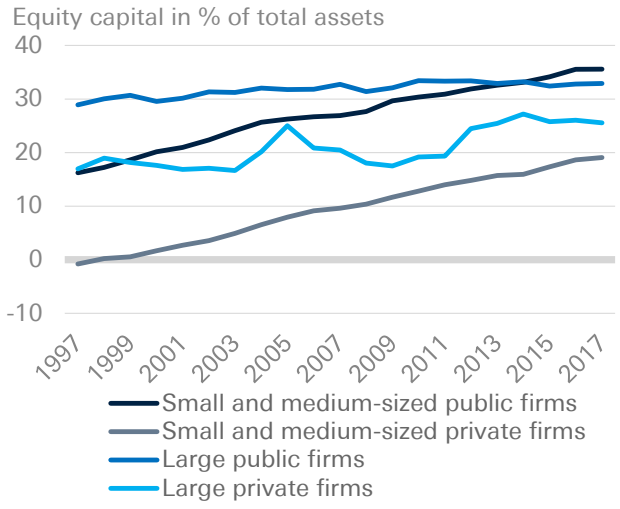
outweighing short-term credit (4.4%).[13]

With regard to firm size, SMEs have substantially improved the resilience of their balance sheets over the past years. For firms with annual turnover of less than EUR 50 m, the capital ratio rose by almost 10 pp since the financial crisis to 28.9% in 2017. For large firms, the ratio had already been higher before and climbed by only 1 pp to 31.9%.

On the funding side, traditional bank loans have declined in importance, especially for SMEs. For them, the share of bank loans in total assets, while remaining significant and much higher than for large companies, fell nearly 7 pp to 21.7% over the past decade. For large firms, it shrank by just 0.5 pp to a modest 6.1%.

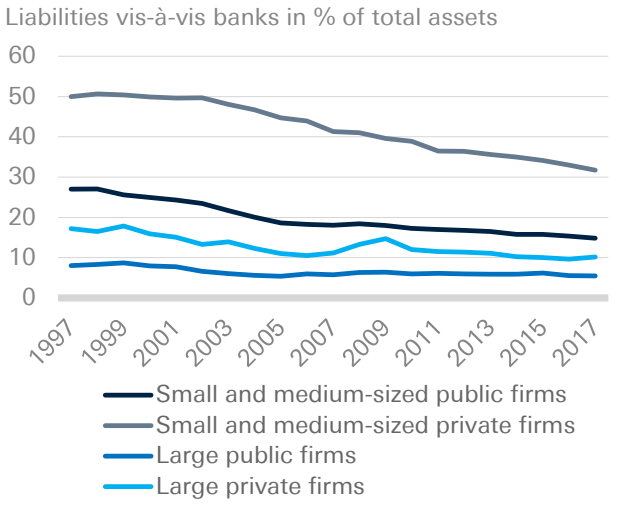
Bottom line, especially smaller enterprises have considerably ramped up their defences against an economic deterioration, while large firms have already been operating with major buffers for years. Firms have also become less dependent on bank loans and thus less susceptible to potential credit constraints (even leaving aside the announced government support measures).

Figure 38: German SMEs strongly improve their capital ratios



SME: turnover < EUR 50 m
Source : Deutsche Bundesbank, Deutsche Bank Research

Figure 39: SMEs become less reliant on bank loans



SME: turnover < EUR 50 m
Source : Deutsche Bundesbank, Deutsche Bank Research

Which individual industries may be particularly susceptible to a major recession? Apart from the obvious candidates logistics, trade, tourism and restaurants, the manufacturing sector is worth taking a closer look as it has been in a protracted recession already since 2018. This may have reduced capital reserves and made firms vulnerable to supply disruptions and a sudden stop in demand as well as a lack of credit. Which manufacturing industries seem most at risk?

To assess this, we will analyse detailed data on 19 individual industries and 4

13 The rest is mainly made up of intra-group loans (23.5%), provisions (14.5%), accounts payable (7%) and advances received from customers (5.9%).

different categories of firm size (measured by turnover). The two indicators will again be the equity capital ratio and the share of bank loans in total assets. We use thresholds of 25% of capital or less and 25% of bank loans or more as signals of potential vulnerability. The results show that firms which could be at risk are mainly small firms with a turnover below EUR 10 m.[14] Riskier companies also cluster in a few industries:

- food and beverages
- textiles
- paper, publishing and printing
- vehicles other than motor vehicles (this is the only area where also large firms seem at considerable risk)
- furniture and other manufacturing

By contrast, most of the strongest enterprises, at least judged by these measures, have annual sales of more than EUR 50 m and are found in many industries:

- beverages
- publishing and printing
- chemical and pharmaceutical products
- other non-metallic mineral products (glass, ceramic)
- computers, electrical equipment, optical instruments
- motor vehicles and other vehicles

Also, in the pharmaceutical industry and the manufacturing of other products, medium-size companies with a turnover of EUR 10-50 m look relatively resilient.

Large producers of vehicles other than motor vehicles are the only sub-segment where the two indicators yield opposite outcomes, i.e. these firms on aggregate have a relatively low equity ratio (of 16%), but also hardly depend on banks for financing (share of bank loans only 3.6%).

All in all, some of the more traditional manufacturing industries seem most at risk (food; paper, publishing and printing; vehicles other than motor vehicles), while large firms generally seem best prepared for the downturn.

Figure 40: Equity capital in % of total assets, weakest and strongest manufacturing industries

Below 25%		Above 45%	
16.1	Vehicles other than motor vehicles, turnover > EUR 50 m	49.1	Pharmaceutical products, turnover EUR 10-50 m
20.7	Food, turnover < EUR 2 m	48.7	Other manufacturing, turnover EUR 2-10 m
21.1	Textiles, turnover < EUR 2 m	47.2	Other non-metallic mineral products, turnover > EUR 50 m
23.1	Vehicles other than motor vehicles, turnover EUR 10-50 m	45.4	Other manufacturing, turnover EUR 10-50 m
23.7	Furniture, turnover < EUR 2 m	45.0	Publishing and printing, turnover > EUR 50 m

Source : Deutsche Bundesbank, Deutsche Bank Research

14 In some industries, there is no data available for companies with turnover below EUR 2 m.

Figure 41: Bank loans in % of total assets, weakest and strongest manufacturing industries

More than 25%		Below 5%	
35.4	Food, turnover < EUR 2 m	1.7	Computers, electronic and optical instruments, turnover > EUR 50 m
29.2	Publishing and printing, turnover < EUR 2 m	3.4	Motor vehicles, turnover > EUR 50 m
27.7	Food, turnover EUR 2-10 m	3.5	Chemical products, turnover > EUR 50 m
27.3	Publishing and printing, turnover EUR 2-10 m	3.6	Electrical equipment, turnover > EUR 50 m
26.2	Paper, turnover EUR 2-10 m	3.6	Vehicles other than motor vehicles, turnover > EUR 50 m
26.0	Vehicles other than motor vehicles, turnover EUR 2-10 m	3.7	Beverages, turnover > EUR 50 m
25.4	Beverages, turnover EUR 2-10 m	4.6	Pharmaceutical products, turnover > EUR 50 m
25.3	Other manufacturing, turnover < EUR 2 m		

Source : Deutsche Bundesbank, Deutsche Bank Research

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Corporate lending in a corona recession: Development banks as an anchor of stability?

- The looming recession is putting substantial pressure on corporate lending by German banks due to higher expected credit losses and increasing need for capital. Could countercyclical lending by government-owned development banks such as KfW help?
- Before and after the financial crisis, net new lending by German banks shifted quickly from expansion (by 2.4% yoy) to shrinkage (-1.1%). By contrast, despite remaining in negative territory, development banks' loan growth improved slightly, from -1.1% to -0.7%, providing for limited mitigation in the overall contraction of corporate lending.
- Risk assumption measures announced by the German government may be particularly helpful for medium-sized companies.

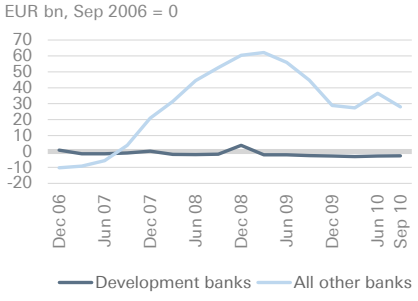
The looming recession triggered by the coronavirus is exerting a lot of pressure on the global and also German banking industry. For one thing, banks' revenues may decline: loan growth will probably shrink due to tighter credit standards and lower demand; interest margins may suffer from more expansionary monetary policy; payment volumes and associated fees are likely to decrease; assets under management, transaction volumes and associated performance and management fees may all head south. Second, loan losses and respective provisions are set to rise due to sharply reduced forecasts for global growth. Third, the related rating migration will automatically result in higher risk-weighted assets which reduces risk-weighted (CET1) capital ratios. Fourth, as a consequence of lower revenues and higher loan loss provisions, profitability may well slump, as cost levels remain relatively resilient. Net losses, in turn, could reduce capital ratios further, both CET1 and the leverage ratio.

Typically, in such an environment, banks become much more cautious with regard to new loan commitments as these are capital-intensive and it is more doubtful whether interest and notional can be paid (back) fully in time. Likewise, (especially corporate) borrowers become more reluctant to take on more debt as their cash flows weaken and the outlook for their business turns more cloudy. The resulting slowdown in lending is particularly pronounced if the recession follows an economic boom.

Currently, in Germany, this is the case, as it was in 2008 when the financial crisis hit. Loan growth within the corporate sector (including self-employed), which still stood at +4.9% yoy at the end of 2019, will probably deteriorate sharply over the coming quarters. The extent of the decline is, of course, uncertain, due to the lack of precedents for a pandemic in a globalised economy and society. However, policymakers are looking at options to mitigate economic repercussions and, in particular, prevent a credit crunch, i.e. a situation when viable companies are deprived of credit by a struggling banking system. One possibility being discussed is to counter, at least partly, the expected reduction in new lending by commercial banks through a countercyclical increase in lending by government-owned development banks, including KfW and various development institutions at the state level.

Could this help? The evidence from the 2008 crisis and its aftermath gives only limited comfort. The Bundesbank banking statistics provide a breakdown of lending by major banking groups. We look at the two years before and after the

Figure 42: Cumulative loan flows to German non-financial companies and self-employed



Source : Bundesbank, Deutsche Bank Research

failure of Lehman Brothers in September 2008 which triggered a dramatic acceleration in the financial crisis and the Global Recession. Loan flows to companies and self-employed in Germany (excluding other financial institutions) by public development banks were negative from September 2006 to September 2008: on average, they stood at -1.1% p.a. of the outstanding volume. At the same time, in this boom period, net new loans by all other banks reached +2.4% yoy. From September 2008 to September 2010, loan growth quickly reversed course. On average, all banks excluding development banks saw negative loan flows of -1.1% yoy, a heavy shift from the previous expansion. Somehow in contrast, the shrinkage of development banks' loan book slowed down, to -0.7% over this 2-year period. That is, unlike the other institutions, their lending standards probably became a bit more accommodative. Nevertheless, even development banks did not increase their absolute lending volumes and market share throughout this time remained moderate – below 7%.

In the unfolding coronavirus recession, similar patterns are likely to emerge, potentially with a larger though not outsize role for development banks in countercyclically providing credit to a shrinking economy. Still, they may not be able to fully compensate for the looming contraction in lending by commercial banks. On a side note: of course, development banks (or other public institutions) could also help in other ways, e.g. through asset guarantees/asset protection schemes similar to measures adopted in 2008. By taking on the credit risk which commercial banks are unwilling or unable to bear, they could allow for more liquidity to flow to the corporate sector. In this sense, the KfW risk assumption measures announced today by the German federal government may be particularly helpful for medium-sized companies, i.e. the backbone of the German economy.

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The view from Berlin: Migrant crisis 2.0? Not really, as political dynamics have changed

- German and European politics are focussing all efforts on fighting the coronavirus pandemia. However, other recent political developments might not allow a break for political leaders either.
- President Erdogan's move to open Turkish borders and the prospect that migrants could enter the EU has led to a rush of thousands attempting to cross the Greek border and seek asylum in the EU. The EU regards this as a breach of the bilateral agreement that Merkel had brokered back in 2016 with all member states supporting a firm response to protect the EU's external borders.
- Political dynamics in Germany have changed since then, and the pushback to Merkel's policy move in 2015 runs across (almost) all parties. Germany will not open its borders again.
- The refugee issue might impact support for the three candidates for CDU leadership.

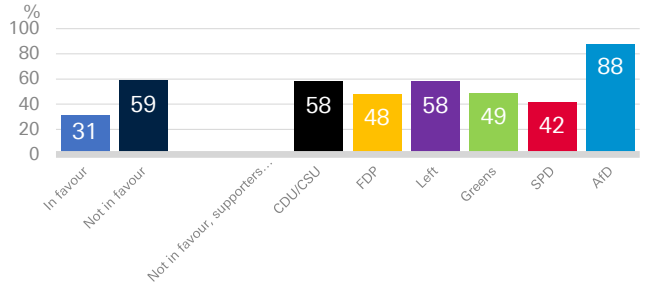
Lost time: EU's disunity prevented solid response to the challenge of migration and asylum

The Turkish deal was not least meant to buy time for the EU to sort out a common migration and asylum policy. But with complacency and disunity prevailing, the EU has since then made little progress in finding a joint response on how to manage migration from neighboring crisis regions. The Dublin Regulation that aims to govern the responsibility for asylum applications in the EU is effectively dead, a mandatory refugee quota system established during the crisis proved ineffective and attempts to reform the EU asylum system failed in the Council. Preventing another refugee crisis might become the first real test for EU Commission President von der Leyen. While she promised some EUR 700 m support to Greece, this does not solve the problem. Neither do further financial transfers to Turkey which 59% of Germans reject in any case. Money matters but more so a consent on an EU asylum system (von der Leyen announced to propose a new "EU migraction pact" after Easter). But while all EU members now assume a more rigid position towards the intake of further refugees and stress the need for better external border protection, walking the talk is still seems far away: Negotiations on the next EU budget show the subordinated status of this issue, as increased expenditures for migration and border management proposed by the Juncker Commission have been cut and according to the modified proposal now account for just 2% of the overall EUR 1 tr budget. Germany insists on a better adjustment of the EU budget to those (new) priorities but it will not reject a budgetary compromise just on these grounds.

Germany unlikely to open its borders again

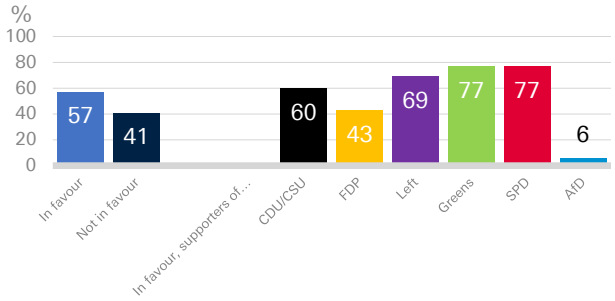
Just the public perception that a return of a refugee crisis similar to that of 2015/16 could be possible would likely have an impact on the domestic political landscape. Meanwhile, being superseded by climate change, migration still ranks second on the list of German concerns indicating that another migration crisis would provide a potential platform for rightist political forces to thrive as the AfD did post-2015. However, political dynamics have changed since then and the pushback to Merkel's policy move in 2015 runs across (almost) all parties. Germany will not open its borders again. The CDU/CSU is well aware that the AfD has benefitted significantly from the electorate's dissatisfaction with the crisis management and that the diverging views within the CDU/CSU put the union at the brink of breaking up in 2018.

Figure 43: EU-Turkey agreement: Should the EU provide additional support?



Source : infratest dimap, DeutschlandTrend March 2020

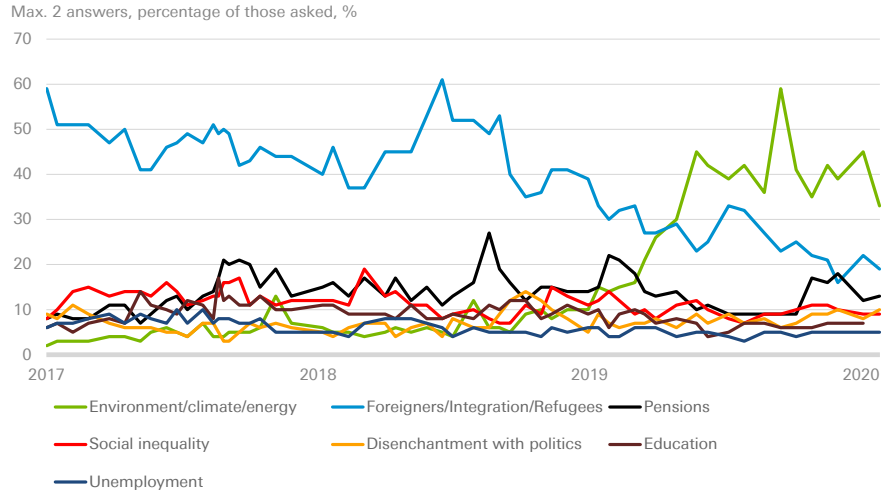
Figure 44: Greek-Turkish border conflict: Refugees should be allowed to enter and be distributed between member states



Source : infratest dimap, DeutschlandTrend March 2020

In fact, the AfD has been quick in reacting to the recent developments calling for the immediate closure of (national) borders. Chancellor Merkel's reaction was strong in condemning Erdogan's move but she also pointed to the need to keep the communication channel open. Other members of the CDU/CSU made clear that a major influx of refugees into Germany was not acceptable and closing borders would remain a real option. They rejected the Green co-leader Baerbock's suggestion to reactivate domestic asylum facilities as sending wrong signals to refugees and have Germany going ahead in accepting a certain quota of refugees for humanitarian reasons. Last week, a motion by the Green party to take in 5,000 minors from Greek refugee camps was voted down by the grand coalition parties but over the weekend the CDU/CSU/SPD coalition committee agreed to accept a number of minors in the context of a concerted European move. Still, given the somehow contrarian approach of the Greens and the CDU/CSU, migration and asylum policy could become a contentious issue for a possible conservative-green coalition after the 2021 elections.

Figure 45: Most important problems in Germany



Source : Forschungsgruppe Wahlen, Politbarometer, Feb. 2020

Refugee policy issue: A game changer in the CDU party leadership contest?

The CDU announced to postpone its extraordinary party convention scheduled for April 25, where 1001 delegates from across Germany were supposed to decide in a secret ballot. The current party leader Annegret Kramp-Karrenbauer said (Spiegel Online, 12.03.2020) that it should take place once the epidemic situation allows it. There is a high probability that in the end the election of a new party leader will take place at the regular party convention in December. It is of course open whether the details of the campaign's design that had been released some days ago will be kept, e.g. that the three candidates – Friedrich Merz, Armin Laschet and Norbert Röttgen – will present themselves in CDU members-only talk shows and digital town halls.

As of today, many observers see Laschet in a good position to win the majority of the delegates as he is more in line with AKK's and Merkel's policy course, thus promising some continuity. Laschet as the PM of NRW has the biggest regional CDU organization behind him as well as a number of other regional CDU chapters likely making up half of the delegates. Merz's nomination is backed by the CDU organizations in Baden-Württemberg and the eastern German Länder as well as the business-friendly part of the CDU which hopes to recapture the party's competence in economic policy with him.

Of course, fighting the coronavirus pandemic ranks first for German politics now. But there are also tensions at the EU's external borders, which might become an issue combined with the question on where candidates stand in terms of homeland security and migration and might even lead to a certain shift in support. We believe, the majority expects Merz taking (and implementing) a more rigid stance given his strong criticism of Merkel's open border policy. Despite admitting the humanitarian crisis, he claimed (Spiegel 29.2.2020) that the loss of control over the German borders in 2015/16 should not be allowed to happen again, a position likely also targeted at the AfD whose voters' share he intends to halve. Laschet basically supported Merkel's approach on asylum policy but calls for more efforts to protect the EU's external borders (Spiegel 29.02.2020). In NRW he proves that a liberal migration policy can go along with a rigid domestic security policy. Laschet's running mate Jens Spahn who is occupied with managing the coronavirus crisis favours a more restrictive course and considers the refugee crisis in 2015 as the overwhelming conflicting factor for the CDU. Röttgen, the Chair of the Foreign Committee in the Bundestag, looks at the development more from a foreign and European policy angle and calls for pressure on Russia to cooperate in the Syrian conflict. While Merz enjoys a narrow lead over Laschet in public surveys on who would fit for chancellor (39 vs. 35%, Politbarometer), based on the expressed support of regional CDU chapters and CDU grandees, Laschet looks to be in a pole position for being elected as CDU leader and thus most likely as chancellor candidate. But given the postponement of the extra ordinary party convention to an unspecified date, things are likely to change due to news flow on refugees, corona or the slump of the German economy.

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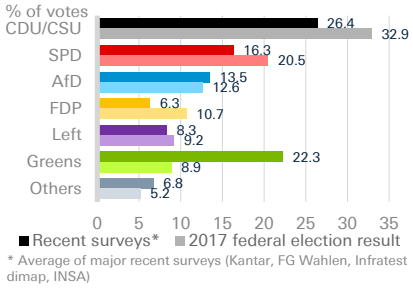
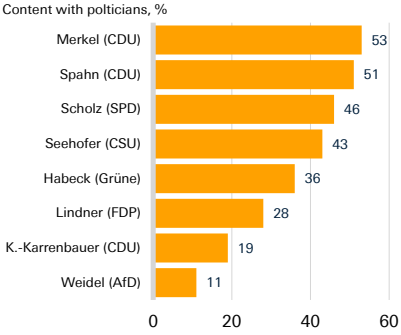
Figure 46: Major political parties' popularity & result of the last federal election



Source : Wahlrecht.de, Mar 15, 2020

Figure 47: Popularity ranking of important German politicians

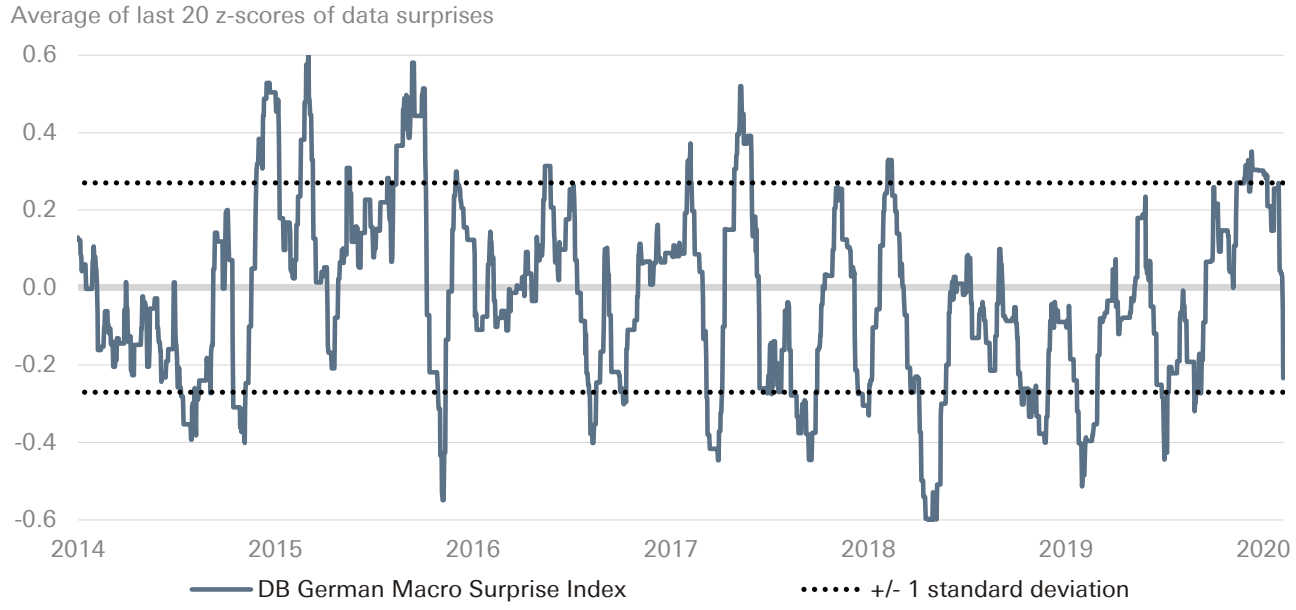


Source : ARD DeutschlandTrend, Infratest dimap, March 2020

Deutsche Bank German Macro Surprise Index

The DB German Macro Surprise Index compares published economic data with market forecasts and thus provides clues as to the direction of future forecast revisions.

Figure 48: DB Macro Surprise Index



Values above (below) 0 indicate the data came in better (worse) than expected
Source : Bloomberg Finance LP, Deutsche Bank Research

Last 20 published economic data for Germany

Bloomberg Tickers	Indicator	Reporting month	Publication date	Current value	Bloomberg consensus	Surprise	Standardised surprise	Quantile rank
GRCAEU Index	Current Account Balance (EUR bn)	12 2019	07/02/2020	24.8	23.5	1.3	0.0	0.6
GRBTIMMM Index	Imports (% mom)	12 2019	07/02/2020	-0.3	0.3	-0.6	-0.3	0.4
GRBTEXMM Index	Exports (% mom)	12 2019	07/02/2020	0.2	0.5	-0.3	-0.2	0.4
GRCP20YY Index	CPI (% yoy)	1 2020	13/02/2020	1.7	1.7	0.0	0.2	0.4
GRZEWI Index	ZEW Survey Expectations	2 2020	18/02/2020	8.7	21.5	-12.8	-1.5	0.1
GRZECURR Index	ZEW Survey Current Situation	2 2020	18/02/2020	-15.7	-10.0	-5.7	-0.9	0.1
GRGDPPGQ Index	GDP (% qoq)	12 2019	25/02/2020	0.0	0.0	0.0	-0.2	0.3
GRIMP95Y Index	Import Price Index (% yoy)	1 2020	28/02/2020	-0.9	-0.3	-0.6	-0.2	0.3
GRUECHNG Index	Unemployment Change (000's mom)	2 2020	28/02/2020	-10.0	4.5	14.5	0.4	0.7
MPMIDEMA Index	Markit Manufacturing PMI	2 2020	02/03/2020	48.0	47.8	0.2	0.2	0.7
GRFRIAMM Index	Retail Sales (% mom)	1 2020	04/03/2020	1.0	0.9	0.1	0.3	0.6
MPMIDESA Index	Markit Services PMI	2 2020	04/03/2020	52.5	53.3	-0.8	-0.9	0.2
GRIORTMM Index	Factory Orders (% mom)	1 2020	06/03/2020	5.5	1.3	4.2	2.0	1.0
GRBTIMMM Index	Imports (% mom)	1 2020	09/03/2020	0.5	0.5	0.0	0.0	0.5
GRBTEXMM Index	Exports (% mom)	1 2020	09/03/2020	0.0	0.9	-0.9	-0.5	0.2
GRIPIMOM Index	Industrial production (% mom)	1 2020	09/03/2020	3.0	1.7	1.3	1.2	0.9
GRTBALE Index	Trade Balance (EUR bn)	1 2020	09/03/2020	13.9	15.3	-1.4	-0.7	0.2
GRCP20YY Index	CPI (% yoy)	2 2020	13/03/2020	1.7	1.7	0.0	0.2	0.4
GRZEWI Index	ZEW Survey Expectations	3 2020	17/03/2020	-49.5	-30.0	-19.5	-2.3	0.0
GRZECURR Index	ZEW Survey Current Situation	3 2020	17/03/2020	-43.1	-30.0	-13.1	-2.0	0.0

Updated by Marc Schattenberg and Jochen Moebert (+49) 69 910-31727, jochen.moebert@db.com
Source : Heiko Peters (2014). DB German Macro Surprise Index. Focus Germany, 4 August 2014

Germany: Data calendar

Date	Time	Data	Reporting period	DB forecast	Last value
24 Mar 2020	9:30	Manufacturing PMI (Flash)	March	45.0	48.0
24 Mar 2020	9:30	Services PMI (Flash)	March	48.0	52.5
25 Mar 2020	10:30	ifo business climate (Index, sa)	March	90.0	96.1
30 Mar 2020	14:00	Consumer prices preliminary (% yoy, nsa)	March	1.6	1.7
31 Mar 2020	9:55	Unemployment rate (%, sa)	March	5.0	5.0
1 Apr 2020	8:00	Retail sales (% mom, sa)*	February	1.8	0.9
6 Apr 2020	8:00	New orders manufacturing (% mom, sa)	February	-1.0	5.5
7 Apr 2020	8:00	Industrial production (% mom, sa)	February	-2.0	2.8
9 Apr 2020	8:00	Trade balance (EUR bn, sa)	February	18.3	18.5
9 Apr 2020	8:00	Merchandise exports (% mom, sa)	February	-1.0	0.0
9 Apr 2020	8:00	Merchandise imports (% mom, sa)	February	-1.0	0.5

*An earlier data release may be possible due to the Federal Statistical Office.
Source : Deutsche Bank Research, Federal Statistical Office, Federal Employment Agency, ifo, IHS Markit

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Financial Forecasts

	US	JP	EMU	GB	CH	SE	DK	NO	PL	HU	CZ
Key interest rate, %											
Current	0.125	-0.10	0.00	0.25	-0.75	0.00	-0.75	1.00	1.00	0.65	1.75
Mar 20	0.125	-0.10	0.00	0.50	-0.75	0.00	-0.75	1.50	1.50	0.75	2.25
Jun 20	0.125	-0.10	0.00	0.50	-0.75	0.00	-0.75	1.50	1.50	0.60	1.50
Sep 20	0.125	-0.10	0.00	0.50	-0.75	0.00	-0.75	1.50	1.50	0.55	1.50
3M interest rates, %											
Current	0.89	0.01	-0.41								
Mar 20	0.80	0.03	-0.40								
Jun 20	0.50	0.03	-0.40								
Sep 20	0.40	0.03	-0.40								
10Y government bonds yields, %											
Current	1.01	0.02	-0.44	0.55							
Mar 20	1.75	-0.05	-0.70	0.63							
Jun 20	0.50	-0.10	-0.88	0.63							
Sep 20	0.65	0.00	-0.70	0.60							

Exchange rates

	EUR/USD	USD/JPY	EUR/GBP	GBP/USD	EUR/CHF	EUR/SEK	EUR/DKK	EUR/NOK	EUR/PLN	EUR/HUF	EUR/CZK
Current	1.10	106.83	0.91	1.21	1.06	10.89	7.47	11.53	4.48	347.83	27.14
Mar 20	1.11	107.00	0.87	1.28	1.06	10.56		10.30	4.37	336.00	25.50
Jun 20	1.13	105.00	0.89	1.27	1.05	11.00		11.25	4.32	335.00	25.90
Sep 20	1.17	100.00	0.92	1.27	1.02	11.00		11.50	4.30	330.00	25.50

Source : Bloomberg Finance LP, Deutsche Bank Research

Germany – Data monitor

	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020
Business surveys and output											
Aggregate											
Ifo business climate	99.5	98.5	95.1	95.4		94.8	94.7	95.1	96.3	96.0	96.1
Ifo business expectations	95.0	94.8	91.5	92.5		90.9	91.5	92.2	93.9	92.9	93.4
Industry											
Ifo manufacturing	98.0	95.1	91.1	91.0		90.6	91.0	90.8	91.2	92.8	92.9
Headline IP (% pop)	-0.7	-1.9	-0.9	-2.0		-1.4	-1.4	1.0	-1.9	2.8	
Orders (% pop)	-4.3	-1.2	-0.8	-0.6		1.0	0.2	-0.8	-2.1	5.5	
Capacity Utilisation	86.3	85.3	83.9	82.6	82.9						
Construction											
Output (% pop)	2.7	1.4	0.3	0.8		2.2	-1.2	2.2	-1.9	6.0	
Orders (% pop)	-1.3	-5.0	0.3	6.8		3.5	-1.8	13.4	-4.8		
Ifo construction	111.9	113.2	112.8	111.4		112.7	112.0	111.6	110.5	108.3	108.1
Consumer demand											
EC consumer survey	-0.2	-1.7	-3.1	-3.3		-2.4	-4.1	-2.0	-3.7	-3.6	-2.6
Retail sales (% pop)	1.6	0.2	0.7	0.0		0.1	-0.5	1.7	-2.0	0.9	
New car reg. (% yoy)	0.2	0.9	6.8	13.7		22.2	12.7	9.7	19.5	-7.3	-10.8
Foreign sector											
Foreign orders (% pop)	-5.4	0.9	-1.1	-0.1		0.6	2.4	-2.0	-4.9	10.5	
Exports (% pop)	0.8	-1.4	0.6	0.6		1.4	1.0	-1.7	0.2	0.0	
Imports (% pop)	0.6	-0.9	-0.5	0.7		1.2	0.3	-0.5	-0.3	0.5	
Net trade (sa EUR bn)	56.5	54.2	57.6	57.6		19.2	20.0	18.5	19.0	18.5	
Labour market											
Unemployment rate (%)	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Change in unemployment (k)	-31.7	22.3	20.3	-7.3		-10.0	7.0	-16.0	6.0	-4.0	-10.0
Employment (% yoy)	1.1	1.0	0.8	0.7		0.8	0.7	0.6	0.6	0.5	
Ifo employment barometer	102.4	100.6	98.8	99.0		98.9	98.7	99.5	98.8	99.6	98.1
Prices, wages and costs											
Prices											
Harmonised CPI (% yoy)	1.6	1.6	1.0	1.2		0.9	0.9	1.2	1.5	1.6	1.7
Core HICP (% yoy)	1.5	1.5	0.9	1.5		1.0	1.1	1.8	1.7	1.3	1.4
Harmonised PPI (% yoy)											
Commodities, ex. Energy (% yoy)	1.5	0.2	6.3	5.3		6.7	3.3	3.5	9.2	9.1	0.2
Crude oil, Brent (USD/bbl)	63.8	68.6	62.1	62.5		62.3	59.7	62.7	65.2	63.4	55.8
Inflation expectations											
EC household survey	31.7	33.8	33.7	31.6		31.5	34.0	28.3	32.5	35.1	34.4
EC industrial survey	14.4	7.1	2.2	2.7		1.1	2.3	3.1	2.7	3.2	3.4
Unit labour cost (% yoy)											
Unit labour cost	3.3	4.2	3.0	3.0							
Compensation	3.2	3.3	3.6	2.8							
Hourly labour costs	2.7	4.2	3.0	3.5							
Money (% yoy)											
M3	5.1	4.8	5.1	4.6		5.1	5.1	4.6	4.6	4.7	
M3 trend (3m cma)						5.4	5.4	5.0	4.8	4.6	
Credit - private	4.1	4.6	4.5	4.9		4.5	4.7	4.8	4.9	0.0	
Credit - public	14.1	5.7	3.1	-5.9		3.1	6.4	9.4	-5.9	7.1	

% pop = % change this period over previous period.

Source : Deutsche Bundesbank, European Commission, Eurostat, Federal Employment Agency, German Federal Statistical Office, HWWI, ifo, IHS Markit

Appendix 1

Important Disclosures

*Other information available upon request

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