DEALING WITH STRUCTURAL CHANGE

This is a translation of the original report published in German, which is the sole authoritative text.

1. The prolonged economic upswing in Germany has come to an end. This reflects the **global economic slowdown** as well as a number of structural factors that may be slowing growth. Furthermore, there are considerable risks to future growth: an escalation of the current trade disputes in particular could be very damaging to Germany's export-driven economy. Economic prospects are moderate, while **structural change** is imminent, arising especially from technological advances due to digitalisation and the need for a transition to a new climate policy. Against this background, a key objective of economic policy should be to strengthen the growth potential of the German economy.

1. Economic developments

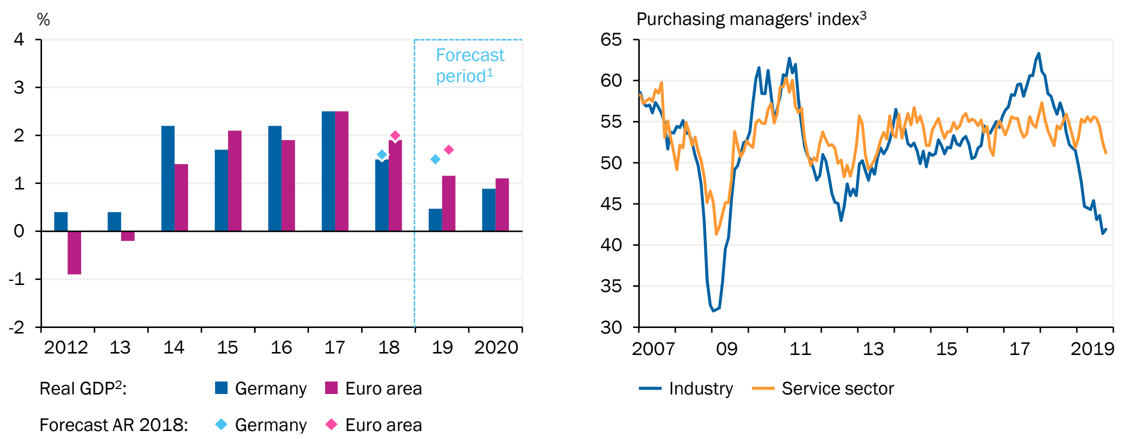
2. The **German economy** is in a downturn. A widespread and deep recession is, however, so far not expected. Real gross domestic product (GDP) is expected to expand at 0.5 % this year, noticeably weaker than in previous years. Weak economic momentum is likely to persist into next year at least, with GDP growth at 0.9 % in 2020 (0.5 % adjusted for calendar effects). ↘ ITEM 69 A key reason for this is the weakness of the industrial sector across countries. This partly reflects a cyclical downturn associated with a decline in investment. ↘ ITEM 75 Going forward, it will be crucial to what extent this trend affects domestic demand and the labour market, which currently remain strong. ↘ ITEMS 76 FF.

While the weakness in Germany's industrial sector is particularly pronounced, the **global economy** is also looking weaker. In Germany, this is reducing the impulses from foreign trade, which is being held back by the ongoing uncertainty surrounding the trade disputes with the United States and Brexit in particular. ↘ ITEMS 73 F. In the euro area, GDP is likely to increase by just 1.2 % in 2019 and 1.1 % in 2020. ↘ ITEM 65

Economic developments

Growth rates are declining in Germany and the euro area. A widespread and deep recession is so far not expected.

The downturn is currently characterised by a dichotomy between industry and the service sector.



1 – Forecast by the GCEE. 2 – Change on previous year. 3 – The purchasing managers' index is based on a monthly survey with purchasing managers and managing directors.

Sources: Eurostat, Federal Statistical Office, IHS Markit, own calculations

3. The **fiscal policy measures** agreed by the federal government provide a substantial demand-side stimulus. Consequently, the structural government budget surplus is declining further while the government will still continue to realise a budget surplus. ↘ ITEMS 108 FF. Furthermore, the European Central Bank (ECB) has further loosened its **monetary policy** this year. During the recent years of economic upswing, it did not normalise monetary policy, although this would have been appropriate as a symmetrical response to the improved economic development. Monetary policy is thus also highly expansionary. It would have been better to at least refrain from restarting the purchases of government bonds, as this policy can entail considerable risks and side effects. ↘ ITEMS 60 FF.

Dynamically rising asset prices, for instance, imply the risk of abrupt price corrections. In the **real estate sector** in particular, appropriate macroprudential measures should counteract the already heightened level of risk without undue delay. In Germany, these could include an increase in the sectoral risk weights for real estate loans, a further increase in the countercyclical capital buffer, or a restriction on loan-to-value ratios. ↘ ITEMS 408 FF. Moreover, the prolonged phase of low interest rates is creating further challenges for banks in the euro area, whose profitability is already under pressure from both structural and bank-specific factors. ↘ ITEMS 391 FF. If the economy were to go into recession, there would be a risk of procyclical amplification by the **financial system**. Many member states have been hesitant in activating the countercyclical capital buffer, so there is only little scope for curbing procyclical effects by releasing it. ↘ ITEM 406

4. Adding further fiscal measures such as an **economic stimulus package** on top of the already expansionary fiscal and monetary policy is currently not necessary in view of the moderate slowdown in growth and the problems with actively managing the business cycle. ↘ ITEMS 112 FF. It is instead a matter of allowing the automatic stabilisers to take effect. As the debt brake is based on cyclically adjusted measures, it does not rule out new borrowing for this purpose. ↘ ITEMS 496 FF. In addition, measures to increase growth potential and to cope with structural change, such as tax cuts, could be implemented and could provide additional, short-term growth impetus. ↘ A DIFFERING OPINION ITEMS 124 FF.

2. Structural challenges

5. Besides the cyclical factors, the decline in growth rates is likely to also have structural causes, which economic policy did not address adequately during the long upswing. **Productivity growth** has been persistently weak for some time. ↘ ITEMS 157 FF. The decline in productivity growth is an international phenomenon. Nevertheless, as an economy's prosperity rests on its ability to innovate, national policymakers are called upon to strengthen entrepreneurial activity and to provide a framework that encourages more citizens to take entrepreneurial risks. ↘ ITEMS 217 FF. ↘ A DIFFERING OPINION ITEMS 229 FF.

6. Given the weak productivity growth, current economic policy **challenges** such as demographic and technological change or climate protection are coming more to the fore. An economic policy that addresses these challenges can create numerous opportunities for Germany's future economic development. To this end, Germany's economic and industrial policy does not need to be completely reinvented, although it is necessary to develop it further.

   Nor does this require changes to the **debt brake** or an increase in the space available to the government to incur higher structural deficits. In particular, an increase in public debt cannot be justified solely with the argument that economic policy ought to be taking advantage of the fact that interest rates are currently lower than economic growth rates and that expansionary monetary policy ought to be supported. Quite to the contrary, a credible reduction in the debt ratio supported by the debt brake sends an important signal to the financial markets and other EU member states. ↘ ITEMS 550 FF. ↘ A DIFFERING OPINION ITEM 562 FF.

Utilising and supporting structural change

7. The efficient allocation of an economy's resources plays an important role for increasing productivity. In Germany, however, there has been a widespread decline in **business dynamics** in all sectors of the economy since the start of the new millennium. This can be observed for example in the substantial decrease in the number of company foundations and closures. ↘ ITEMS 183 F.

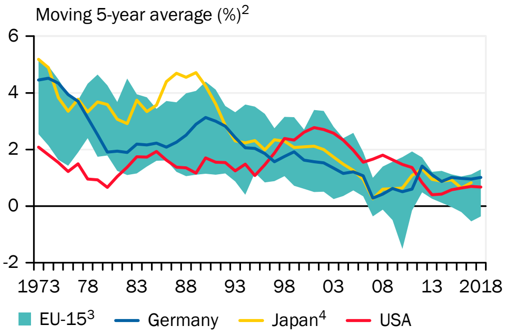
8. An industrial policy that creates an appropriate framework for all market participants and promotes the dissemination and sharing of knowledge can prepare the ground for more dynamism and competitiveness. ↘ ITEMS 250 FF. Protecting and subsidising individual sectors and companies can have the effect of slowing down **structural change**, as these measures are typically used to preserve the status quo. In cases of sector-specific market failures, however, there could be justification for a vertical policy intervention that is tailored to individual sectors or technologies. To prevent this support from being pocketed by interest groups, the government would need to apply strict criteria. ↘ ITEMS 267 FF.

9. Furthermore, European competition policy should be adjusted to take account of the specific features of new technologies, but it should not be relaxed. Passing up the benefits of competition and freedom of capital movement today for fear of increased competitive pressure from foreign companies in the future would be disproportionate. Government-fostered national or European champions and controls on foreign direct investment will not be able to ensure the **competitiveness** of the domestic economy. ↘ ITEMS 318 FF.

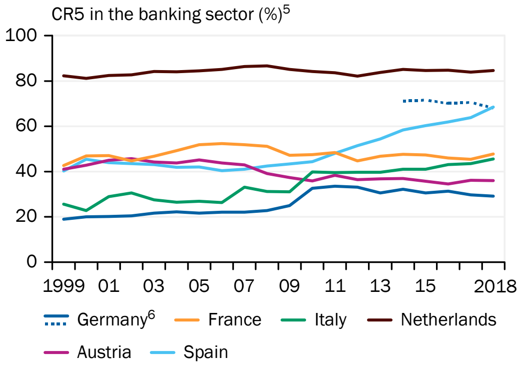
   The strong competition in the German **banking sector** could, however, have the effect of reducing welfare, because it can have a negative impact on financial stability. Banks' low profitability makes it difficult for them to make the necessary investment into the future viability of their business models, while new market players such as FinTech and BigTech companies could increasingly be entering the banking market. ↘ ITEMS 414 FF.

Structural challenges

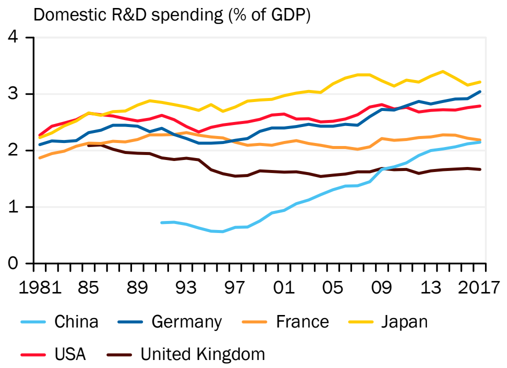
The growth in labour productivity[1] is declining globally and in Germany.



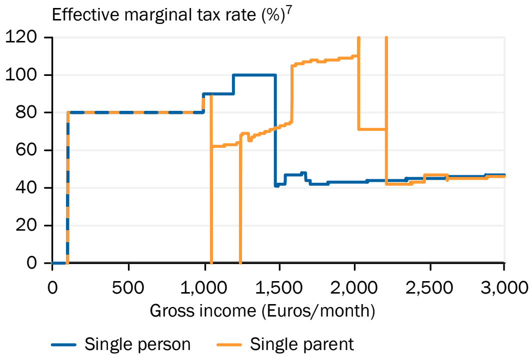
The structural change is accompanied by lower start-up dynamism and higher concentration.



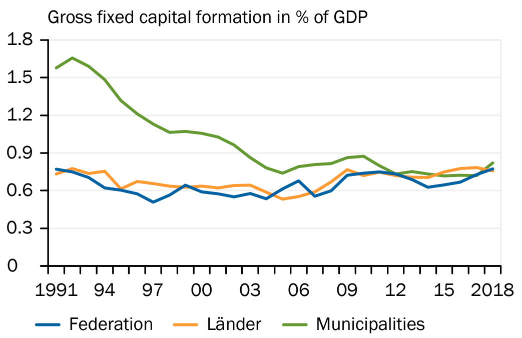
Industry and innovation policy are key to future competitiveness.



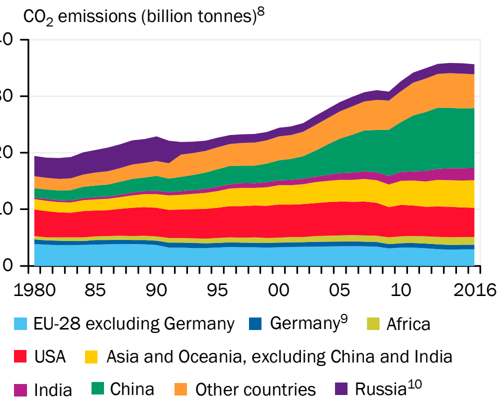
Work incentives are currently set by the tax and transfer system in an erratic fashion.



The debt brake continues to offer scope for increased public-sector investment.



Internationally coordinated carbon pricing should become the key climate policy tool.



1 – GDP per hour worked. 2 – Change on previous year. For Germany calculations by the GCEE, otherwise calculations by the European Commission. 3 – Bandwidth: excluding highest and lowest value. 4 – Data available for labour productivity up to 2017. 5 – Shares of the five largest credit institutions (CR5) in total assets of all credit institutions in a country. 6 – For the increase in concentration measures in Germany from 2010 see chart 61, page 206. 7 – For details see chart 103, page 349. 8 – Total CO_2 emissions from energy consumption (combustion of coal and coke, natural gas, petroleum and other liquids). 9 – Germany: West Germany in the period of 1980 to 1990 . 10 – Russia: Former Soviet Union in the period of 1980 to 1991.

Sources: National Association of German Cooperative Banks (BVR), Commerzbank, Deutsche Bank, German Saving Banks Association (DSGV), EIA, European Commission, Federal Statistical Office, ifo microsimulation model, KfW, OECD, own calculations

10. The government mitigates a substantial portion of the negative effects of structural change, particularly through social and regional policy. By international comparison, Germany has a high level of **redistribution**, which means that net income inequality after taxes and transfers is significantly lower than earned income inequality. ↘ ITEMS 590 FF. Despite an influx of immigrants that fall predominantly into the lower income brackets, inequality as measured by the Gini coefficient has not increased significantly since 2005. ↘ A DIFFERING OPINION ITEMS 709 FF.

11. Average wealth in Germany is low by international comparison. Also, **net wealth** is distributed unequally, although this inequality has declined significantly since 2007 and is now back at the level of 2002. However, these findings should be considered alongside other factors that put them into perspective, such as the relatively low level of owner-occupied residential property, retained company profits that increase business assets, and considerable claims from public pension systems. ↘ ITEMS 627 FF. Monetary policy decisions have affected individual groups with differing levels of wealth to different degrees. Interest rate cuts tend to favour lower income groups, whereas the asset purchase programs of central banks tend to benefit wealthier households. ↘ ITEMS 633 FF.

Funding of research and innovation

12. The fall in economic dynamism in Germany may be explained among other things by a decline in the **number of new enterprises founded and existing companies being closed**. The provision of debt to established companies seems to be functioning well, but young growth companies need especially equity capital. Venture capital investment currently plays only a minor role in Germany. When setting up public-sector funding, special attention should be paid to ensuring that private investors are not crowded out. ↘ ITEMS 281 FF.

    Tax incentives, such as the limit on the offsetting of losses for companies or tax discrimination against equity finance also play a role in entrepreneurial decisions. ↘ ITEM 257 The opportunities for realising the value of successful start-ups, for example in the form of a sale, are also important. This requires a liquid market for the issuance of shares. The expansion of the **European capital markets union** can play a crucial role here (GCEE Annual Report 2018 Items 539 ff.).

13. In comparison with the United States and China, a **single European market** is important, not only for the scaling up of digital business models. The digital single market strategy is promising in terms of further market integration in Europe. The completion of a single market for services would also open up new opportunities. ↘ ITEMS 311 FF.

    Digital platform-based **business models** are becoming more important. This requires policymakers to find appropriate ways of regulating the risks arising from the business activities of new market players without stifling innovation unnecessarily. This applies in the area of European competition and data protection law, for example. The stronger role of knowledge-based sectors means that access to technology and data becomes more important. A balance has to be struck between the demand for open access to data to facilitate innovation, and the protection of intellectual property. ↘ ITEMS 305 FF. For the financial sector, the regulation of FinTech and BigTech will play a crucial role. ↘ ITEMS 423 FF.

14. For the German economy's ability to innovate a powerful and effective **research and innovation policy** is needed. ↘ ITEMS 291 FF. Germany spends more than 3 % of GDP on research and development. This is supported by a well-functioning system of government research funding which covers a spectrum ranging from fundamental to applied research. Where appropriate, an expansion should be organised at European level.

Innovation is key, particularly in the context of climate change and the need for a transformation to ways of life and forms of production with lower carbon emissions (GCEE Special Report 2019 Items 208 ff.). **Carbon pricing** is already providing incentives for such investment and innovation. At the same time, however, the richer economies should expand their technology-neutral (basic) research and investment in technologies designed to remove CO2 from the atmosphere (GCEE Special Report 2019 Box 1).

15. Due to regional differences in economic structures and human capital, structural change and innovation present different **challenges for individual regions**. ↘ ITEMS 332 FF. Regional policy should pay greater attention to the increasing importance of knowledge in the production process and focus more on funding research and innovation. ↘ ITEMS 338 FF. Innovation clusters are a useful tool for coordinating the parties involved and are particularly important as a means of disseminating and sharing knowledge. ↘ ITEMS 345 FF.

Leveraging the potential in human capital

16. In addition to increasing productivity, the leverage of dormant **potential in the labour market** may counteract the decline in medium-term growth prospects resulting from an ageing population. This includes increasing the participation of women and older people, through measures such as an expansion of full-day care, the flexibilization of working hours and more flexible retirement rules. In addition, a targeted integration of the long-term unemployed can mobilise additional workers. ↘ ITEMS 678 F.

17. For people with low earned income in particular, the tax and transfer system may in some instances present negative **incentives** for people to **take on a job** or work more hours. These negative incentives could be mitigated with reforms such as the introduction of a universal transfer benefit. Furthermore, a lowering of transfer withdrawal rates for incomes above the threshold for marginal employment could increase labour supply. However, this would result in an expansion of the number of people subject to transfer payments. In many areas of the income support, however, better coordination of the various instruments would already be an important first step in order to strengthen the efficiency of the system with less invasive interventions. ↘ ITEMS 680 FF. ↘ A DIFFERING OPINION ITEMS 709 FF.

18. Technological change and the shortage of skilled workers in some sectors of the economy mean that **education** and the migration of skilled workers from EU member states and non-EU countries are gaining importance. ↘ ITEMS 253 FF. An expansion and strengthening of universities and universities of applied sciences could make an important contribution to education, while also setting regional policy impulses. A greater orientation on applied research could promote the commercialization of innovations. ↘ ITEM 356

The success of a company is among other things determined by its management. More intense competition and relatively frequent moves between jobs correlate strongly with improved **management capabilities** within companies and aid the spreading of knowledge at the macroeconomic level. The skills required to lead and organise a company are also conducive to successful adaptation of new IT technologies. ↘ ITEMS 194 FF.

19. **Lifelong learning** plays an important role in ensuring that an economy remains able to innovate effectively despite having an ageing population. ↘ ITEM 220 This may also increase **income mobility** throughout the life cycle. Income inequality among people born in the same year is lower than income inequality in cross-sectional perspective. Cohort-specific inequality did rise over time, but a comparison of cohorts does not suggest reduced intragenerational mobility. ↘ A DIFFERING OPINION ITEMS 709 FF. Mobility tends to be relatively high at the start of people's working lives, but declines sharply as they get older. ↘ ITEMS 616 FF. To increase income mobility within a cohort and thus boost equality of opportunity, **early childhood education** is very important, as is supporting children in households with lower levels of education. ↘ ITEM 626

Increase in private-sector and public-sector investment

20. The level of **investment** by the private sector has a substantial impact on the long-term prosperity of an economy. ↘ ITEMS 208 FF. A functioning infrastructure is also required, and where appropriate also complementary public spending in areas such as education. The required level of public involvement needs to be determined for each area individually. ↘ ITEMS 531 FF. One alternative to the direct public provision of infrastructure would be to use regulatory measures to create a framework that is conducive to private-sector activity.

21. The economic regulatory framework is also a material factor in private-sector investment activity. **Uncertainty** with regard to the future of global free trade and of climate and energy policy should be reduced wherever possible, making it easier for companies to plan ahead. ↘ ITEM 214

22. It is hardly possible to precisely determine the aggregate **public-sector investment needs** but there are signs of insufficient investment, particularly in infrastructure. There seem to be many reasons for this. Sufficient funding has been available on the aggregate level in recent years, and the scope available within the debt brake should be sufficient in the future. ↘ ITEMS 448 FF. A high level of capacity utilisation in the construction sector and public administration coupled with increased regulation, lengthy approval procedures and changes in de-

mand may rather be among the primary reasons for lack of investment. Regional differences demand more targeted solutions in which the federal states are responsible for providing adequate funding to their local authorities and for financial oversight. ↘ ITEMS 541 FF. ↘ A DIFFERING OPINION ITEMS 562 FF.

Coordination at international level

23. Many of the challenges described require an **internationally coordinated response**. Firstly, Germany is a very open economy. Whilst this has brought considerable welfare gains (GCEE Annual Report 2017 Items 657 ff.), it also makes the German economy highly dependent on international developments. Secondly, as a member state of the European Economic and Monetary Union, Germany has very little direct influence by itself on many of the international challenges; answers to these issues have to be sought at European level.

24. Climate change also demands an internationally coordinated approach (GCEE Special Report 2019 Items 13 ff.). The German government has decided to refocus its **climate policy** and plans to introduce national carbon pricing for the transport and buildings sectors. This is a step in the right direction. However, CO2 pricing should be the focal point of climate policy rather than a marginal aspect as envisaged in the current plans. If rigorously implemented with targeted accompanying measures (GCEE Special Report 2019 Items 245 ff.) and a systematic redistribution of the additional government revenues, many of the currently planned regulation and funding measures would no longer be necessary.

The important next step in climate policy is **coordination at European and international level**. National carbon pricing should be replaced as quickly as possible – by no later than 2030 – with an expansion of the EU Emissions Trading Scheme (ETS) (GCEE Special Report 2019 Item 129). Negotiations are also required at international level to implement a global uniform price for greenhouse gas emissions (GCEE Special Report 2019 Item 7).

25. One area in which progress has been achieved through international coordination over many decades is the **international division of labour** through global trade, which came along with gains in productivity and prosperity. ↘ ITEM 227 However, some of this progress has been reversed recently through protectionist measures. ↘ ITEMS 4 F. It would be the wrong approach for Germany and Europe to respond with its own protectionist measures outside the rules of the WTO, for example by implementing protective policies using competition law or by making strategic interventions against foreign competitors. ↘ ITEMS 318 FF. Instead the multilateral trade system should be strengthened (GCEE Annual Report 2018 Items 15 ff.) and Germany be made a more attractive place to do business for foreign and domestic investors. ↘ ITEM 227

26. The United Kingdom's exit from the EU (**Brexit**) is highly likely to also lead to more protectionism. Even though it still hasn't happened yet, Brexit probably already has led to greater uncertainty and exerted a negative impact on Germany – and even more so on the United Kingdom. ↘ ITEMS 33 FF. Although the probability of a disorderly Brexit seems to have receded following developments in recent

weeks, a no-deal Brexit could have even more severe consequences. It would therefore still be preferable for the negotiating partners to find a way of preventing Brexit or, if that is not possible, reaching as broad an agreement as possible on the subsequent trading relationship (GCEE Annual Report 2016 Items 356 ff.).